

KK Relay

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FOREWORD

One of the reasons we wrote this book was to demonstrate that you're never too old to change.

As of this writing, Karen is 74 and Kit is 76. Until recently, neither of us had ever played relay. Karen had dabbled a bit in the mid 80's, but stuck with standard on the theory that relay was difficult to learn, difficult to remember, and surely inaccurate since it eliminates judgment.

In 2012, Karen's partner at the time was learning a variation of Symmetric Relay as taught to Sam Dinkin by Phillip Alder (who got it from Alan Truscott, who learned it during his 1981 visit to Australia, where relay was commonplace due primarily to the influence of Paul Marston and Stephen Burgess). Their highly successful Moscito system was derived from Roy Kerr and Burgess's original Symmetric Relay.

In 2014, Karen took on the Dinkin variation just for fun and discovered a brand new world. For several years she raved about what she called McTurk Relay (an offshoot of Symmetric) to Kit, who scoffed at it, thinking it difficult to learn, difficult to remember, and surely inaccurate since it eliminates bidding judgment. But finally, if only to keep her quiet, he decided to try a "bit" of relay. Karen taught him the McTurk Grammy¹ structure in May of 2017 and the rest is history.

In the process of switching to relay, we've come to the conclusion that we were both wrong. Relay has proven to be far more accurate than any methods either of us have previously played. It may be a bit difficult to learn all the ins and outs at first, for some, but it's extremely easy to remember since it follows an orderly pattern. And, far from eliminating judgment, it actually hones your judgment. You have new decisions to make, certainly, but as you become more experienced with KK Relay—the system detailed in this book, named for Karen and Kit—you will see that your good bidding judgment is essential.

¹Game-forcing Relay After Major-suit opening.

KK Relay, while based on Roy Kerr and Stephen Burgess's original Symmetric Relay, is no longer their Symmetric. We've made multiple changes and improvements over the past six years and it is now a stand-alone system. For this reason, there are often two or three ways to do the same thing, all being played in at least one KK Relay partnership. We've presented KK Relay in the way we play it ourselves, but there are areas where the reader could choose to handle a situation differently than we do.

We have assumed an IMP context for the judgment decisions; the reader can make their own logical adjustments to consider things from a matchpoint perspective.

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INTRODUCTION

Suppose your partner opens 1 ♣, strong and artificial, and you hold:

♠ 7 ♥ K852 ♦ AQJ64 ♣ KJ3

This is a pretty nice hand with plenty of slam potential opposite a strong 1 ♣ opener. You can start with 2 ♦, perhaps following by showing hearts and then maybe clubs to give partner an idea about your shape. Meanwhile, he will be bidding his suits looking for a fit and you may or may not discover one. But it may prove to be complicated to show everything.

It would be a lot easier if you could say: “Hey, partner, I hold singleton, king-fourth, ace-queen-jack-fifth, king-jack-third.” Partner would be able to place the contract with 100% accuracy.

With KK Relay, you can do exactly that!

The 1 ♣ opener does not attempt to describe his hand. Instead, he simply asks questions about responder’s hand. He relays repetitively with the cheapest call, giving responder room to make a complete description of his hand. When the opener has found what he needs to know, he places the contract.

Many bridge players are unwilling to get involved with a relay system. They believe that a huge amount of memory of coding is involved. While this may be true for some relay systems, KK Relay is constructed so that the amount of memory work involved is minimal. It is structured in simple steps that repeat themselves in multiple situations.

Players are also afraid that somebody may make the wrong relay response, or mis-interpret a response, and wind up in some silly 3–1 fit. While this could happen, (and probably will at first), you will find that after a little practice everything becomes as automatic as responding to RKC, and the big accident just won’t happen.

Let's Give it a Try

Let's walk through a sample auction step by step. (Don't worry now about why the bids show what they show. We'll get around to that in the upcoming chapters.)

You're playing in your local New England Regional KO with your favorite relay partner. You hold:

♠ A6 ♥ A1074 ♦ K53 ♣ AQ104

You open 1♣, strong and artificial, and the bidding proceeds:

WEST	EAST
1♣	1♠

Responder's 1♠ call shows 9+ HCPs (positive and game-forcing),² 4+ hearts, fewer than 4 spades, and an unbalanced hand. ("Unbalanced" in KK Relay means that he has at least one 5-card or longer suit (or 4-4-4-1), but he does not promise a singleton or void). In other words, he's not 4-4-3-2 or 4-3-3-3. But he may still have only four hearts and a longer minor. You relay with the next step, 1NT.

WEST	EAST
1♣	1♠
1NT	2♥

The 2♥ call shows a diamond suit, with 5+ diamonds and exactly 4 hearts. (Don't even think about why! All will be revealed in good time.) You relay with the next step, 2♠.

WEST	EAST
1♣	1♠
1NT	2♥
2♠	2NT

²A positive response in the original Symmetric Relay required 2+ controls. KK Relay does not have a control requirement. We've found it to be irrelevant, and moreover, it can cause insoluble problems when responder has 12–13 HCP with only 1 control.

Responder's 2NT call shows shortness (singleton or void) in the higher-ranking remaining suit, spades. You now relay with the next step, 3♣, to find partner's exact shape.

WEST	EAST
1♣	1♠
1NT	2♥
2♠	2NT
3♣	3♦

The 3♦ call describes his distribution as 5-4-3-1, or, in this case, exactly 1=4=5=3.

Note that this is the most balanced, and therefore the most common, of the shapes consistent with a two-suiter, one of them a 4-card suit, and some shortness. His other possible shapes that meet the criteria would be 6-4-2-1, 6-4-3-0, and 7-4-2-0. (These shapes would have been shown by bids of 3♥, 3♠, and 3NT respectively—going up the line from most common to least common.)

Repeating your hand:

♠ A6 ♥ A1074 ♦ K53 ♣ AQ104

Putting it all together, you now know his distribution is exactly 1=4=5=3, and you are only at 3♦. Pretty nice. You know you can play in 4♥ if necessary, but there could be a slam if partner has extras. The first order of business is to find out how many controls partner has. You relay with 3♥ to get this information.

WEST	EAST
1♣	1♠
1NT	2♥
2♠	2NT
3♣	3♦
3♥	4♣

Responder's 4♣ call shows 4 controls, with an ace counted as 2 controls and a king as 1 control. Partner will not count a singleton king when he

responds to your Control Ask. Therefore, you know partner must have king of hearts, ace of diamonds, and king of clubs.

Slam prospects are good, but you need to know about partner's other cards. Since he doesn't know that you know where his aces and kings are, you have to go through the process of asking him even though you know the answer. Once he finishes with the aces and kings, he will get to the queens and jacks which are the cards you need to know about. You relay again to get this information.

WEST	EAST
1 ♣	1 ♠
1NT	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	5 ♣

Responder's 5 ♣ call is a "cue-bid" of sorts, showing the ace or king of diamonds, ace or king of hearts, queen of diamonds, and no queen of hearts. Responder goes suit-by-suit, starting with his longest suit, then second longest etc., looking for controls in the suit. If he has a control, he bypasses that step. When he hits a suit where he doesn't have a control, that is his bid.

It's called "Denial Cue-Bidding." You cue-bid the first place where you don't have a control. It's important to note that responder's actual call has nothing to do with the suit named. Controls are shown in coded steps, from longest suit to shortest suit.

In Denial Cue-Bidding (DCB), we skip the singletons when scanning for aces and kings. The reason is that the person doing the asking (the 1 ♣ opener) will know if you have an ace there when you deny elsewhere. And we don't show singleton kings. So we skip over the singleton completely when showing aces and kings.

Responder also knows that he doesn't need to tell you what he has in clubs, since you will automatically know that by counting the controls he has shown in the other two suits, and looking at your hand; so he bypasses clubs and goes directly to showing queens. (This business of skipping suits may seem a bit confusing right now, but it will become

clear, and extremely simple to apply, when we examine the details of DCB in later chapters.)

Responder so far has shown $1=4=5=3$, with 4 controls, ace or king of diamonds, ace or king of hearts, queen of diamonds, and no queen of hearts. You are getting there. The queen of diamonds is a big card, but missing the queen of hearts is a disappointment. You can find out more. When he finishes showing or denying the queen of clubs (you know the answer to that), he will get on to jacks. You can definitely play in $6\heartsuit$ if need be, so you don't have to worry about overshooting the mark. Perhaps you can do better; $6NT$ might be safer. It's always possible that you have 12 tricks in notrump while a bad trump split or a freak ruff sets you in a suit contract. You continue to relay.

WEST	EAST
1 $\clubsuit$	1 $\spadesuit$
1NT	2 $\heartsuit$
2 $\spadesuit$	2NT
3 $\clubsuit$	3 $\diamondsuit$
3 $\heartsuit$	4 $\clubsuit$
4 $\diamondsuit$	5 $\clubsuit$
5 $\diamondsuit$	5 $\heartsuit$

The $5\heartsuit$ response shows no queen of clubs. You knew you would receive this response since you are looking at the queen of clubs, but partner doesn't know that so he has to deny it. Now you can get on to finding out about his jacks, which may be the key to your final decision. You continue to relay with $5\spadesuit$.

WEST	EAST
1 $\clubsuit$	1 $\spadesuit$
1NT	2 $\heartsuit$
2 $\spadesuit$	2NT
3 $\clubsuit$	3 $\diamondsuit$
3 $\heartsuit$	4 $\clubsuit$
4 $\diamondsuit$	5 $\clubsuit$
5 $\diamondsuit$	5 $\heartsuit$
5 $\spadesuit$	6 $\clubsuit$

Responder's 6♣ call shows jack of diamonds and no jack of hearts. At least you won't have to worry about a 4–1 diamond split. You can still look for the jack of clubs with a final relay. If partner doesn't have it he will bid 6♥ over your 6♦ relay, and you can play there which will be reasonably safe. However, if he does have the jack of clubs you will be able to count 12 top tricks (5 diamonds, 2 hearts, 4 clubs, 1 spade), so you will know that 6NT is safer. You make a final relay.

WEST	EAST
1♣	1♠
1NT	2♥
2♠	2NT
3♣	3♦
3♥	4♣
4♦	5♣
5♦	5♥
5♠	6♣
6♦	6♠

His 6♠ call shows jack of clubs! You now know partner's exact hand. He holds

♠ x ♥ Kxxx ♦ AQJxx ♣ KJx

In case you haven't noticed, this is the hand from the beginning of this chapter, where responder to your 1♣ would have liked to tell you he holds singleton, king-fourth, ace-queen-jack-fifth, king-jack-third. He has told you exactly that!

Repeating your hand:

♠ A6 ♥ A1074 ♦ K53 ♣ AQ104

It may look right to bid 6NT where you know you have 12 top tricks. But wait! There's more! You're not missing any important controls. Perhaps you have a grand slam in a trump suit. Not in hearts, where you almost certainly have a trump loser. Not in diamonds, since the trump suit doesn't give you any opportunity for a thirteenth trick. But what about clubs? Voila! You can ruff a spade in partner's hand, and take 5 club tricks, 5 diamond tricks, 2 heart tricks, and 1 spade trick.

All you need is a 4–2 club split and the grand slam will be a virtual claim.

Playing in clubs was the furthest thing from your mind when you first found partner’s distribution, but upon locating his exact honors it becomes the right trump suit. You bid 7♣, placing the contract.

♠ A6	♠ x
♥ A1074	♥ Kxxx
♦ K53	♦ AQJxx
♣ AQ104	♣ KJx

WEST	EAST
1♣	1♠
1NT	2♥
2♠	2NT
3♣	3♦
3♥	4♣
4♦	5♣
5♦	5♥
5♠	6♣
6♦	6♠
7♣	

7♣ is a great contract and can probably be reached intelligently only by proper relay bidding. This sort of result is quite common with KK Relay. Game bidding isn’t always quite so accurate as this, but with the strong hand knowing the weak hand’s exact shape you have a pretty good chance of making the right choice. Slam bidding won’t always be as perfect as this one was, since sometimes you run out of room before you can find everything you need to know, but both game bidding and slam bidding are usually more accurate than auctions using conventional methods.

It’s a lot easier to get to the right contract when you know partner’s exact hand.

THE RELAY CONCEPT

The relay concept is quite simple.

Instead of making a descriptive bid, one of the partners makes a call that asks a question. His partner answers that question. That's it!

The actual bids used to ask and answer the question frequently have nothing to do with the suit named in the bid. The meanings of the answers are a matter of partnership agreement.

Many bridge players might not realize it, but quite a few popular conventions and treatments are relays. They simply ask a question and get an answer. For example:

Stayman: The 2♣ call has nothing to do with clubs. It is a relay.

2♣ asks the question: Do you have a 4-card major? Opener's response if he has a major is to bid the major, so in this case his response happens to say something about the suit he bid. However, if opener doesn't have a major, he bids 2♦. This says nothing at all about diamonds. It says only that opener doesn't have a major. It's simple relay.

Roman Keycard Blackwood: An RKC 4NT call has nothing to do with notrump. The bidder is often distributional and has no intention of playing in notrump. It is a relay, which asks the question: How many keycards do you have? Partner's response is coded. 5♣ shows 0 or 3 keycards, 5♦ shows 1 or 4 keycards (these are reversed if the partnership is playing 1430), 5♥ shows 2 keycards with no queen of trumps, and 5♠ shows 2 keycards with the queen of trumps. Responder's calls have nothing to do with the suit named. They are simply responses to a question, in a coded manner which the RKC bidder will understand. Relay again.

Ogust rebids after weak 2: After a weak 2 opening, responder's 2NT enquiry has nothing to do with the desire to play in notrump. It asks opener about his hand. A common agreement is Ogust. 3♣ shows bad hand, bad suit. 3♦ shows bad hand, good suit.

3♥ shows good hand, bad suit. 3♠ shows good hand, good suit. The meanings of opener's rebids have nothing to do with the suit named. They are coded responses to responder's question. Relay!

An artificial call which has more than one meaning may trigger a relay response so that the meaning can be clarified. For example, consider the auction:

WEST	EAST
1♠	3NT

Many pairs play that this 3NT call shows an unspecified mini-splinter (about 9–12 HCP), while other calls between 3♠ and 4♠ show stronger splinters in the suit bid. If opener has possible slam interest opposite a mini-splinter, he can bid 4♣ relay to ask. Responder now clarifies his short suit according to the coding agreed upon by the partnership. Many partnerships play up-the-line coding here. Thus, 4♦ would show a club mini-splinter, 4♥ would show a diamond mini-splinter, and 4♠ would show a heart mini-splinter. Once again, the actual suit named in response to the relay has nothing to do with responder's holding in that suit. Relay again!

In all of these examples, it is the player who has the most information who is asking the question. He's doing the relaying because he's in a better position to use the information. This is normal in constructive bidding. It doesn't help if both players keep describing their hands. Somebody has to make the final decision. This player is the captain for the auction. Usually one of the partners has limited his hand in some way (such as a 1NT opening), and his partner is the captain. It is the captain's job to find out more about the hand in order to be able to place the contract. Relay-type bids are often the best solution.

KK Relay extends the relay concept to start with the first response to a strong 1♣ opening, when responder has a positive response. There are several reasons why this works well:

- The positive response establishes an immediate game force. Opener doesn't have to worry about whether or not his bids are forcing. Anything he bids below 3NT will be forcing.
- There is plenty of room when you start relaying at the 1-level. In the mini-relays such as RKC, when spades are trump and

4NT RKC is bid, there are only 4 bids which don't carry the partnership beyond the 5♠ safety level. This limits the amount of information that can be exchanged.

- The opening 1♣ bid doesn't say anything about opener's hand, other than that he has a strong hand. Consequently, it is more efficient for responder to do the describing, since responder's bid is the first bid which carries any distributional meaning. He is known in relay parlance as the "Teller."
- The 1♣ bidder has most of the partnership strength. It is usually the partner who has most of the high cards who is in a better position to place the contract, since he can see how well his high cards fit opposite his partner's distribution. And, if opener needs specific cards there are fewer cards he needs to find. He is referred to as the "Asker."¹

It could easily be said that relay is merely Blackwood on steroids. Nothing more. One partner, usually the stronger hand, takes charge. He is simply asking questions and using the information received to choose the right contract. Instead of asking for aces, we ask for shape and controls.

How much information can be exchanged before opener has to make the final decision? What should this information be? How can the coding be structured in a way which isn't too much of a memory burden, so that after some practice we won't be making mistakes? These are the questions that will be answered in the upcoming chapters.

¹Referring to "Asker" and "Teller," as opposed to "Opener" and "Responder," isn't an especially important distinction in KK Relay 1♣ auctions, since opener always does the asking, and responder always does the telling. But it will become important when and if you expand your use of the relay structure to other auctions. It's quite likely that opener will be doing the describing in some sequences.

THE FIBONACCI SERIES

If a pair of rabbits is placed in an enclosed area, how many rabbits will be born there if we assume that every month a pair of rabbits produces another pair, and that rabbits begin to bear young two months after their birth?

And what does that have to do with KK Relay? Everything!

Let's suppose we bid 4NT, RKC for spades. How many different pieces of information can we get from partner without having to commit to going above 5♠?

The immediate answer might appear to be four. Teller has four possible responses to 4NT: 5♣, 5♦, 5♥, and 5♠. It is true that, if he bids 5♠ or 5♥, we can't get any more information without going above 5♠. Even if he bids 5♦ and we bid 5♥, he has only one response 5♠ or below, so again we can't get any more information without going above 5♠. But suppose he bids 5♣. Now, if we bid 5♦, he can bid either 5♥ or 5♠ without going above 5♠. Therefore, there are two possible pieces of information we can get from Teller after his 5♣ call without going above the 5♠ safety level, but only one each after his 5♦, 5♥ or 5♠ calls, so the correct answer is that we can get five pieces of information, not four.

This extra information might be utilized as follows: after Teller bids 5♣, we can bid 5♦ asking for the queen of spades. 5♦ is another relay. If Teller has the queen of spades, we won't mind going above that safety level of 5♠. (As we will see going forward, when Teller gives the right answer, the safety level rises, and you can acquire a lot more information.) But now he has two bids available to show that he doesn't have the queen of spades. We can agree that 5♥ shows no queen of spades but extra length, while 5♠ shows no queen of spades and no extra length. If playing standard RKC responses, the five pieces of information would then be:

1. **5♠**: 2 keycards, queen of spades
2. **5♥**: 2 keycards, no queen of spades
3. **5♦**: 1 or 4 keycards
4. **5♣, then 5♥**: 0 or 3 keycards, no queen of spades, extra length
5. **5♣, then 5♠**: 0 or 3 keycards, no queen of spades, no extra length

Thus, if the relay call (the Ask) is four steps below the safety level, there are five pieces of information which may be transmitted without going above the safety level.

The astute but non-mathematically inclined reader might wonder if there are possibly six, or maybe even seven, pieces of information available at 5♠ or below. Using the same RKC sequence, 4NT for spades :

1. **5♣**: 0 or 3
2. **5♦**: 1 or 4
3. **5♥**: 2 without the queen
4. **5♠**: 2 with the queen
5. **5♣ followed by 5♥**: 0 or 3 without the queen
6. **5♣ followed by 5♠**: 0 or 3 with the queen
7. **5♦ followed by 5♠**: 1 or 4 without the queen

The mathematical fact, that there are really only five pieces of information here, can be easily understood by looking at 5♣ as showing one of two possible hands (0 or 3 without the queen, OR 0 or 3 with the queen); then the later 5♥ and 5♠ calls are merely clarifying which of the two 5♣ hands is held—i.e., two parts of one thing. Similarly, 5♦ is showing one of two hands, later clarified with 5♠ and 5NT (only one of which meets our criteria of staying at 5♠ or below).

A Trip to Italy

There is an incredible mathematical sequence of numbers called the Fibonacci Sequence, or Fibonacci Series, invented by the Italian mathematician Leonardo Pisano Bigollo in Pisa, Italy in the year 1202 (and first derived from his observation of the growth of rabbit populations!).

The rule for the series is that each number is the sum of the previous two numbers. Thus, the Fibonacci Series goes:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, etc.

In addition to being of vital use in mathematics, the Fibonacci Series is of value for relay systems. It tells us how many pieces of information can be transmitted while not exceeding a safety level if the Asker always relays by bidding the next step until he has gotten all the information possible.

To illustrate how it works, let's suppose we do not want the Teller to bypass 3NT when responding to a relay ask because we may want to play in 3NT. Going backwards from Teller's last bid, we would have:

- **3NT:** We are done. There's no room to ask for any further information. This is the initial "0" in the Fibonacci Series.
- **3♠:** All Asker can do is bid 3NT, and Teller is done. We still can't get any further information. This is the first "1" in the Fibonacci Series—Teller has only one bid available.
- **3♥:** Asker can bid 3♠. However, by the condition that Teller doesn't go beyond 3NT, 3NT is all Teller can bid, so Asker still doesn't learn anything new. This is the second "1" in the series.
- **3♦:** Asker bids 3♥. Now there are two bids Teller can make, 3NT and 3♠, which don't go beyond 3NT. Thus, there are two pieces of information that can be transmitted. After Teller makes one of these calls, Asker cannot get any more information and stay below 3NT. This is the "2" in the Fibonacci Series.
- **3♣:** Asker bids 3♦. Teller can respond 3NT, 3♠, or 3♥, so there are three pieces of information that can be transmitted. As we have seen, once Teller bids 3♥ or higher there is nothing else

Asker can find out about and still stop in 3NT. This is the “3” in the series.

- **2NT:** Asker bids 3♣. There are now four bids Teller can make: 3NT, 3♠, 3♥, and 3♦. The first three of these each impart one piece of information, and that is all that can be learned from these calls. However, when Teller bids 3♦ there is more to be learned. Asker can bid 3♥, and Teller can then bid either 3NT or 3♠. Thus, there are two additional pieces of information that can be learned, for a total of five pieces of information. This corresponds to the 4NT RKC example at the beginning of this chapter. Note that the “5” is 3 + 2, the three pieces of information from 3♥ or higher plus the two pieces of information from 3♦. This is the “5” in the series, and is the sum of the previous two numbers in the Fibonacci Series.
- **2♠:** Asker bids 2NT. Then:
 1. Teller bids 3♣. After Asker relays with 3♦, as we have seen there are three pieces of information which can be transmitted.
 2. Teller bids 3♦ or higher. These are the same bids Teller could make if Asker’s relay call had been 3♣. As we know, there are five pieces of information which could be transmitted.

Thus, the number of pieces of information which can be transmitted is $5 + 3 = 8$, the sum of the previous two numbers in the Fibonacci Series, and the “8” in the series.

As we can see then, if Teller’s last call was 2♥, there will be 13 pieces of information which can be transmitted without passing 3NT (5+8), and so on.

This pattern will continue as Teller’s previous call gets cheaper. The number of pieces of information that can be transmitted will always be the sum of the numbers for the next two higher bids, exactly as it is in the Fibonacci Series. Thus, knowing the point at which Teller starts showing his hand will tell us how many pieces of information can be transmitted while staying below the 3NT safety level.

This is important. Asker will often want to stop at 3NT, depending upon what information he receives. However, since we are in a game

force, all sequences where Asker relays until Teller has made a call of 3NT, 3♥, or 3♠ are available.

Here's how it works. After a strong 1♣ opening bid, responder bids 1♦ with a negative response. Anything else he bids shows game-forcing values, so the safety level is 3NT. With responder's game-forcing bids starting at 1♥, there are 13 possible calls between 1♥ and 3NT. A quick examination of the Fibonacci Series tells us that there are an incredible 377 pieces of information responder can give opener and still allow opener to stop at 3NT. That is quite a lot of potential information! It's usually enough to allow the 1♣ opener to make an intelligent decision about the best game and/or whether to make a move towards slam.

KK Relay organizes this large unwieldy mass of information into a sensible, meaningful, and easy-to-learn and easy-to-remember structure.

The answer to the riddle posed at the beginning of the chapter is 466 rabbits (233 pairs). We knew this, of course! 233 is the 13th number in the Fibonacci Series.

OVERVIEW

What's it all about?

Playing on BBO recently, Karen held ♠ AK ♥ AK5 ♦ 763 ♣ AK543 and heard her partner, Peter Buchen, respond 1♥ to 1♣. Wouldn't you like knowing that partner has five hearts headed by the QJ, and that he holds a doubleton club, before you launch into RKC hoping to find the diamond ace? You're thinking about a grand slam. But, if you could look through the backs of the cards and see his real hand: ♠ xxx ♥ QJ10xx ♦ AK ♣ xxx, you'd know not to bid 7♥. Despite all your aces and kings and tricks, you can't make a grand because of that inescapable club loser. But you probably don't have a foolproof way to ask for partner's exact shape—so you guess. Wouldn't it be so much better to know for sure?

That's exactly what KK Relay attempts to do.

The Heart of the Matter

The most important thing responder can tell the 1♣ opener is his exact distribution. If there are game-going values, knowing the shape will help the 1♣ opener make accurate decisions as to what is the best game. And the distributional information is vital for slam bidding, since Asker will know how well the hands fit and can often project how the play will go. If slam is in the picture, Asker can later probe to see if there are enough controls, and values, and whether or not Teller's high cards are in the right places. However, getting the distributional information has the highest priority.

As seen in the previous chapter, when we relay after a positive response there are 377 possible pieces of information that can be shown without going above the 3NT safety level. This is sufficient space to handle all but the most extreme distributions.

But there are also some theoretical and practical considerations that must be taken into account when constructing a relay structure. The most important of these is ease of memory. If we were programming a relay structure into a computer, this would not be a consideration. We would want to make the coding as optimal as possible without regard for ease of learning and remembering. But, for us mere mortals, this is not the case: our memories are not without limits! Thus, it is vital that the coding be both easy to learn and consistent, so the same patterns repeat themselves regardless of which suits Teller holds. KK Relay is structured with this in mind.

A second factor to consider is frequency. There are not an infinite number of possible sequences. It isn't worth spending some of these sequences for very rare distributions. Thus, the KK Relay structure does not take into account hands with 8-card (or longer) suits, nor hands with twelve or more cards in two suits. If you are dealt such a hand you will need to re-sort it to a distribution that can be shown within the KK structure. For example, with $8=1=2=2$ shape you would pretend your shape is $7=1=2=3$ or $7=1=3=2$ and bid accordingly. This won't be completely accurate, but it will be close. Since the freak hands with distributions that can't be shown are very rare (and the opponents are usually in the bidding when you hold those hands), the overall cost of leaving them out of the relay structure is negligible.

A third factor is keeping the bidding as low as possible, as often as possible. Once Asker learns about Teller's distribution, he may continue to relay to find out more about choice-of-game and slam possibilities. The more information the Asker is able to acquire, the more accurate his decisions will be. Asker may want to stop quickly in game if Teller doesn't have the necessary controls to make a slam. Or he may need to stop below slam because Teller's honor cards are in the wrong place. These possibilities illustrate how important it is for Asker to find out Teller's exact shape and start relaying for slam purposes as cheaply as possible.

In particular, it is enormously valuable if Teller's final shape-showing call is $3\heartsuit$ or lower, since that will allow Asker's next-step relay to be below 3NT. If Teller's final shape-showing call is $3\spadesuit$ or higher, Asker will have to relay at the 4-level, since 3NT by Asker is always to play. This higher relay (above 3NT) is considerably less convenient

because we're running out of room. For this reason, the KK shape-showing structure is coded so that Teller's least distributional hands, which are the more common hand types, are shown at the lowest levels, with Teller's final call being 3♥ or lower. (In fact, in most cases 3♦ will be the final shape-showing call, leaving maximum room for further investigation).

After the 1♣ opener has learned Teller's exact distribution he may simply want to sign off in game. Asker is usually well-placed to choose the best game. However, he may have slam interest. If so, Asker will usually start his exploration with a relay that asks Teller how many controls he has (ace = 2, king = 1). After receiving the response, Asker will know if slam is still in the picture. If not, Asker will sign off in game.

If slam is in the picture, Asker will usually continue with another relay that initiates Denial Cue-Bidding (DCB for short). In a specified order depending upon Teller's shape (which Asker already knows since Teller will have shown his exact shape), the Teller shows the Asker exactly which control cards (aces and kings) he has. The general concept is that Teller will bypass control cards he holds and go straight to the first control he is missing. But, unlike normal cue-bidding, this is done in coded steps, as opposed to "naturally." Teller bypasses the steps that correspond to a control he has and bids the first step that corresponds to a control he is missing. In response to further relays, after having shown his aces and kings, Teller will then show his queens, and after that his jacks. Asker can continue to relay to get this information, provided the responses won't get the partnership too high. Depending upon space considerations and the safety level, sometimes Asker can determine Teller's exact hand. Other times, when there is less room, Asker will only be able to get some of the important information, after which Asker will have to make the percentage call with the information he has received.

Relay in Action

Here are some hands from our recent BBO sessions that illustrate how Asker can find what is likely to be the right contract after hearing about Teller's hand through KK Relay. It's not important for the reader to know the exact system details for these examples at this juncture. That will come in later chapters. For now, we will walk you through the meaning of Teller's calls.

Example 1: Choice of Games

♠ A6 ♥ AQ1052 ♦ KQ3 ♣ A84

WEST

1 ♣

2 ♣

2 ♥

EAST

1NT¹

2♦²

3♣³

1. Usually 5+ clubs

2. 4+ diamonds

3. Exactly 2=2=4=5 distribution

There could still be a slam (perhaps 6♣) if Teller has a strong hand, so Asker next asks how many controls Teller has:

WEST

3♦

EAST

3♥⁴

4. 0-2 controls

Asker now knows there is no slam, so it is a matter of choosing the best game. The matching doubletons in spades suggest that 3NT won't be best. 5♣ in the 5-3 fit might be okay, but 11 tricks could be difficult to come by. 4♥ in the 5-2 fit is probably better, since only 10 tricks are needed. So, Asker simply gets to 4♥. (His actual route there is to bid 4♦, which forces Teller to bid 4♥, after which Asker places the contract. A direct 4♥ has another meaning. We'll get to that later.) Thus, the full auction is:

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♦ ²
2♥	3♣ ³
3♦	3♥ ⁴
4♦ ⁵	4♥ ⁶

Pass

1. Usually 5+ clubs
2. 4+ diamonds
3. Exactly 2=2=4=5 distribution
4. 0–2 controls
5. Command to bid 4♥.
6. Following orders.

Teller's hand is:

♠ Q8 ♥ K7 ♦ J1052 ♣ K9542

4♥ is clearly the best contract, and it would be a difficult contract to find without KK Relay. In a “Standard” auction, if opener's hand is in the partnership's range for a 2NT opening, the auction will go 2NT-3NT. If the auction starts with 1♥, opener will likely bid 3NT over responder's 1NT response. A strong club with natural responses would have some chance, but the auction might go like this:

WEST	EAST
1 ♣	2 ♣
2♥	3♦
?	

Opener can't do much but bid 3NT, and responder will have to pass.

Example 2: Choice of Games

♠ KQ6 ♥ Q4 ♦ KQJ9 ♣ A975

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2NT ³
3 ♣	3 ♦ ⁴

1. 4+ spades
2. 4+ hearts
3. 5+ spades, exactly 4 hearts, diamond shortness
4. Exactly 5=4=1=3 distribution

Asker knows there is a 5–3 spade fit. However, with Asker's diamond holding opposite Teller's singleton, it looks like notrump will be fine. Also, Asker's Qx of hearts suggests that there may be little or no value for ruffing hearts in the short hand. Since 9 tricks look easier than 10, Asker simply places the contract in 3NT. Teller will normally pass (but can move if he has a strong hand). The full auction is:

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2NT ³
3 ♣	3 ♦ ⁴
3NT	Pass

1. 4+ spades
2. 4+ hearts
3. 5+ spades, exactly 4 hearts, diamond shortness
4. Exactly 5=4=1=3 distribution

Teller's hand is:

♠ AJ853 ♥ KJ92 ♦ 7 ♣ 1042

4♠ would be in quite a bit of jeopardy on a club lead, while 3NT is virtually cold. This would be extremely difficult to diagnose without

KK Relay. In most auctions responder will show 5-4 in the majors, but, without knowledge of responder's minor-suit distribution, opener can't know to choose 3NT over 4♠.

Example 3: Slam Investigation

♠ KJ86 ♥ A5 ♦ AKQJ7 ♣ QJ

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♣ ²
2 ♦	3 ♥ ³
1. 4+ spades	
2. 4+ clubs	
3. Exactly 6=2=1=4 distribution	

Obviously, Asker is very interested in slam. His first step is to find out about controls.

WEST	EAST
3 ♠	4 ♣ ⁴
4. 3 controls	

That looks promising. Since Asker has 2 of the 4 kings, Teller must have an ace and a king for his 3 controls. Ace of spades and king of clubs would make slam very good. Ace of clubs and king of hearts would be fine, as would be AK of clubs. However, if Teller has ace of spades and king of hearts, then we are off the first two club tricks. It is time to find out exactly where Teller's controls are. Asker initiates Denial Cue-Bidding (DCB) with a next-step relay.

WEST	EAST
4 ♦	4 ♠ ⁵
5. Ace or king of spades + both the ace and king of clubs or neither one.	

Teller has shown the ace of spades, so he can't have both ace and king of clubs. Therefore, he has neither one, and Asker knows there is no slam.

Since the last bid was 4♠, Asker can simply pass. If the last bid had been higher, Asker would have had to sign off in 5♠. The full auction:

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♣ ²
2 ♦	3 ♥ ³
3 ♠	4 ♣ ⁴
4 ♦	4 ♠ ⁵
Pass	
1. 4+ spades	
2. 4+ clubs	
3. Exactly 6=2=1=4 distribution	
4. 3 controls	
5. Ace or king of spades + both the ace and king of clubs or neither one.	

Teller's hand:

♠ AQ9752 ♥ K9 ♦ 8 ♣ 10975

With so much strength and the big spade fit, it could be very difficult to stop short of slam with other methods. Perhaps the lack of a club control might be diagnosed via control bidding, but perhaps not. With KK Relay, there is no guess. Asker knew for certain that he was off the first two club tricks.

Example 4: Finding a Light Slam

♠ QJ94 ♥ A2 ♦ A54 ♣ AQ72

WEST	EAST
1 ♣	1NT ¹
2 ♣	3 ♦ ²
1. 5+ clubs	
2. Exactly 3=3=2=5 distribution	

If Teller is minimal, 3NT should be okay. However, if Teller has enough controls there could be a slam, and 5♣ figures to be safe enough. It can't

hurt to ask. The only answers to the Control Ask that will go beyond 3NT show 4 or more controls, which is enough to consider slam.

WEST	EAST
3♥	4♣ ³
3. 4 controls	

There are enough controls for slam, but we may need them in the right places. Time to find out.

WEST	EAST
4♦	4♠ ⁴
4. Ace or king of clubs, either no spade control or both ace and king of spades.	

Teller is known to have 4 controls (from his earlier 4♣ response). One of them is now known to be the king of clubs. If he has neither the ace nor king of spades, he would have at most only 3 controls, since Asker has all three other aces. He needs the AK of spades to get to 4. Therefore, he has AK of spades along with the club king. We can now picture his minimal hand as:

♠ AKx ♥ xxx ♦ xx ♣ Kxxxx

A reminder of our hand:

♠ QJ94 ♥ A2 ♦ A54 ♣ AQ72

Perfect. Assuming trumps aren't 4-0, we can draw trumps, discard his losing diamond on the fourth spade, give up a heart, and ruff his third heart for our twelfth trick. We can bid 6♣ with confidence. The full auction:

WEST	EAST
1 ♣	1NT ¹
2 ♣	3 ♦ ²
3 ♥	4 ♣ ³
4 ♦	4 ♠ ⁴
6 ♣	Pass

1. 5+ clubs
2. Exactly 3=3=2=5 distribution
3. 4 controls
4. Ace or king of clubs, either no spade control
or both ace and king of spades.

Teller's hand:

♠ AK7 ♥ 987 ♦ 102 ♣ K10863

It would be almost impossible to get to this 27-point slam intelligently without KK Relay. Two balanced hands are unlikely to venture past 4NT. Not only were the AK of spades critical, but Teller's red-suit distribution was key. If Teller had 2 hearts and 3 diamonds, slam would have no play.

How does Asker magically know Teller's exact distribution after a few bids? This will be explained in the upcoming chapters.

HAND TYPES

In order for responder to show his exact distribution, it is necessary to define the distinct types of hands responder can hold. There are five possible hand types; each of these hand types is handled in a separate way in KK Relay.

The five hand types are as follows:

1. **Balanced Hand.** This is a hand with no 5-card or longer suit, and no singleton or void. The only possible distributions for a balanced hand are 4-3-3-3 and 4-4-3-2.
2. **One-Suiter.** This is a hand with one suit of 5 cards or longer, but no second suit of 4 cards or longer. There are only six possible one-suited hands distributions: 5-3-3-2, 6-3-2-2, 6-3-3-1, 7-2-2-2, 7-3-2-1, and 7-3-3-0.

Remember, KK Relay does not show 8-card suits because it's not practical to do so—it would take up valuable space in the relay structure for extremely infrequent hands, and the opponents are virtually always in the bidding on these distributional deals, making a relay structure nearly useless anyway.

3. **Short Two-Suiter.** This is a hand with one suit of 5 cards or longer, a second suit of exactly 4 cards, and no other 4-card suit. The six possible distributions for short two-suiters are 5-4-2-2, 5-4-3-1, 6-4-2-1, 6-4-3-0, 7-4-1-1, and 7-4-2-0. Again, KK Relay does not show 8-card suits.
4. **Long Two-Suiter.** This is a hand with two suits of 5 cards or longer. The four possible distributions for these hands are 5-5-2-1, 5-5-3-0, 6-5-1-1, and 6-5-2-0. (KK Relay does not show hands with twelve cards in two suits for the same reasons that we don't show 8-card suits—it's not practical.)
5. **Three-Suiter.** This is a hand with three suits of 4 cards or longer. The only possible distributions for three-suited hands are 4-4-4-1 and 5-4-4-0.

Showing the Hand Type

The first-round responses to 1♣ begin to describe responder's hand type:

- **1♦**: Any 0-8
- **1♥**: 4+ spades, 9+, unbalanced
- **1♠**: 4+ hearts, 9+, unbalanced
- **1NT**: 5+ clubs, 9+, unbalanced
- **2♣**: 5+ diamonds, 9+, unbalanced
- **2♦ and higher**: 9+, Balanced

After the initial response, responder will reveal more about his hand type with his subsequent calls.

Showing a Balanced Hand

With the balanced hand, 4-3-3-3 or 4-4-3-2, responder will usually bid 2♦ over 1♣. KK relay splits the balanced ranges so that with hands of exactly 12–14 HCP responder bids higher than 2♦ immediately. Thus, the 2♦ response will be either 9–11 HCP or 15+ HCP. In the next chapter we'll look at the follow-ups to the 2♦ response. We'll also describe the first-round responses above 2♦ (showing exactly 12–14).

Showing a One-Suiter

With the one-suiter, responder shows that suit as follows:

- **1♥**: Spades
- **1♠**: Hearts
- **1NT**: Clubs
- **2♣**: Diamonds

This coding will hold throughout the relay structure, i.e., the default relay order will always be Spades, Hearts, Clubs, Diamonds.¹ The primary reason for this particular coding is that it maximizes the chances that the 1♣ bidder will be declarer. Opener will almost always relay with the next step. So, if responder's suit eventually becomes the trump suit, opener will have been the first to bid that suit when it is spades or diamonds, and opener has already bid clubs with his opening bid. That leaves only the heart suit to chance.

There are two reasons why it is usually advantageous for the 1♣ opener to be declarer. The obvious one: it's usually preferable for the opening lead to come up to the strong hand rather than through the strong hand. But, even more importantly, the defense will be more difficult when the unknown hand is concealed, as will be the case most of the time, since dummy-to-be is doing the describing.

Note, however, that even when the auction times out so the 1♣ opener is dummy and declarer's hand is known, the opening leader is still in the dark about what the overall deal looks like since the 1♣ bidder could have anything. This is an intrinsic advantage of relay.

After responder shows his single suit on the first round, his next bid will be 2♠ or higher, within a structure that will show his exact distribution. This structure will be described in detail in Chapter 6.

¹When learning relay it can be helpful to use acronyms as a memory aid for the order in which things are shown. To remember the default order for the suits, SHCD we use "Some Husbands Can't Dance." This will later be expanded to cover the order in which we clarify the hand type: SHCDBR5S, "Some Husbands Can't Dance Before Reaching 55 and Single," which is an acronym for Spades, Hearts, Clubs, Diamonds, Balanced, Reverser, 5/5, Single-Suiter.

Showing a Two-Suiter

With a two-suiter, responder shows his suits using exactly the same coding as is used for the one-suiter. 1♥ = Spades, 1♠ = Hearts, 1NT = Clubs, 2♣ = Diamonds. HOWEVER, the first-shown suit is not necessarily responder's longest suit. KK Relay follows the MAFIA (Majors First Always) principle (introduced into strong-club bidding theory by Eric Rodwell) and shows 4-card majors before showing longer suits (we also show spades before hearts). We follow the default relay order: Spades, Hearts, Clubs, Diamonds. Therefore, responder's first-shown suit is determined as follows:

- If responder has 4+ spades, he shows spades first, whether or not he has a longer suit elsewhere. Else,
- If responder has 4+ hearts but fewer than 4 spades, he shows hearts first, whether or not he has a longer minor. Else,
- If responder has 5+ clubs and no 4-card major, he shows clubs first, whether or not he has longer diamonds. Else,
- Responder must have 5+ diamonds, so he shows diamonds first. His second suit (if he has one) must be clubs—and it must be exactly four clubs, since he would have shown clubs first with 5+ clubs.

Note that we do not refer to “primary suits” or “secondary suits” in KK relay. This is because the first-shown suit is often shorter than the second suit, and the use of the term “primary suit” would lead to confusion. Instead we speak of “first-bid suit,” or, more accurately, “first-shown suit.” We may also refer to the suits as “longest suit,” “second-longest suit,” etc.

Examples

♠ KQ72 ♥ AK10954 ♦ 63 ♣ 8

Even though responder has 6 hearts and 4 spades, he will show spades first: his first response will be 1♥, showing 4+ spades. Later he will clarify that he also has a heart suit, and that spades is only a 4-card suit, with longer hearts.

♠ 5 ♥ 9854 ♦ AKQ75 ♣ Q63

Even though responder has 5 diamonds, and the diamonds are much stronger than the hearts, hearts are shown first in the relay order. His first response will be 1♠, showing hearts. The rest of his distribution will be clarified later.

♠ A ♥ 6 ♦ KQJ952 ♣ 87632

If responder had a 4+ card major, that suit would have been shown first. Since responder doesn't have a major but does have 5 clubs, clubs are shown first (because clubs come ahead of diamonds in the relay order). The first response will be 1NT, showing clubs. It doesn't matter that responder has 6 diamonds. That will be clarified later.

THE SECOND SUIT

When he holds a two-suiter, Teller's next call after showing his first suit will show his other suit. And again, we will follow the basic relay order to show that second suit: Hearts, Clubs, Diamonds. (Spades cannot be a second suit, since we always show spades first.)

Teller will also clarify whether he has a long two-suiter (5–5+) or a short two-suiter (one 4-card suit and one 5+ suit). If he shows a short two-suiter he will also say whether the first-shown or second-shown suit is the 4-card suit.

The sensational thing about this is that it will all be done with rebids of 2♠ or lower, leaving plenty of room to describe the exact distribution by the 3♦-level in most cases, and virtually always by the 3NT level (unless Teller has extreme distribution).

Note: The astute reader will notice that Teller's rebids of 2♠ and higher on the second round describe and clarify his one-suiters, as mentioned above. Hence, we must squeeze the two-suiters in below 2♠. Therefore, with a two-suiter, responder's second-round rebid will always be 2♥ or lower.

The process of clarifying the exact shape of the two-suiter on subsequent rounds will be described in detail in Chapters 7 and 8.

Showing a Three-Suiter

Three-suiters are a bit trickier than one-suiters and two-suiters. With a three-suiter, responder's first call is as follows:

- If responder's short suit is a minor, he has both majors by definition. He starts by showing spades, as always with both majors (with a 1♥ response). He will later take a special sequence to show that he has a three-suiter.
- If responder's short suit is a major, he has both minors, by definition. He starts by showing clubs with a 1NT response. Then he will follow with a different special sequence that shows a three-suited hand.

IMPORTANT NOTE: Even with a distribution such as 5=0=4=4, responder starts with 1NT because he's short in a major. He will later clarify that he has a three-suiter and will show his exact distribution. (Three-suited hands are the only exception to the rule that we always show spades first.)

Examples

Let's look at some example hands to see what responder's first call will be:

♠ A2 ♥ K43 ♦ 98654 ♣ K62

Even though responder has no shortness he has a 5-card suit. Regardless of how weak the suit is, this hand is considered a one-suiter. The suit is diamonds, so responder's call is 2♦.

♠ KQJ7 ♥ A954 ♦ 32 ♣ 654

Responder has no 5-card suit and no shortness. This is a balanced hand. His strength is 9–11, so his call is 2♦.

♠ A8732 ♥ 65 ♦ KQ54 ♣ 83

Responder has a 5-card spade suit, so spades are shown first. He also has a 4-card minor, so he has a short two-suiter. His first call is 1♥, showing spades. (He will show diamonds later.)

♠ Q5 ♥ 10762 ♦ AK954 ♣ 62

Responder has four hearts, so he shows hearts first, even though the diamonds are longer and stronger. MAFIA. His first call is 1♠, showing hearts.

♠ 8 ♥ K ♦ KQ9542 ♣ J10987

Responder has no major, and he has a 5-card club suit. He shows clubs first, even though the diamonds are longer and stronger. (Clubs come before diamonds in the relay order.) His first call is 1NT, showing clubs.

♠ — ♥ AQJ32 ♦ KQ87 ♣ 8732

Responder has a three-suiter, with shortness in a major. That means that his first call is 1NT, showing clubs, even though he has a 5-card major. The actual distribution will be clarified later with a special sequence for three-suiters. This sequence will be described in Chapter 9.

BALANCED HANDS

Responder's balanced hands are divided into three HCP ranges: 9–11, 12–14, and 15+. There is also a control requirement for the stronger hands: the 15+ hand must have 4+ controls; otherwise it is described as 12–14.

We will focus first on the 9–11 range, showing how responder describes his exact shape. (Hands in the higher ranges will follow exactly the same shape-showing structure, with a slight modification in order to distinguish the range.)

Responder's initial call with 9–11 balanced is 2♦, which is assumed to be 9–11, and it usually is, but it may later turn out to be 15+. Opener will relay with 2♥.

- If responder is 4-3-3-3 he'll show his long suit. We'll get back to how he does that shortly.
- If responder has a 4-4-3-2 hand, he shows his two suits using CRASH coding (color, rank, shape) as follows:
 - **2♠**: Two 4-card suits of the same color, so either spades + clubs or hearts + diamonds.
 - **2NT**: Two 4-card suits of the same rank, so either spades + hearts or diamonds + clubs.
 - **3♦ and higher**: Two 4-card suits of the same shape, so either spades + diamonds or hearts + clubs.

What do we mean by 3♦ and higher? And what happened to 3♣? It would appear to be more economical to make 3♣ show two suits of the same shape and start describing a step lower. The answers to these questions are the key to the KK Relay structure. Read on.

Two Suits of the Same Shape

Let's suppose Teller is 4-4-3-2 and has shown two 4-card suits of the same shape. His 4-card suits are either clubs + hearts or diamonds + spades. But he could have any doubleton. Once his doubleton is known, his exact shape will be known. For example, suppose Teller shows a doubleton heart. Once that information is known, since his 4-card suits are known to be of the same shape, they can't be hearts + clubs, so they must be diamonds + spades. Therefore, his exact distribution must be 4=2=4=3.

Since Teller might have any doubleton, it won't be good enough for 3♦ to simply show two suits of the same shape. Asker would have to relay with 3♥ and there wouldn't be room enough to show four different pieces of information (the four possible doubletons) and still keep the auction at 3NT or lower. As we've seen from examining the Fibonacci series, with three steps we can only show two pieces of information.

The solution to the problem is to immediately use all four of the available steps of 3♦ and higher—i.e., 3♦, 3♥, 3♠, and 3NT—to show two 4-card suits of the same shape, and to designate the doubleton at the same time. In order to keep the memory work as simple as possible, we define that the actual doubleton is the suit we bid (3NT shows the doubleton club). Thus, we have:

WEST	EAST
1 ♣	2 ♦
2 ♥	?

- **3♦**: Two suits same shape, doubleton diamond, hence 3=4=2=4.
- **3♥**: Two suits same shape, doubleton heart, hence 4=2=4=3.
- **3♠**: Two suits same shape, doubleton spade, hence 2=4=3=4.
- **3NT**: Two suits same shape, doubleton club, hence 4=3=4=2.

What happened to 3♣? As you will know by now, no space is wasted in KK Relay. We'll be looking at that missing 3♣ step shortly.

Two Suits of the Same Rank

Let's now look at what happens when responder is 4-4-3-2 with either 4-4 in the majors or 4-4 in the minors, i.e., two suits of the same rank.

His immediate rebid (after 2♦ showing a balanced hand) is 2NT. Opener relays with the next step, 3♣. And now responder shows his doubleton in exactly the same way he does when he has two suits of the same shape, namely by bidding his doubleton (again 3NT will show the doubleton club). This is the key to construction of KK Relay.

The final expansion steps, showing Teller's exact shape, always mean the same thing, regardless of the earlier calls. In this case, Teller will have identified some 4-4-3-2 shape: either two suits of the same color, two suits of the same rank, or two suits of the same shape. He will show his doubleton with 3♦, 3♥, 3♠ or 3NT and his entire shape will be known. We will see this pattern come up again and again when we delve deeper into relay: the same bids are used to show the final pattern for a give hand type, regardless of what has come before.. It's a key feature in KK Relay and makes the structure very easy to learn and remember.

And it is now clear why two suits of the same shape are shown with immediate bids of 3♦ or higher, not with 3♣ or higher. After Teller's 2♦ and the 2♥ ask, if we started with 3♣ to show the four possible doubletons, the final bids (known as ESS calls—for Exact Shape Showing) would not be identical to the expansion with two suits of the same rank. The structure would not be "Symmetric." But, it's important that they are identical, both for comfort and ease of memory.

So, for two suits of the same rank we have:

WEST	EAST
1♣	2♦
2♥	?

- **2NT, then 3♦:** Two suits same rank, doubleton diamond, hence both majors and exactly $4=4=2=3$.
- **2NT, then 3♥:** Two suits same rank, doubleton heart, hence both minors and exactly $3=2=4=4$.

- **2NT, then 3♠:** Two suits same rank, doubleton spade, hence both minors and exactly $2=3=4=4$.
- **2NT, then 3NT:** Two suits same rank, doubleton club, hence both majors and exactly $4=4=3=2$.

Two Suits of the Same Color

When responder has 4–4 in the red suits or 4–4 the black suits (two suits of the same color), we use exactly the same pattern to identify the doubleton (and therefore the exact pattern) as was used for the expansion of the other 4-4-3-2 hands. The doubleton will again be shown with calls of 3♦, 3♥, 3♠ or 3NT. But this time Teller’s first rebid is 2♠. Asker will relay with 2NT and Teller will show his doubleton.

WEST	EAST
1♣	2♦
2♥	?

- **2♠, then 3♦:** Two suits same color, doubleton diamond, hence the black suits and exactly $4=3=2=4$.
- **2♠, then 3♥:** Two suits same color, doubleton heart, hence the black suits and exactly $4=2=3=4$.
- **2♠, then 3♠:** Two suits same color, doubleton spade, hence the red suits and exactly $2=4=4=3$.
- **2♠, then 3NT:** Two suits same color, doubleton club, hence the red suits and exactly $3=4=4=2$.

Note that when Teller starts with 2♠ (two suits, same color) or 2NT (two suits, same rank), Asker doesn’t immediately know which these two suits are. However, when Teller reveals his doubleton, Asker will be able to unwind everything and determine Teller’s exact shape.

Again, we ask. . . what about that missing 3♣ call?

The TWO-STEP

There is one balanced hand that we haven't yet discussed: the 4-3-3-3 hand. And 3♣ is, of course, used to show that missing pattern: 4-3-3-3. There's no need to expand to doubletons when you're 4-3-3-3, so it would appear that we have plenty of room. Right?

Not so fast... As we learned from the Fibonacci series, there are only three possible pieces of information that can be shown when we have only three steps available. But there are four possible 4-3-3-3 shapes. An immediate 3♣ call won't take care of all four of them at or below 3NT; after Asker relays with 3♦, we have only three steps (3♥, 3♠, 3NT) available to complete the shape expansion.

The answer to the problem is that there are two routes to 3♣. (Do you remember those two missing 3♣ steps?) One path to 3♣ is to bid it immediately; the other is to rebid 2♠ first, then follow with 3♣ over the 2NT relay. Note that 2♠ was used to show two suits of the same color, but a 3♣ follow-up, rather than the expected 3♦ or higher, eliminates the two-suits-of-the-same-color meaning and leaves a 4-3-3-3 pattern as the only possibility. If we make use of both paths to 3♣ there is plenty of room to show all of the 4-3-3-3 hands.

The coding is as follows: The slow route to 3♣ (2♠, then 3♣) shows 4-3-3-3 with a 4-card *major*. The fast route to 3♣ (the immediate 3♣ call) shows 4-3-3-3 with a 4-card *minor*. One way to remember this is that it follows the MAFIA principle: majors first, always. The step showing 4-3-3-3 with a major, 2♠, comes before the step showing 4-3-3-3 with a minor, 3♣. In both cases, Asker can relay with 3♦ to find the exact distribution and Teller will clarify which is the 4-card suit.

This is another of the keys to KK relay: the Two-Step. The fact that there are two routes to the 3rd step (immediate or delayed) allows us to double the number of things that can be shown with that step.

In KK Relay, the final expansion to exact shape (ESS), once the generic shape is known, is done numerically. For example, if you're known to hold some 6-3-2-2 with 6 spades, then your exact shape becomes a four-digit number; 6223 is numerically lower than 6232, so 6=2=2=3 is shown first. So, for the 4-3-3-3 hands we're looking at now, let's suppose Teller has shown a 4-card major. His only possible major-suit shapes are 3-4 (3 spades, 4 hearts) and 4-3 (4 spades, 3 hearts). 34

is numerically lower than 43. The cheaper call is used for the smaller number. Thus:

WEST	EAST
1 ♣	2 ♦
2 ♥	?

- **2 ♠, then 3 ♣, then 3 ♥** shows 3=4=3=3
- **2 ♠, then 3 ♣, then 3 ♠** shows 4=3=3=3

The same approach is used for 4-3-3-3 hands with a 4-card minor. Teller takes the fast route to 3 ♣ showing 4-3-3-3 with a minor. The possible minor-suit shapes are 3-4 and 4-3. Thus:

WEST	EAST
1 ♣	2 ♦
2 ♥	?

- **3 ♣, then 3 ♥** shows 3=3=3=4
- **3 ♣, then 3 ♠** shows 3=3=4=3

BELL-RINGERS and PIVOT POINTS

Memory aids are quite useful when trying to learn and remember a relay structure in the heat of battle, since so much of it is repetitive steps that have no “natural” connection to the suit you are naming when you make a bid.

Bell-Ringers

One of the most useful memory aids is the Bell-Ringer. Certain calls occur over and over again in a repeating pattern; they send a signal to the partnership that we are now entering a new phase of the bidding. The 3 ♣ bid in the auction above is one such bid.

Other Bell-Ringers will be discussed in later chapters when we deal with the one-suited and two-suited structures.

The 3♣ call is often referred to as “equal” in the KK Relay, since it always deals with shapes where there is no specific shortest suit. 3♣ is, in fact, known as “The Equal”—a Bell-Ringer. It’s also referred to as “The Funny” because there is always something slightly unusual going on when Teller bids 3♣. Whenever you hear 3♣ from Teller you know that we are now entering an unusual clarification stage where Teller will define, or has already defined, which of the two “no specific shortness” hands he holds.

It should be noted that when Teller bids 3♣ (the “Funny”), Asker will often skip over the next-step relay (3♦), rather than getting a full clarification, and go on to more important matters. Again, 3♣ is a Bell-Ringer indicating that things may change here—we may be about to break out of the normal relay pattern. We’ll deal more with this in later chapters when we discuss Control Asks and Denial Cue-Bidding.

The structure that got us here, to the 3♣ Bell-Ringer, is the balanced hand relay also known as CR4SH—a slight variation of CRASH as we know it; and the name serves as yet another memory aid. CR4SH stands for Color, Rank, 4, Shape. The “4” in CR4SH stands for 4-3-3-3 with a minor or 4-3-3-3 with a major—the two extra shapes that are added into what one would normally expect in a CRASH structure. The full CR4SH structure is:

- 2♠: Two 4-card suits of the same color OR 4-3-3-3 with a major
- 2NT: Two 4-card suits of the same rank
- 3♣: 4-3-3-3 with a minor
- 3♦ and higher: Two 4-card suits of the same shape

Another way to remember the balanced hand structure is: Color, Rank, Equal, Shape. As will be seen in the ensuing chapters, this concept of 3♣ as a “funny” Bell Ringer is also used for expanding and clarifying the one-suited and two-suited hands, so it can be useful to think of it this way.

Pivot Points

There's a very special Bell-Ringer known as the "Pivot Point," which is integral to understanding and using the KK Relay structure. The message when we reach the Pivot Point is, "We're done here. Now we'll go on and do something new." We'll pivot.

It's called the Pivot Point because this is the point in the auction at which Teller will "Zoom." Zooming is voluntarily going on to the next phase of clarification, when you reach the end of the previous phase (known as End of Line or EOL). Teller can often do this without being asked, hence the term "Zooming."

As an example of Zooming, look what happens when Teller has a 4-4-3-2 hand with two suits of the same shape. With the other 4-4-3-2 hands, Teller shows that his suits are either the same color or rank (via 2♠ or 2NT), and then shows his doubleton after Asker's next relay bid, starting with 3♦, the Pivot Point. With two suits of the same shape, we have reached the Pivot Point of 3♦, so there is not room for Teller to wait for the next question to show his doubleton; he does it right away. Thus with two suits of the same shape, Teller Zooms to show his exact shape immediately with bids of 3♦—the Pivot Point—and higher.

As we will see in the next chapter, with unbalanced hands the Pivot Point will always show the lowest possible shortness; and it will show the most common distribution—at the same time! When we reach this point in the auction Teller will now "pivot" to clarifying the exact distribution.

Thus, the Pivot Point is one of the most important features in the KK Relay. It serves multiple functions. Bells should ring when you hear it!

Knowing exactly what the Pivot Point is for various hand types will be extremely helpful in a number of ways. It will most often be 3♦, but it's different for some hand types. We'll go into detail about all of the exact Pivot Points in later chapters. So long as Teller doesn't go through "The Equal," all the bids from the Pivot Point or higher will always mean the same thing, regardless of how you got there. We have seen this with the 4-4-3-2 hands: 3♦ through 3NT always mean the same thing—a doubleton in the suit bid (clubs for 3NT). (When Teller does go through "The Equal," the development will be slightly different, as we'll see shortly.)

Being conscious of the Pivot Point for the particular hand type you are describing makes things considerably easier on the memory. It serves to anchor the auction—you can simply refer to the Pivot Point and then count the steps up and down from there, instead of starting at the beginning and counting each possible step. Knowing exactly where that Pivot Point occurs helps to remind you if you are mentally off by a step, which can easily happen in a relay structure, since it's all built on artificial steps. If you see that the Pivot Point isn't coming out to what it's supposed to be, you know you've done something wrong.

Balanced 12–14

When responder has a balanced hand with 12–14 points, he doesn't start with 2♦. Instead, he skips over that step and immediately begins to show his shape by bidding 2♠ or higher, as if he had started with 2♦ and then bid over Asker's 2♥ relay. The formula he uses to show his shape is exactly the same as that used in the 9–11 structure: 2♠ shows 4-4-3-2 with two suits of the same color OR 4-3-3-3 with a major, 2NT shows 4-4-3-2 with two suits of the same rank, 3♣ shows 4-3-3-3 with a minor, and 3♦ and higher show 4-4-3-2 with two suits of the same shape.

WEST
1♣

EAST
3♥

Responder has 12–14 balanced, since he started with 2♠ or higher. Just like in the 9–11 structure, he is 4-4-3-2 with two suits of the same shape, since his immediate call is 3♦ or higher. He has a doubleton heart, since he bids his actual doubleton. Thus, in one bid he has described 12–14 HCP, exactly 4=2=4=3 distribution.

Balanced 15+

When responder has a balanced hand with 15+ HCP (and 4+ controls), he starts by showing a balanced hand with 9–11 points. However, when Asker signs off, Teller takes another call, which says he has the strong balanced hand (15+) and simultaneously shows his number of controls (starting with 4).

Teller must be careful to not make a call that Asker can pass before Teller has shown the strong hand. For example:

♠ AQ87 ♥ QJ52 ♦ AQ8 ♣ 92

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	?

2 ♦ shows a balanced hand with 9–11 or 15+ HCP. 2NT shows two 4-card suits of the same rank. Teller now shows his doubleton. If he had 9–11 HCP, his bid to show the doubleton club would be 3NT. But he must not bid 3NT with this hand, since Asker would not know about the extra strength. Instead he bids beyond 3NT, which shows the shape for a 3NT call ($4=4=3=2$) but 15+ HCP. And he shows his controls at the same time. Teller is known to have at least 4 controls for a 15+ HCP hand. So,

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	4 ♣

shows a doubleton club ($4=4=3=2$) with 15+ HCP and exactly 4 controls; 4 ♦ would show a doubleton club with 15+ HCP and 5 controls, etc. In the example hand Teller has 4 controls, so his correct bid over the 3 ♣ relay is 4 ♣.

♠ 82 ♥ AK7 ♦ KQ98 ♣ K743

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	?

2♦ shows a balanced hand with 9–11 or 15+ HCP. 2NT shows two 4-card suits of the same rank. Teller now bids 3♠ showing a doubleton spade, so exactly 2=3=4=4 distribution. He will not have shown his strength yet, but he is safe, since Asker will not be passing 3♠. When Asker signs off, which is likely, Teller takes another call to show the 15+ hand and his number of controls. In this case, when he bids on over the signoff, he will have already shown his 2=3=4=4 pattern, so he'll now show exactly 5 controls. The procedure Teller uses to override the signoff will be described later.

Note that if responder is in the 15+ range, but has fewer than 4 controls, he shows his hand as 12–14.

1♣ – 2♥

What about a 2♥ response to 1♣? It would have been a bit more economical to slide everything down one step and show the 12–14 balanced hands starting with 2♥, rather than 2♠. However, this would mean that the follow-up bids (the “expansions”) would have different meanings than for the 9–11 balanced hands. From a memory point of view, it makes a lot more sense for the bids to mean the same thing as far as distribution goes. For example, 2♦-then-2NT shows 9–11 or 15+, while an immediate 2NT shows 12–14, but both sequences show two suits of the same rank. This makes the structure much easier to learn and reduces the chances of an error. In addition, as we will see, the immediate 2♥ response can optionally be used to show a special type of hand.

BALANCED HANDS QUIZ

First you will get to bid responder's hand. Assume that opener relays until you have shown your exact distribution. Determine what all your bids will be, and what they mean.

1. ♠ KQ43 ♥ KJ2 ♦ 982 ♣ 754
2. ♠ A54 ♥ 63 ♦ KJ92 ♣ Q1074
3. ♠ Q6 ♥ J954 ♦ A83 ♣ KQ52
4. ♠ 873 ♥ A954 ♦ KQ85 ♣ 62
5. ♠ A943 ♥ KQ52 ♦ K74 ♣ K3
6. ♠ K7 ♥ 8543 ♦ AK6 ♣ J743
7. ♠ A87 ♥ QJ64 ♦ K83 ♣ 974
8. ♠ K3 ♥ A764 ♦ QJ94 ♣ K75
9. ♠ Q1095 ♥ K75 ♦ KQ94 ♣ 82
10. ♠ 86 ♥ K75 ♦ QJ94 ♣ A763
11. ♠ K95 ♥ K63 ♦ QJ82 ♣ 975
12. ♠ 8764 ♥ K2 ♦ A93 ♣ Q982

Now switch to the other side. You are the 1♣ opener and will keep relaying until partner has described his distribution. You will be given the full auction, and you should be able to call off partner's exact shape. You then use this information to choose the best game.

13. ♠ AQ42 ♥ 983 ♦ KJ8 ♣ AK7

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♥

14. ♠ A87 ♥ AQ1074 ♦ KJ3 ♣ K8

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

15. ♠ Q7 ♥ AKJ95 ♦ AJ42 ♣ K7

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥

16. ♠ AQJ7 ♥ A83 ♦ AQ5 ♣ J104

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♠

17. ♠ AQ6 ♥ KQJ7 ♦ 52 ♣ AJ94

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥

18. ♠ KQ109 ♥ 8752 ♦ AQ ♣ KQ3

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♠

19. ♠ 83 ♥ AQJ9 ♦ AQ74 ♣ KJ8

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

20. ♠ 8 ♥ KQJ ♦ KQJ87 ♣ A852

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♠

21. ♠ AK ♥ AQJ95 ♦ 74 ♣ K873

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥

22. ♠ AK ♥ QJ42 ♦ J7 ♣ AQJ108

WEST

1 ♣

2 ♥

3 ♣

EAST

2 ♦

2NT

3 ♠

23. ♠ Q2 ♥ A8654 ♦ KQJ3 ♣ AJ

WEST

1 ♣

2 ♥

2NT

EAST

2 ♦

2 ♠

3 ♦

24. ♠ KQ85 ♥ AQ7 ♦ KQJ ♣ 943

WEST

1 ♣

2 ♥

EAST

2 ♦

3NT

ANSWERS

1. ♠ KQ43 ♥ KJ2 ♦ 982 ♣ 754

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2 ♠ ²
2NT	3 ♣ ³
3 ♦	3 ♠ ⁴

1. 9–11 or 15+ balanced
2. 4-4-3-2 two suits of the same color OR 4-3-3-3 with a 4-card major
3. 4-3-3-3, 4-card major
4. Four spades, therefore exactly 4=3=3=3

2. ♠ A54 ♥ 63 ♦ KJ92 ♣ Q1074

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2NT ²
3 ♣	3 ♥ ³

1. 9–11 or 15+ balanced
2. 4-4-3-2, two suits of the same rank
3. Doubleton heart, therefore exactly 3=2=4=4

3. ♠ Q6 ♥ J954 ♦ A83 ♣ KQ52

WEST	EAST
1 ♣	3 ♠ ¹

1. 12–14 balanced, 4-4-3-2, two suits of the same shape, doubleton spade, therefore exactly 2=4=3=4

4. ♠ 873 ♥ A954 ♦ KQ85 ♣ 62

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2 ♠ ²
2NT	3NT ³

1. 9–11 or 15+ balanced
2. 4-4-3-2 two suits of the same color OR 4-3-3-3 with a 4-card major
3. 9–11, 4-4-3-2, doubleton club, therefore exactly 3=4=4=2

5. ♠ A943 ♥ KQ52 ♦ K74 ♣ K3

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2NT ²
3 ♣	4 ♦ ³

1. 9–11 or 15+ balanced
2. 4-4-3-2, two suits of the same rank
3. 15+, 5 controls, doubleton club, therefore exactly 4=4=3=2

6. ♠ K7 ♥ 8543 ♦ AK6 ♣ J743

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	3 ♠ ²

1. 9–11 or 15+ balanced
2. 4-4-3-2, two suits of the same shape, doubleton spade, therefore exactly 2=4=3=4

7. ♠ A87 ♥ QJ64 ♦ K83 ♣ 974

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2 ♠ ²
2NT	3 ♣ ³
3 ♦	3 ♥ ⁴

1. 9-11 or 15+ balanced
2. 4-4-3-2, two suits of the same color OR 4-3-3-3 with a 4-card major
3. 4-3-3-3 with a 4-card major
4. 4-card heart suit, therefore exactly 3=4=3=3

8. ♠ K3 ♥ A764 ♦ QJ94 ♣ K75

WEST	EAST
1 ♣	2 ♠ ¹
2NT	3 ♠ ²

1. 12-14 balanced, 4-4-3-2, two suits of the same color OR 4-3-3-3 with a 4-card major
2. 4-4-3-2, two suits of the same color, doubleton spade, therefore exactly 2=4=4=3

9. ♠ Q1095 ♥ K75 ♦ KQ94 ♣ 82

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	3NT ²

1. 9-11 or 15+ balanced
2. 9-11, 4-4-3-2, two suits of the same shape, doubleton club, therefore exactly 4=3=4=2

10. ♠ 86 ♥ K75 ♦ QJ94 ♣ A763

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2NT ²
3 ♣	3 ♠ ³

1. 9-11 or 15+ balanced
2. 4-4-3-2, two suits of the same rank
3. Doubleton spade, therefore exactly 2=3=4=4

11. ♠ K95 ♥ K63 ♦ QJ82 ♣ 975

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	3 ♣ ²
3 ♦	3 ♠ ³

1. 9-11 or 15+ balanced
2. 4-3-3-3 with a 4-card minor
3. 4-card diamond suit, therefore exactly 3=3=4=3

12. ♠ 8764 ♥ K2 ♦ A93 ♣ Q982

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2 ♠ ²
2NT	3 ♥ ³

1. 9-11 or 15+ balanced
2. 4-4-3-2, two suits of the same color OR 4-3-3-3 with a 4-card major
3. 4-4-3-2, two suits of the same color, doubleton heart, therefore exactly 4=2=3=4

13. ♠ AQ42 ♥ 983 ♦ KJ8 ♣ AK7

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♥

The 2♦ call shows a balanced 9–11 or 15+. The 3♥ call shows two suits of the same shape and a doubleton heart, so exactly 4=2=4=3. With the weak heart holding, 4♠ is likely to be the best contract.

14. ♠ A87 ♥ AQ1074 ♦ KJ3 ♣ K8

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

The 2♦ call shows a balanced 9–11 or 15+. The 2NT call shows 4-4-3-2, two suits of the same rank. The 3♠ call shows a doubleton spade, so exactly 2=3=4=4. The third round of spades can be ruffed in the short hand, so it seems clear to play in 4♥.

15. ♠ Q7 ♥ AKJ95 ♦ AJ42 ♣ K7

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥

The 2♦ call shows a balanced 9–11 or 15+. The 2♠ call shows either 4-4-3-2 with two suits of the same color or 4-3-3-3 with a 4-card major. The 3♥ call shows a doubleton heart, so exactly 4=2=3=4. There is only a 7-card heart fit, and everything is well stopped, so 3NT looks right.

16. ♠ AQJ7 ♥ A83 ♦ AQ5 ♣ J104

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♠

The 2 ♦ call shows a balanced 9–11 or 15+. The 2 ♠ call shows either 4-4-3-2 with two suits of the same color or 4-3-3-3 with a 4-card major. The 3 ♣ call shows 4-3-3-3 with a 4-card major. The 3 ♠ call shows 4-card spade suit, so exactly 4=3=3=3. With the hands mirrored there likely isn't any value to playing the 4–4 fit, so 3NT is probably best.

17. ♠ AQ6 ♥ KQJ7 ♦ 52 ♣ AJ94

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥

The 2 ♦ call shows a balanced 9–11 or 15+. The 2 ♠ call shows either 4-4-3-2 with two suits of the same color or 4-3-3-3 with a 4-card major. The 3 ♣ call shows 4-3-3-3 with a 4-card major. The 3 ♥ call shows four hearts, so exactly 3=4=3=3. You can tell from your hand that 4 ♥ figures to be the best game due to the likely weakness in diamonds.

Note that if you had opened a strong 1NT, partner would probably have just bid 3NT, since from his point of view 3NT would figure to be best even if you have four hearts.

18. ♠ KQ109 ♥ 8752 ♦ AQ ♣ KQ3

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♠

The 2♦ call shows a balanced 9–11 or 15+. The 2♠ call shows either 4-4-3-2 with two suits of the same color or 4-3-3-3 with a 4-card major. The 3♠ call shows a doubleton spade, so exactly 2=4=4=3. Considering your weak heart holding, your strong spade holding opposite partner's doubleton, and your strong holding in your doubleton opposite partner's 4-card holding, it is a good bet that 3NT is better than the 4–4 heart fit. Note that partner could never have come to this conclusion had you opened 1NT.

19. ♠ 83 ♥ AQJ9 ♦ AQ74 ♣ KJ8

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

The 2♦ call shows a balanced 9–11 or 15+. The 2NT call shows 4-4-3-2, two suits of the same rank. The 3♠ call shows a doubleton spade, so exactly 2=3=4=4. The 4–3 heart fit jumps out as the likely best game, with the matching doubletons in spades and the strong heart holding. This would probably have been impossible for responder to have found opposite a strong 1NT opening.

20. ♠ 8 ♥ KQJ ♦ KQJ87 ♣ A852

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♠

The 2 ♦ call shows a balanced 9–11 or 15+. The 3 ♠ call shows 4-4-3-2, two suits of the same shape and a doubleton spade, so exactly 2=4=3=4. Clearly 3NT is out. Teller would need good heart spots for the 4–3 heart fit to be playable. Five-of-a-minor figures to be better. Normally a 4–4 fit is better than a 5–3 fit, but here the internal solidity of the diamond suit makes 5 ♦ better, since a losing club might be discarded on a long heart or possibly on the second round of spades.

21. ♠ AK ♥ AQJ95 ♦ 74 ♣ K873

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥

The 2 ♦ call shows a balanced 9–11 or 15+. The 2 ♠ call shows 4-4-3-2 with two suits of the same color or 4-3-3-3 with a 4-card major. The 3 ♥ call shows a doubleton heart, so exactly 4=2=3=4. Diamonds look a little dangerous for notrump. There is a 4–4 club fit, but 11 tricks could be asking a lot. Looking at the strong intermediates in the heart suit, best appears to be 4 ♥ in the 5–2 fit.

22. ♠ AK ♥ QJ42 ♦ J7 ♣ AQJ108

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

The 2♦ call shows a balanced 9–11 or 15+. The 2NT call shows 4-4-3-2 with two suits of the same rank. The 3♠ call shows a doubleton spade, so exactly 2=3=4=4. The short suit is double-stopped, the jack of diamonds may help if Teller's 4-card diamond holding is weak, and the club suit is a nice source of tricks. 3NT figures to be better than the 5-4 club fit or the 4-3 heart fit.

23. ♠ Q2 ♥ A8654 ♦ KQJ3 ♣ AJ

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♦

The 2♦ call shows a balanced 9–11 or 15+. The 2♠ call shows 4-4-3-2 with two suits of the same color or 4-3-3-3 with a 4-card major. The 3♦ call shows a doubleton diamond, so exactly 4=3=2=4. Your strong diamond holding indicates that there will be little value in a diamond ruff in the short hand if playing in 4♥, and with your weak heart holding and honors outside of hearts you might not need the heart suit to take 9 tricks in notrump. 3NT figures to be better than 4♥, even with the 5-3 heart fit.

24. ♠ KQ85 ♥ AQ7 ♦ KQJ ♣ 943

WEST

1 ♣

2 ♥

EAST

2 ♦

3NT

The 2 ♦ call shows a balanced 9–11 or 15+. The 3NT call shows 4-4-3-2 with two suits of the same shape and a doubleton club, so exactly 4=3=4=2. Even though your hand has no ruffing value, you know that his hand does, and that clubs is a likely soft spot for notrump. 4 ♠ figures to be the best game.

ONE-SUITERS

A one-suiter is defined as a hand with one suit of 5 cards or longer, but no second suit of 4 cards or longer. Responder shows a positive response with a one-suiter by first showing the long suit following the basic KK Relay order (SHCD), as follows:

- **1♥:** Spades
- **1♠:** Hearts
- **1NT:** Clubs
- **2♣:** Diamonds

Opener will usually relay after the positive response, and responder's rebids of 2♠ and higher will show a one-suiter. Lower bids will show two-suiters or three-suiters, as we'll see in the next couple of chapters.

The first focus in describing a one-suiter is on responder's shortness. (In KK Relay, when we refer to "shortness," we mean a shortest suit, which will often be a doubleton.) If responder has a shortest suit, he shows it with HMEL coding (high, middle, equal, low) as follows:

- **2♠:** High short
- **2NT:** Middle short
- **3♣:** Equal short (we'll look at what this means shortly)
- **3♦ and higher:** Low short

The high, middle, and low-short relate to the three remaining suits.

If responder's suit is spades:

- **2♠:** Heart shortness
- **2NT:** Diamond shortness
- **3♦ and higher:** Club shortness

If responder's suit is hearts:

- **2♠:** Spade shortness
- **2NT:** Diamond shortness
- **3♦ and higher:** Club shortness

If responder's suit is diamonds:

- **2♠:** Spade shortness
- **2NT:** Heart shortness
- **3♦ and higher:** Club shortness

If responder's suit is clubs:

- **2♠:** Spade shortness
- **2NT:** Heart shortness
- **3♦ and higher:** Diamond shortness

It is important to see that the shortness that is shown by the particular bid is a function of the long suit. For example, 2NT shows diamond shortness when the long suit is spades or hearts, but shows heart shortness when the long suit is diamonds or clubs.

The “Funny” Step

So what about that 3♣ step? As we saw in the preceding chapter on showing balanced hands, the 3♣ step is used to show distributions that do not have a shortest suit. (Note that 3♣ is the third step, and we sometimes refer to that third step as the “funny” step, because it can be used to do unusual or “funny” things; for example, we often use it to show more than one shape at the same time, depending upon whether you get to it quickly or slowly (via the Slow Boat or the Speedboat).) We’ll look more closely at the “equal” or “funny” 3♣ step shortly.

HIMMELL

The one-suited structure involves the same concept as was used for the balanced hands. There, we used the CR4SH coding of color, rank, equal, shape. Here, for showing shortness with a one-suiter, the coding is high, middle, equal, low (or HMEL, or HIMMELL). These mnemonics help make it easy to remember.

As with the balanced hand CR4SH structure, the equal step is just before the low step when we’re expanding a one-suiter.

The Final Expansion (ESS)

When we reach the final expansion to exact shape, each of the ESS calls (exact-shape-showing bids) will have exactly the same meaning, regardless of which suit is the long suit and which suit is the short suit. This is the beauty of KK Relay.

Let’s examine the possible distributions that can be held for a one-suiter with a distinct shortest suit. They are as follows:

- 5-3-3-2
- 6-3-3-1
- 7-2-3-1
- 7-3-2-1
- 7-3-3-0

Since we are not showing 8-card suits, these five are the only possibilities. Note that 7-2-3-1 and 7-3-2-1 are designated as different distributions, because the 2-card and 3-card suits might be in either order. They are ordered numerically: 231 is lower than 321.

Just as with balanced hands, 3♦ is the Pivot Point for one-suiters: it is the last possible shortness-showing bid and the starting bid for the final shape-showing clarification. With high shortness, responder bids 2♠, and his next call of 3♦ or higher shows his exact shape. With middle shortness, responder bids 2NT, and his next call of 3♦ or higher shows his exact shape. With low shortness, responder immediately bids 3♦ or higher, which simultaneously shows that he has low shortness and defines his exact shape.

This is why we call it the Pivot Point. It's an important feature of KK Relay, and helps to make it easy to remember. Note that the 3♦ step is the Pivot Point for most shapes, making it especially easy to remember—when you hear 3♦ it's one of those Bell-Ringers we watch out for.

Starting at the Pivot Point (3♦) then, the most balanced hands are shown with the cheapest bids. There are two reasons for this. One is that the more balanced hands are more frequent, and the more space saved the more accurate slam exploration will be. The other is that we are more likely to want to play 3NT with the balanced hand, and the lower we start the more likely it is that the response to a Control Ask (which follows immediately after the ESS call) will permit us to stop in 3NT if there are insufficient controls for slam.

The coding for the ESS calls (exact-shape-showing) for the one-suiter is as follows:

- **3♦**: 5-3-3-2
- **3♥**: 6-3-3-1
- **3♠**: 7-2-3-1
- **3NT**: 7-3-2-1
- **4♣**: 7-3-3-0

The distinction between 7-2-3-1 and 7-3-2-1 is dependent upon the relative rank of the second and third longest suits. If the higher-ranking suit is the doubleton, that is considered 7-2-3-1 and the bid is 3♠ (the cheaper call). If the higher-ranking suit is the tripleton that is considered 7-3-2-1, and the bid is 3NT (the higher call). This can be thought of as simple numeric, with 23 being a smaller number than 32.

In KK Relay, whenever a generic shape is known (such as “some 7-3-2-1”) the remaining possibilities are treated as four-digit numbers and finally clarified numerically. Lower numerics are always shown before higher ones.

It is important to understand that the ESS calls will always have the same meaning regardless of which suit is the long suit and which suit is the short suit. Thus, the 3♠ and 3NT calls in the one-suiter expansion simply describe the generic distribution: 7-2-3-1 or 7-3-2-1. The exact distribution can now be determined from the previous calls that identified the long suit and the short suit. For example:

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3♥

The 3♥ call shows a generic 6-3-3-1 pattern. The long suit and short suit have already been identified by Teller’s previous calls. 1NT said that the long suit is clubs. 2NT indicated that the short suit is the middle suit of the three remaining (spades, hearts, diamonds), i.e., shortness in hearts. Therefore, the distribution is exactly 3=1=3=6.

Equal Shortness

As we've already seen, the 3♣ call (the Equal) is used for distributions that do not have a distinct shortest suit. In the one-suited structure these distributions are 6-3-2-2 and 7-2-2-2. Since there are three possible ways the short suits can be distributed for the 6-3-2-2 shape (6-2-2-3, 6-2-3-2, and 6-3-2-2), there are four distributions to take care of. Just as we saw when describing a balanced hand, because 3♣ is the third step Teller has two routes to get there. He can bid 3♣ immediately, or he can bid 2♠ first, and then 3♣ over the 2NT relay. Just as we use these different routes to show the four different 4-3-3-3 hands when balanced, we use these same routes here to distinguish the four possible "equal-short" distributions for a one-suiter. The coding is again HELL (high-short, equal-short, low-short), but since we have to deal with two shortest suits now, there's an unusual maneuver here that must be understood. It works like this:

High Short: The slow route to 3♣, (show the long suit, then 2♠, then 3♣), aka the "Slow Boat," shows a 6-3-2-2 hand where one of the two doubletons is the highest doubleton. For example, if the long suit is spades, 1♥ then 2♠ then 3♣ would show some 6-3-2-2 with six spades, and a doubleton heart. (The other doubleton would not yet be identified.) Note that 2♠ initially showed high shortness and may turn out to be a hand with only one short suit. It's not until Teller follows with 3♣—the "funny" step, that we know he has the generic 6322 pattern—the equal-short hand. As a memory aid, the 2♠ call can be thought of as showing either high-short (shortest suit) OR high- and equal-short (high shortness and equal shortness at the same time).

Equal Short: The fast route to 3♣ (show the long suit, then 3♣), aka the Speedboat, shows equal shortness (but one of the short suits will not be the highest-ranking suit since that would have been shown with an initial 2♠ response to the shortness ask, to show high-short). Therefore, the fast route to 3♣ (the Speedboat) shows either 6-3-2-2 where the doubletons are the two lower suits, OR 7-2-2-2. Thus, the Speedboat will always show doubletons in the two lower suits.

In either case, after Teller's 3♣, Asker may relay with 3♦ to get the exact distribution (or he may skip this step if he doesn't need the information, as we'll see a bit later). The final shape clarification is numeric since the generic pattern is known to be 6322.¹ As before (when we looked at 7321s), the numeric is based on the three suits other than the long suit. Thus:

Slow Boat:

- **2♠, then 3♣, then 3♥** shows 6-2-2-3 (223 is the smaller number)
- **2♠, then 3♣, then 3♠** shows 6-2-3-2 (232 is the larger number)

Speedboat:

- **3♣, then 3♥** shows 7-2-2-2 (222 is the smaller number)
- **3♣, then 3♠** shows 6-3-2-2 (322 is the larger number)

Low Short: This will be 3♦, of course, as we've already seen, and is not needed to describe one of the equal-short shapes. The "Equal" shape always goes through 3♣—The "Equal" step.

¹ Although 7222 is included in this structure, we still refer to the equal-short sequences as showing a hand "known to be 6322." Hence, clarification is numeric based on the final three numbers.

Examples

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3 ♥

2 ♣ shows 5+ diamonds. Initially, the 2 ♠ call shows a one-suiter, high-short, but when followed by 3 ♣ (the “funny”) it now shows “high and equal-short,” i.e., 6-3-2-2 with a high doubleton. The ESS call (3 ♥) says that the remaining suits are 2–3 (not 3–2), because 3 ♥ is the lower call. Since the initial 2 ♣ call showed diamonds, the exact distribution must be 2=2=6=3.

WEST	EAST
1 ♣	1 ♠
1NT	3 ♣
3 ♦	3 ♠

1 ♠ shows hearts. The immediate 3 ♣ call (the Speedboat), shows a one-suiter with equal shortness, either 7-2-2-2 or 6-3-2-2 with the two doubletons being the two lower suits. The ESS call (3 ♠) says the remaining suits are 3–2–2 (not 2–2–2), since 3 ♠ is the higher call. The initial 1 ♠ call showed hearts, so the exact distribution must be 3=6=2=2.

ONE-SUITERS QUIZ

First, you are responder. Determine your bids and what they mean. Assume opener relays until you have completed showing your exact distribution.

1. ♠ 983 ♥ K2 ♦ AQ875 ♣ K43
2. ♠ 9 ♥ K93 ♦ A82 ♣ QJ10974
3. ♠ 94 ♥ AQJ7532 ♦ K83 ♣ 4
4. ♠ KJ10864 ♥ 975 ♦ K8 ♣ Q7
5. ♠ 8 ♥ AJ7632 ♦ K75 ♣ Q92
6. ♠ 97 ♥ KQ8 ♦ K2 ♣ Q87643
7. ♠ 864 ♥ AK2 ♦ 108752 ♣ K6
8. ♠ AJ87632 ♥ 8 ♦ K93 ♣ Q2
9. ♠ 92 ♥ K3 ♦ 85 ♣ AQ98762
10. ♠ AK98642 ♥ K75 ♦ 863 ♣ —
11. ♠ 75 ♥ AQJ84 ♦ K63 ♣ 952
12. ♠ K84 ♥ 7 ♦ AQ9762 ♣ K86

Now you get to be the 1♣ opener. For each hand, determine responder's exact distribution. Assuming that you have found out there are insufficient controls for slam, choose the best game.

13. ♠ AQ875 ♥ K2 ♦ A43 ♣ KQ7

WEST	EAST
1♣	1♠
1NT	2NT
3♣	3♦

14. ♠ AJ2 ♥ 973 ♦ AJ4 ♣ AKJ6

WEST	EAST
1♣	2♣
2♦	2♠
2NT	3♣
3♦	3♠

15. ♠ AQ9752 ♥ 96 ♦ AK7 ♣ A5

WEST	EAST
1♣	1♠
1NT	2♠
2NT	3♥

16. ♠ AQ4 ♥ A8753 ♦ 6 ♣ AK72

WEST	EAST
1♣	2♣
2♦	3♦

17. ♠ KQ108 ♥ A2 ♦ Q985 ♣ AQ6

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♥

18. ♠ AJ842 ♥ 963 ♦ AK7 ♣ A5

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♦

19. ♠ A542 ♥ Q83 ♦ A ♣ AQJ75

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♥

20. ♠ QJ7 ♥ 6 ♦ AKQJ72 ♣ AKJ

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♠

21. ♠ QJ ♥ A982 ♦ AK873 ♣ A3

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦

22. ♠ AQ107 ♥ A6 ♦ QJ95 ♣ A93

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♦	3 ♥

23. ♠ AQJ9 ♥ 762 ♦ A5 ♣ AK74

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♦

24. ♠ A7632 ♥ A3 ♦ KJ109 ♣ AQ

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	3 ♦

ANSWERS

1. ♠ 983 ♥ K2 ♦ AQ875 ♣ K43

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2NT ²
3 ♣	3 ♦ ³

1. Diamond suit
2. One-suiter, middle short
3. 5-3-3-2 generic shape, therefore exactly 3=2=5=3

2. ♠ 9 ♥ K93 ♦ A82 ♣ QJ10974

WEST	EAST
1 ♣	1NT ¹
2 ♣	2 ♠ ²
2NT	3 ♥ ³

1. Club suit
2. One-suiter, either high-short or 6-3-2-2 with high doubleton
3. 6-3-3-1 generic shape, therefore exactly 1=3=3=6

3. ♠ 94 ♥ AQJ7532 ♦ K83 ♣ 4

WEST	EAST
1 ♣	1 ♠ ¹
1NT	3 ♠ ²

1. Heart suit
2. One-suiter, low-short since 3 ♦ or higher, 7-2-3-1 generic shape, therefore exactly 2=7=3=1

4. ♠ KJ10864 ♥ 975 ♦ K8 ♣ Q7

WEST

1 ♣

1 ♠

3 ♦

EAST

1 ♥¹

3 ♣²

3 ♠³

1. Spade suit
2. One-suiter, equal-short, either 6-3-2-2 two low doubletons or 7-2-2-2
3. 6-3-2-2 generic shape, therefore exactly 6=3=2=2

5. ♠ 8 ♥ AJ7632 ♦ K75 ♣ Q92

WEST

1 ♣

1NT

2NT

EAST

1 ♠¹

2 ♠²

3 ♥³

1. Heart suit
2. One-suiter, either high-short or 6-3-2-2 with high doubleton
3. 6-3-3-1 generic shape, therefore exactly 1=6=3=3

6. ♠ 97 ♥ KQ8 ♦ K2 ♣ Q87643

WEST

1 ♣

2 ♣

2NT

3 ♦

EAST

1NT¹

2 ♠²

3 ♣³

3 ♠⁴

1. Club suit
2. One-suiter, either high-short or 6-3-2-2 with high doubleton
3. 6-3-2-2 with high doubleton
4. 3-2 order in the other two suits, therefore exactly 2=3=2=6

7. ♠ 864 ♥ AK2 ♦ 108752 ♣ K6

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	3 ♦ ²

1. Diamond suit
2. One-suiter, low-short since 3 ♦ or higher, 5-3-3-2 generic shape, therefore exactly 3=3=5=2

8. ♠ AJ87632 ♥ 8 ♦ K93 ♣ Q2

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♠ ²
2NT	3NT ³

1. Spade suit
2. One-suiter, either high-short or 6-3-2-2 with high doubleton
2. 7-3-2-1 generic shape, with 3-2 in rank order since 32 is higher than 23, therefore exactly 7=1=3=2

9. ♠ 92 ♥ K3 ♦ 85 ♣ AQ98762

WEST	EAST
1 ♣	1NT ¹
2 ♣	3 ♣ ²
3 ♦	3 ♥ ³

1. Club suit
2. One-suiter, equal-short, not 6-3-2-2 with high doubleton since would bid 2 ♠ then 3 ♣ with that
3. 7-2-2-2 generic shape, since 222 is lower than 322, therefore exactly 2=2=2=7

10. ♠ AK98642 ♥ K75 ♦ 863 ♣ —

WEST

1 ♣

1 ♠

EAST

1 ♥¹

4 ♣²

1. Spade suit

2. One-suiter, low-short since 3 ♦ or higher, 7-3-3-0 generic shape, therefore exactly 7=3=3=0

11. ♠ 75 ♥ AQJ84 ♦ K63 ♣ 952

WEST

1 ♣

1NT

2NT

EAST

1 ♠¹

2 ♠²

3 ♦³

1. Heart suit

2. One-suiter, high-short or 6-3-2-2 with high doubleton

3. 5-3-3-2 generic shape, therefore exactly 2=5=3=3

12. ♠ K84 ♥ 7 ♦ AQ9762 ♣ K86

WEST

1 ♣

2 ♦

3 ♣

EAST

2 ♣¹

2NT²

3 ♥³

1. Diamond suit

2. One-suiter, middle short

3. 6-3-3-1 generic shape, therefore exactly 3=1=6=3

13. ♠ AQ875 ♥ K2 ♦ A43 ♣ KQ7

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	3 ♦

1 ♠ shows hearts. 2NT shows one-suiter, middle short. 3 ♦ shows generic 5-3-3-2, so exactly 3=5=2=3. 4 ♠ in the 5-3 spade fit looks fine, and better than 3NT due to the potential weakness in diamonds and the ability to ruff the third round of diamonds in the short hand.

14. ♠ AJ2 ♥ 973 ♦ AJ4 ♣ AKJ6

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3 ♠

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3 ♠ shows 3-2 in the other suits in rank order, so exactly 2=3=6=2. With partner having a triplet heart notrump figures to be okay, and 3NT is better than 5 ♦.

15. ♠ AQ9752 ♥ 96 ♦ AK7 ♣ A5

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♥

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♥ shows generic 6-3-3-1, so exactly 1=6=3=3. The 8-card heart fit figures to be better than 3NT since there is no other source of tricks for notrump and there might be a club weakness, so 4 ♥ looks best.

16. ♠ AQ4 ♥ A8753 ♦ 6 ♣ AK72

WEST	EAST
1 ♣	2 ♣
2 ♦	3 ♦

2 ♣ shows diamonds. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=5=2. The 5-3 heart fit looks fine, and there figures to be value in ruffing with these quick tricks, so 4 ♥ it is.

17. ♠ KQ108 ♥ A2 ♦ Q985 ♣ AQ6

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♥

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♥ shows generic 6-3-3-1, so exactly 1=6=3=3. While you don't know the quality of partner's heart suit, your secondary cards in the other suits, in particular in his short suit, spades, indicate that 3NT is likely to be a better contract than 4 ♥.

18. ♠ AJ842 ♥ 963 ♦ AK7 ♣ A5

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♦

1NT shows clubs. 2NT shows one-suiter, middle short. 3 ♦ shows generic 5-3-3-2, so exactly 3=2=3=5. Opposite your hand, 4 ♠ figures to be the best game.

19. ♠ A542 ♥ Q83 ♦ A ♣ AQJ75

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♥

2 ♣ shows diamonds. 2NT shows one-suiter, middle short. 3 ♥ shows generic 6-3-3-1, so exactly 3=1=6=3. Clearly your heart holding is too weak for 3NT. If you had stronger spades you might try 4 ♠, but this spade suit can't handle having the short hand being tapped. So, your best hope is 5 ♣, even though you have to take 11 tricks in a 5-3 fit.

20. ♠ QJ7 ♥ 6 ♦ AKQJ72 ♣ AKJ

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♠

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♠ shows generic 7-3-2-1, with the 2-card suit higher ranking than the 3-card suit, so exactly 1=7=2=3. You don't know the quality of partner's heart suit, but you don't need to know. You have a spade stopper, and partner has a doubleton diamond. Since they have to give you a spade trick to set up their spade suit, 3NT is virtually cold. There is no reason to bid 4 ♥ and risk losing a bunch of trump tricks.

21. ♠ QJ ♥ A982 ♦ AK873 ♣ A3

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦

1 ♥ shows spades. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 5=3=3=2. The club suit is too dangerous for 3NT. The heart suit is too weak for a 4-3 fit. There is a 5-3 diamond fit, but 11 tricks might be too many. The best game figures to be 4 ♠ in the 5-2 fit. Your QJ of spades will help out for the third and fourth rounds of spades. You don't know how strong partner's spade suit is, but the odds are that he has one of the honors, and that will be sufficient to make your QJ pull its weight.

22. ♠ AQ107 ♥ A6 ♦ QJ95 ♣ A93

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♦	3 ♥

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3 ♥ shows other two suits 2–3 in rank order, so exactly 2=6=2=3. While you don't know the quality of partner's heart suit, 3NT looks like a winner. You have the potential to run hearts, or to take 9 tricks without using the heart suit. It is critical that partner has 2 diamonds and 3 clubs rather than 3 diamonds and 2 clubs. The third club is potentially an extra loser in hearts, while it gives you protection in notrump for what is likely your weakest suit. If partner had 3 diamonds and 2 clubs, then 4 ♥ would be the percentage choice.

23. ♠ AQJ9 ♥ 762 ♦ A5 ♣ AK74

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♦

2 ♣ shows diamonds. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=2=5=3. Your heart holding is weak, and partner has only a doubleton heart. 4 ♠ in the 4–3 fit looks like the best game. Your spade suit is strong enough to handle a 4–3 fit, and your third heart can be ruffed in the short hand, which will provide you with an extra trick playing in spades.

24. ♠ A7632 ♥ A3 ♦ KJ109 ♣ AQ

WEST

1 ♣

1NT

3 ♣

EAST

1 ♠

2NT

3 ♦

1 ♠ shows hearts. 2NT shows one-suiter, middle short. 3 ♦ shows generic 5-3-3-2, so exactly 3=5=2=3. No guarantees, but the spade suit is weak, the clubs are double stopped, and there doesn't seem to be much value ruffing diamonds in dummy, so 3NT is probably better than 4 ♠.

SHORT TWO-SUITERS

Teller is defined as having a short two-suiter (aka S2S) when he holds one suit of exactly 4 cards in length and one suit longer than 4 cards, but no third suit of 4-card length.

Teller begins to show his two suits using the same coding as is used for showing a one-suiter:

- **1♥**: Spades
- **1♠**: Hearts
- **1NT**: Clubs
- **2♣**: Diamonds

HOWEVER, the first suit he shows will not necessarily be his longest suit.

KK Relay follows the MAFIA principle (Majors First Always) and shows majors before minors; thus 4-card majors are shown before longer minors. In addition, four spades are shown before longer hearts (following the default relay order). With a two-suiter we simply continue to describe, following the default order: Spades, Hearts, Clubs, Diamonds. Therefore, Teller's first-shown suit is determined as follows:

- If Teller has 4+ spades, he shows spades first, whether or not he has a longer suit elsewhere. If Teller does not hold 4+ spades, then,
- If Teller has 4+ hearts, he shows hearts first, whether or not he has a longer minor. If Teller does not hold 4+ hearts, then,
- If Teller has 5+ clubs, he shows clubs first, whether or not he has longer diamonds. If Teller does not hold 5+ clubs, then,
- Teller must have 5+ diamonds, so he shows diamonds. And his second suit must be clubs, since he would have shown a 4-card major ahead of a 5-card minor. Note also that Teller must hold exactly four clubs, since he would have shown clubs first with 5+ clubs.

Simply stated:

- If one of Teller's suits is spades, spades are defined as being his first-shown suit. Else,
- If one of Teller's suits is hearts, hearts are defined as being his first-shown suit. Else,
- If Teller has 5+ clubs, clubs are defined as being his first-shown suit. Else,
- Diamonds are Teller's first-shown suit. It must be at least a 5-card diamond suit or longer, since no other suit is five cards in length.

Once Teller has shown his first suit, Asker will usually relay with the next step and Teller will now show his second suit, following the same basic relay order we use to show the first suit: Hearts/Clubs/Diamonds. (Spades cannot be a second suit.) Therefore,

- With spades and hearts, Teller rebids 1NT. The first step (over the 1♠ relay) shows hearts, since hearts are next in the relay order. Similarly,
- With a major and clubs, Teller rebids 2♣, the next step (over the 1♠ or 1NT relay)
- With a major and diamonds, Teller rebids either 2♦ or 2♥, the next step (over the 1♠ or 1NT relay). There is an anomaly here which will be explained in a moment.
- With clubs and diamonds:
 - With clubs the first-shown suit, and diamonds the second suit, Teller rebids 2♦ (over the 2♣ relay). Again it's merely a coincidence that bidding diamonds shows diamonds.
 - With diamonds the first-shown suit, and clubs the second suit, Teller rebids 2♥ (over the 2♦ relay).

The Reverser

Since we show 4-card majors ahead of longer suits, and 5-card majors ahead of 4-card minors, etc., it is now necessary to determine which of Teller's two suits is longer. We've seen that Teller's first-shown suit is frequently not his longest suit. When this happens, i.e., when Teller's first-shown suit is his 4-card suit, and his second-shown suit is longer, this is called a Reverser.

There are only three possibilities for a Reverser:

- 4 spades, 5+ hearts
- 4 spades, 5+ minor
- 4 hearts, 5+ minor

Note that there is no Reverser when Teller's first-shown suit is a minor. You can only have a Reverser if you have a 4-card major, in which case you will have started by showing the major.

After Teller's initial 1M response (showing a major), if he later shows a second suit it will be necessary to distinguish whether or not Teller has a Reverser.

Bell-Ringer—Teller's 2♥ Call

In most cases it's pretty simple for responder to clarify which is his longer suit. If Teller has a Reverser, he simply shows his second suit as above, and then rebids 2♥ over opener's next-step relay. This 2♥ step is designated as the Reverser step in KK Relay—a "Bell-Ringer." If you have anything else—anything other than a Reverser—you skip over the 2♥ step and go on to something else. If Teller bids 2♥, he has a Reverser.

But there is an anomaly here because of space considerations:

When Teller's second suit is hearts or clubs, he will have just rebid 1NT or 2♣, so the relay call will be 2♣ or 2♦, giving Teller room to show the Reverser with the 2♥ call—the Bell-Ringer. But if Teller has a Reverser with diamonds and rebids 2♦ to show his second suit, the relay step will be 2♥, and there will be no room for Teller to rebid 2♥ showing a Reverser. He won't be able to distinguish his Reverser from a hand with four diamonds and a longer major.

The solution is simple: Teller rebids 2♥ immediately when he has a Reverser with diamonds—not 2♦. Thus, Teller actually rebids 2♦, showing diamonds, only when he does not have a Reverser; hence a 5+-card major and 4+ diamonds.

The upshot is that all Reversers are symmetrically clarified with a 2♥ call—the “Bell-Ringer.”

When Teller Has a Long Minor

So, what is 2♥ after Teller starts with a minor? It can't be a Reverser—we've already seen that there is no Reverser when the first-shown suit is a minor.

It all depends. . . If you've shown 5+ diamonds via a 2♣ response, the relay is 2♦, and the Reverser step is unneeded, of course, so 2♥ is used to show secondary clubs (exactly four). But, if you've started with 1NT showing 5+ clubs, you can rebid 2♦ over the 2♣ relay to show diamonds, so we don't need 2♥ (the Reverser step) for anything all. It's sitting there idle. As you will have guessed by now, there is no such thing as “idle” in a relay structure. There is a hidden treasure here—extra space—more precious than gold in relay auctions. For now, it's a secret—we'll talk more about that impossible 2♥ call in chapter 9

Showing Shortness

If Teller has shown his second suit but does not have a Reverser, he will now go straight to showing his shortness without stopping off at 2♥. The shortness showing actually starts with 2NT, whether or not Teller has a Reverser. This is because 2♥ and 2♠ are both Bell-Ringers—special calls designated for other purposes—and cannot be used for showing shortness when Teller has a two-suiter. The first available step for showing shortness is 2NT.

- When Teller has a Reverser he will have already bid 2♥; Asker's relay will be 2♠, and 2NT will, of course, be Teller's first shortness-showing step.

- When Teller does not have a Reverser, he will skip straight to 2NT and start showing his shortness.

Thus, the structures are now the same from this point on (i.e., “sym-metric”) for all short two-suiters (S2S). 2NT, 3♣ and 3♦ show HEL shortness.

The curious reader may wonder, “What happened to 2♠?” It’s there, but we don’t use it for the short two-suiters. 2♠ is reserved for showing long two-suiters—another Bell-Ringer. We’ll be looking at that structure in the next chapter.

HELL

Teller shows his shortest suit in the same manner as is used with the one-suiter. Here, however, there are only two possible shortest suits; so instead of high, middle, or low shortness (HML or HIMMELL), we now have high shortness, equal shortness, or low shortness. Once again, as with one-suiters, the “equal” step comes just before the “low” step. The first shortness-showing for short two-suiters is always 2NT—lower bids are used to show other hand types. This significantly eases the memory burden, as the shortness showing and the final ESS calls are the same no matter which long suits and which shortness Teller has.

Teller’s steps to show shortness are:

- **2NT:** High shortness
- **3♣:** Equal shortness
- **3♦ and higher:** Low shortness

So, the mnemonic is HEL (or HELL), for high, equal, low. (The use of two “L’s” will be explained in later chapters when we get to showing controls and specific honor locations.)

When Teller has a short two-suiter (S2S) with equal shortness, there are only two possible distributions, 5-4-2-2 and 7-4-1-1 (aka the “Swan”). Since 5-4-2-2 is over 25 times more likely than 7-4-1-1, the practical thing to do is assume the 5-4-2-2 shape. Later, we will show how to handle the rare Swan hand.

Most Common Patterns First

The possible distributions for a short two-suiter (S2S) with unique shortness are:

- 5-4-3-1
- 6-4-2-1
- 6-4-3-0
- 7-4-2-0

KK Relay generally shows the most common patterns first, while the least common shapes are left until the very last, since this will leave the most room for the most frequent hands. Thus, Teller's patterns are shown in the order above, from most balanced to most distributional.

The Pivot Point is again 3♦, as it was for one-suiters. Symmetric again. (See Chapter 5 for the explanation of Pivot Points.) With high shortness, Teller bids 2NT and then shows the exact shape over opener's 3♣ relay, starting with 3♦ for the most common pattern (5-4-3-1). But, with low shortness, Teller goes straight to the Pivot Point (3♦) and shows his remaining shape immediately.

Following the principle of the cheaper bids for the more balanced and more common distributions, his final ESS calls, showing his exact shape, are:

- 3♦: 5-4-3-1
- 3♥: 6-4-2-1
- 3♠: 6-4-3-0
- 3NT: 7-4-2-0

These meanings will stay the same regardless of how Teller gets to the final ESS call.

Thus, Teller's bids with a S2S will, step-by-step show:

1. His first-shown suit
2. His second-shown suit
3. A Reverser if he has one
4. His shortness*
5. His generic distribution*

*Note that with low shortness Teller has reached the end of the shortness showing calls (or “End of Line”). Thus, he will immediately go straight to the Pivot Point and show generic distribution simultaneously.

From this information, Teller’s exact shape will have been revealed at this point.

Examples

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2NT
3 ♣	3 ♦

Responder’s 1 ♥ call shows spades. The 2 ♣ call shows clubs. 2NT shows high shortness—i.e., heart shortness—and not a Reverser (since Teller would stop off at 2 ♥ with a Reverser). So, 5+ spades and exactly 4 clubs are known at this point. 3 ♦ is the Pivot Point, the last shortness step and the first shape-showing step, so it shows the generic 5-4-3-1 shape, the most common pattern. Putting all this information together we know that Teller’s shape is exactly 5=1=3=4.

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♦

Again, responder's 1♥ call shows spades and his 2♣ call shows clubs. But this time he has gone straight to the Pivot Point, 3♦. So, he's shown low shortness (diamonds) and a generic 5-4-3-1 pattern. When we put it together we have exactly 5=3=1=4.

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2NT
3 ♣	3 ♥

The 1♠ call shows hearts. The 2♦ call shows diamonds. This will not be a Reverser, since Teller would have bid 2♥ (rather than 2♦) if he had a Reverser with diamonds. So teller has 5+ hearts and exactly 4 diamonds. 2NT shows high shortness, which is spades in this case. 3♥, one step beyond the Pivot Point of 3♦, shows a generic 6-4-2-1 shape. Putting all this together then, Teller's shape is exactly 1=6=4=2.

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣

The 1♥ call shows spades. The 1NT call shows hearts. The 2♥ call shows a Reverser, so 4 spades and longer hearts. The 3♣ call shows equal-short—a generic 5-4-2-2 or 7-4-1-1. Teller's shape is assumed to be exactly 4=5=2=2 at this point. If Teller happens to be 4=7=1=1, that will be revealed later with a special sequence reserved for the Swan (see Chapter 13).

SHORT TWO-SUITERS

WEST

1 ♣

2 ♦

2 ♠

EAST

2 ♣

2 ♥

3 ♦

The 2 ♣ call shows 5+ diamonds. The 2 ♥ call shows clubs (exactly 4). The 3 ♦ call shows low shortness (hearts), and, since it's the Pivot Point, a generic 5-4-3-1 distribution. Therefore, Teller's shape is exactly 3=1=5=4.

WEST

1 ♣

2 ♣

2 ♥

3 ♣

EAST

1NT

2 ♦

2NT

3NT

The 1NT call shows 5+ clubs. The 2 ♦ call shows 4+ diamonds. The 2NT call shows high shortness. 3NT shows a generic 7-4-2-0. Therefore, Teller's shape is exactly 0=2=4=7.

SHORT TWO-SUITERS QUIZ

First, assume you are Teller, and opener will relay until you have described your exact shape. Determine your full sequence of bids.

1. ♠ A8732 ♥ K986 ♦ 8 ♣ Q93
2. ♠ 82 ♥ AQJ4 ♦ K98653 ♣ 7
3. ♠ 64 ♥ A2 ♦ K764 ♣ QJ985
4. ♠ AK8753 ♥ — ♦ A873 ♣ 972
5. ♠ 873 ♥ A8752 ♦ KQ94 ♣ 6
6. ♠ 8 ♥ 92 ♦ AQJ852 ♣ K954
7. ♠ KJ94 ♥ 92 ♦ 85 ♣ AQJ63
8. ♠ — ♥ 9842 ♦ AKJ9852 ♣ K3
9. ♠ 943 ♥ — ♦ A842 ♣ KQ10984
10. ♠ 85 ♥ AQ93 ♦ KJ842 ♣ 75
11. ♠ 9842 ♥ KJ8543 ♦ A ♣ K2
12. ♠ K8743 ♥ 942 ♦ 8 ♣ AQJ8

Now, over to the 1♣ bidder. Determine Teller's exact shape. Assume that you have found that there are insufficient controls for slam; choose the best game.

13. ♠ A32 ♥ K874 ♦ A2 ♣ KQ43

WEST	EAST
1♣	1♠
1NT	2♥
2♠	3♣

14. ♠ A9873 ♥ K762 ♦ AQ ♣ K2

WEST	EAST
1♣	2♣
2♦	2♥
2♠	3♦

15. ♠ KQ4 ♥ QJ95 ♦ A874 ♣ A2

WEST	EAST
1♣	1♥
1♠	2♣
2♦	2♥
2♠	2NT
3♣	3♦

16. ♠ 75 ♥ AQ983 ♦ KQ94 ♣ AQ

WEST	EAST
1♣	1♥
1♠	2♦
2♥	2NT
3♣	3♥

17. ♠ AQJ93 ♥ K8 ♦ 92 ♣ AK74

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣

18. ♠ 7 ♥ AK42 ♦ KQJ7 ♣ A986

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	3 ♦

19. ♠ QJ9 ♥ A9872 ♦ A5 ♣ KQ4

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣

20. ♠ QJ983 ♥ A74 ♦ A43 ♣ AK

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♦

21. ♠ AK8 ♥ 82 ♦ K964 ♣ AKJ5

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♥

22. ♠ K7654 ♥ AQJ3 ♦ K2 ♣ AQ

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦

23. ♠ 643 ♥ A5 ♦ AKJ97 ♣ A43

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♦

24. ♠ KQJ2 ♥ 983 ♦ A32 ♣ AQ7

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♣

ANSWERS

1. ♠ A8732 ♥ K986 ♦ 8 ♣ Q93

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2NT ³
3 ♣	3 ♦ ⁴

1. Spades
2. Hearts
3. High short
4. Generic 5-4-3-1, so exactly 5=4=1=3

2. ♠ 82 ♥ AQJ4 ♦ K98653 ♣ 7

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♥ ²
2 ♠	3 ♥ ³

1. Hearts
2. Diamonds, Reverser
3. Low short, generic 6-4-2-1, so exactly 2=4=6=1

3. ♠ 64 ♥ A2 ♦ K764 ♣ QJ985

WEST	EAST
1 ♣	1NT ¹
2 ♣	2 ♦ ²
2 ♥	3 ♣ ³

1. Clubs
2. Diamonds
3. Equal short, presumably generic 5-4-2-2, so exactly 2=2=4=5

4. ♠ AK8753 ♥ — ♦ A873 ♣ 972

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♦ ²
2 ♥	2NT ³
3 ♣	3 ♠ ⁴

1. Spades
2. Diamonds, not a Reverser
3. High short
4. Generic 6-4-3-0, so exactly 6=0=4=3

5. ♠ 873 ♥ A8752 ♦ KQ94 ♣ 6

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	3 ♦ ³

1. Hearts
2. Diamonds, not a Reverser
3. Low short, generic 5-4-3-1, so exactly 3=5=4=1

6. ♠ 8 ♥ 92 ♦ AQJ852 ♣ K954

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2 ♥ ²
2 ♠	2NT ³
3 ♣	3 ♥ ⁴

1. Diamonds
2. Clubs
3. High short
4. Generic 6-4-2-1, so exactly 1=2=6=4

7. ♠ KJ94 ♥ 92 ♦ 85 ♣ AQJ63

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♣ ²
2 ♦	2 ♥ ³
2 ♠	3 ♣ ⁴

1. Spades
2. Clubs
3. Reverser
4. Equal short, presumably generic 5-4-2-2, so exactly 4=2=2=5

8. ♠ — ♥ 9842 ♦ AKJ9852 ♣ K3

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♥ ²
2 ♠	2NT ³
3 ♣	3NT ⁴

1. Hearts
2. Diamonds, Reverser
3. High short
4. Generic 7-4-2-0, so exactly 0=4=7=2

9. ♠ 943 ♥ — ♦ A842 ♣ KQ10984

WEST	EAST
1 ♣	1NT ¹
2 ♣	2 ♦ ²
2 ♥	3 ♠ ³

1. Clubs
2. Diamonds
3. Low short, generic 6-4-3-0, so exactly 3=0=4=6

10. ♠ 85 ♥ AQ93 ♦ KJ842 ♣ 75

WEST

1 ♣

1NT

2 ♠

EAST

1 ♠¹

2 ♥²

3 ♣³

1. Hearts

2. Diamonds, Reverser

3. Equal short, presumably generic 5-4-2-2, so exactly 2=4=5=2

11. ♠ 9842 ♥ KJ8543 ♦ A ♣ K2

WEST

1 ♣

1 ♠

2 ♣

2 ♠

3 ♣

EAST

1 ♥¹

1NT²

2 ♥³

2NT⁴

3 ♥⁵

1. Spades

2. Hearts

3. Reverser

4. High short

5. Generic 6-4-2-1, so exactly 4=6=1=2

12. ♠ K8743 ♥ 942 ♦ 8 ♣ AQJ8

WEST

1 ♣

1 ♠

2 ♦

EAST

1 ♥¹

2 ♣²

3 ♦³

1. Spades

2. Clubs

3. Low short, generic 5-4-3-1, so exactly 5=3=1=4

13. ♠ A32 ♥ K874 ♦ A2 ♣ KQ43

WEST	EAST
1 ♣	1 ♠
1NT	2 ♥
2 ♠	3 ♣

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 3 ♣ shows equal-short, presumably generic 5-4-2-2, so exactly 2=4=5=2. Playing 4 ♥ in the 4-4 fit definitely looks best.

14. ♠ A9873 ♥ K762 ♦ AQ ♣ K2

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦

2 ♣ shows diamonds. 2 ♥ shows clubs. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=1=5=4. The known 5-3 spade fit looks best, so 4 ♠ is right.

15. ♠ KQ4 ♥ QJ95 ♦ A874 ♣ A2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 4=1=3=5. The heart holding is adequate for notrump, and there is no reason to play in what is known to be a 4-3 spade fit. 3NT looks best.

16. ♠ 75 ♥ AQ983 ♦ KQ94 ♣ AQ

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2NT
3 ♣	3 ♥

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 6=1=4=2. Notrump is unlikely to be right with partner also having a doubleton club, especially since partner has bid notrump first and would be declaring. (Because you would want to protect your club tenace, not because of partner's declaring skills.) You have 8-card fits in both spades and diamonds. You do not know the quality of partner's spades, but 10 tricks are easier than 11, so 4 ♠ figures to be the best bet.

17. ♠ AQJ93 ♥ K8 ♦ 92 ♣ AK74

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=2=5. 3NT is clearly out due to the diamond weakness. 5 ♣ in the 5-4 fit is possible, but there might be 3 losers. Your spade suit is strong enough to handle a 5-2 fit, so the 10-trick game of 4 ♠ looks best.

18. ♠ 7 ♥ AK42 ♦ KQJ7 ♣ A986

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	3 ♦

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 5=3=4=1. While you don't know where partner's honors are, it looks like there won't be enough winners for 3NT. 4 ♥ in the 4-3 fit is possible, but your weakness in intermediates makes that shaky. Even though contracting for 11 tricks, it looks best to try 5 ♦ in the 4-4 fit, since you will be able to ruff clubs in partner's hand and you will have the strong trump holding.

19. ♠ QJ9 ♥ A9872 ♦ A5 ♣ KQ4

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows equal-short, presumably generic 5-4-2-2, so exactly 4=2=2=5. Diamonds are dangerous for notrump. While you can't know how strong partner's spades are, your strong intermediates in spades suggest that 4 ♠ in the 4-3 fit will be best.

20. ♠ QJ983 ♥ A74 ♦ A43 ♣ AK

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♦

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=5=1=4. It is a question of which 5-3 major-suit fit to play. You have the spade intermediates, while partner might not have heart intermediates. Your losing diamonds can be ruffed in the short hand. 4 ♠ looks best.

21. ♠ AK8 ♥ 82 ♦ K964 ♣ AKJ5

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♥

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 4=6=1=2. If partner had a stiff club 3NT would be fine, but the diamond stopper isn't good enough for notrump opposite a stiff diamond. While you don't know what partner's heart suit looks like he does have six of them, so 4 ♥ looks best.

22. ♠ K7654 ♥ AQJ3 ♦ K2 ♣ AQ

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦

2 ♣ shows diamonds. 2 ♥ shows clubs. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=1=5=4. With the weak spade suit, very solid holding in partner's singleton, and partner taking care of the minors, it looks like 3NT has a better chance than 4 ♠ in the 5-3 spade fit.

23. ♠ 643 ♥ A5 ♦ AKJ97 ♣ A43

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♦

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 4=5=3=1. Clubs are weak for notrump. You don't know if either of partner's majors are strong enough to handle a 7-card fit. Your diamonds are strong, and you can ruff your losing clubs in the short hand. 5 ♦ looks best.

24. ♠ KQJ2 ♥ 983 ♦ A32 ♣ AQ7

WEST

1 ♣

1NT

2 ♦

EAST

1 ♠

2 ♣

3 ♣

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly $2=5=2=4$. Your hand is flat, but there is potential weakness in the diamond suit and the slow spade tricks may take time to establish. It looks better to bank on taking 10 tricks in hearts.

LONG TWO-SUITERS

When responder is showing a two-suiter he will always be showing both of his suits with calls of 2♥ or lower. If Teller actually bids 2♥ that will always show a short two-suiter. He will normally have a Reverser when he bids 2♥ (i.e., a 4-card major and a longer suit), but a short two-suiter may be a hand with 5+ diamonds and 4 clubs. The relay times out such that responder will never be bidding 2♠ when he has a short two-suiter. Consequently, when he's shown two suits, Teller's 2♠ is used to show a Long Two-Suiter (aka L2S)—at least 5–5. And we come upon another Bell-Ringer. When you hear 2♠ think “Long Two-Suiter.”

Just as we saw when responder to 1♣ had a short two-suiter, when he has a long two-suiter (L2S), his first-shown suit is not necessarily his longest suit. Since we show the suits in a specific order (SHCD), Teller could have 5 cards in his first-shown suit and 6 cards in his second-shown suit. Also, remember that if responder has a long two-suiter with both minors, his first-shown suit is always clubs. Thus, if responder's first-shown suit is diamonds he never has a long two-suiter, and his only possible second suit is clubs. This means that responder will never need to bid 2♠ with a two-suiter with diamonds as the first-shown suit.

After responder's 2♠ call showing a long two-suiter (L2S), opener relays with 2NT. Responder now shows his shortness, in the same high, equal, low pattern that is used for the short two-suiter (HELL). Here, the bids are:

- **3♣:** High-short
- **3♦:** Equal-short
- **3♥ and higher:** Low-short

Thus, the Pivot Point is for the long two-suiter (L2S) is 3♥, not 3♦; it's one step higher here because of that necessary 2♠ step to clarify the long two-suiter. (Remember that the Pivot Point is always the last shortness-showing step (thus low-short) and the first of the final shape-

showing steps.) In consequence, the “funny” step step for L2Ss (the equal step) is also a step higher: 3 ♦ instead of 3 ♣.

Note that the long two-suiter (L2S) is the only distribution for which 3 ♦ is not the Pivot Point.

When responder has one shortest suit with the L2S, his possible shapes are:

- 5-5-2-1
- 5-5-3-0
- 5-6-2-0
- 6-5-2-0

The 5-6-2-0 denotes that the 5-card suit is the higher-ranking suit, and the 6-5-2-0 denotes that the 6-card suit is the higher-ranking suit. Again, following the basic KK Relay principles that the more balanced (i.e., more common) hands are shown with the cheaper bids and equally balanced hands are shown numerically (in this case, 56 comes before 65):

- **3♥**: 5-5-2-1
- **3♠**: 5-5-3-0
- **3NT**: 5-6-2-0
- **4♣**: 6-5-2-0

These meanings will be the same whether Teller has high-short or low-short, and it won't matter which are Teller's long suits. With high-short responder bids 3 ♣ (over the 2NT relay), and then makes the ESS call of 3 ♥ or higher in response to the 3 ♦ relay. With low-short, responder goes straight to his ESS call of 3 ♥ or higher immediately.

Equal Shortness

For there to be equal shortness in a long two-suiter (L2S) the only possible distributions are:

- 5-6-1-1
- 6-5-1-1

5-6-1-1 denotes that the 5-card suit is higher ranking, and 6-5-1-1 denotes that the 6-card suit is higher ranking.

After Teller's 3♦ call (showing equal shortness), Asker can relay with 3♥ to get the exact shape. After the 3♥ relay, Teller makes his ESS call:

- **3♠**: 5-6-1-1
- **3NT**: 6-5-1-1

Some examples will make this clear:

WEST	EAST
1♣	1♠
1NT	2♦
2♥	2♠
2NT	3♣
3♦	3♥

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. 2♠ shows a long two-suiter (L2S). 3♣ shows high-short. 3♥ (the Pivot Point) shows a generic 5-5-2-1, so exactly 1=5=5=2.

WEST	EAST
1♣	1NT
2♣	2♦
2♥	2♠
2NT	3NT

1NT shows clubs. 2♦ shows diamonds. 2♠ shows a L2S. 3NT shows low-short (since 3♥ or higher), generic 5-6-2-0, so exactly 2=0=5=6.

WEST

1 ♣

1 ♠

2 ♦

2NT

3 ♥

EAST

1 ♥

2 ♣

2 ♠

3 ♦

3 ♠

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♠ shows a L2S. 3 ♦ shows equal-short. 3 ♠ shows generic 5-6-1-1, so exactly 5=1=1=6.

LONG TWO-SUITERS QUIZ

You are responder. Plan your full auction, assuming opener relays until you have described your exact distribution.

1. ♠ A8732 ♥ 7 ♦ KQ982 ♣ 52
2. ♠ A82 ♥ — ♦ AKJ87 ♣ 87652
3. ♠ — ♥ Q9873 ♦ A2 ♣ AQ9864
4. ♠ AQ9872 ♥ K8765 ♦ 6 ♣ 4
5. ♠ 92 ♥ — ♦ AKJ972 ♣ Q8765
6. ♠ A83 ♥ K7654 ♦ Q10876 ♣ —
7. ♠ KQ875 ♥ A ♦ 8 ♣ QJ10962
8. ♠ 872 ♥ — ♦ AK875 ♣ QJ862

Now try some hands from the point of view of the 1 ♣ opener. Determine responder's exact distribution and, assuming not enough controls for slam, choose the best game.

9. ♠ AK7 ♥ 943 ♦ K2 ♣ AQ875

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥

10. ♠ A86 ♥ QJ7 ♦ AK93 ♣ K85

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♣
3 ♦	3 ♥

11. ♠ K954 ♥ KJ ♦ AQ3 ♣ KQ103

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2 ♠
2NT	3 ♥

12. ♠ AJ3 ♥ A2 ♦ KJ9752 ♣ K7

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♦
3 ♥	3 ♠

13. ♠ AJ ♥ A3 ♦ K97652 ♣ AQ4

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♠
2NT	3 ♥

14. ♠ Q752 ♥ AK85 ♦ Q7 ♣ AQ6

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	4 ♣

15. ♠ AK9 ♥ QJ1052 ♦ K75 ♣ A2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2 ♠
2NT	3 ♠

16. ♠ KQJ74 ♥ K7 ♦ AJ8 ♣ K93

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3 ♠

ANSWERS

1. ♠ A8732 ♥ 7 ♦ KQ982 ♣ 52

WEST

1 ♣

1 ♠

2 ♥

2NT

3 ♦

EAST

1 ♥¹

2 ♦²

2 ♠³

3 ♣⁴

3 ♥⁵

1. Spades

2. Diamonds, not a Reverser

3. Long two-suiter (L2S)

4. High-short

5. Generic 5-5-2-1, so exactly 5=1=5=2

2. ♠ A82 ♥ — ♦ AKJ87 ♣ 87652

WEST

1 ♣

2 ♣

2 ♥

2NT

EAST

1NT¹

2 ♦²

2 ♠³

3 ♠⁴

1. Clubs

2. Diamonds

3. L2S

4. Low-short, generic 5-5-3-0, so exactly 3=0=5=5

3. ♠ — ♥ Q9873 ♦ A2 ♣ AQ9864

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♣ ²
2 ♦	2 ♠ ³
2NT	3 ♣ ⁴
3 ♦	3NT ⁵

1. Hearts
2. Clubs
3. L2S
4. High-short
5. Generic 5-6-2-0, so exactly 0=5=2=6

4. ♠ AQ9872 ♥ K8765 ♦ 6 ♣ 4

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♠ ³
2NT	3 ♦ ⁴
3 ♥	3NT ⁵

1. Spades
2. Hearts
3. L2S
4. Equal short
5. Generic 6-5-1-1, so exactly 6=5=1=1

5. ♠ 92 ♥ — ♦ AKJ972 ♣ Q8765

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♦ ²
2 ♥	2♠ ³
2NT	4♣ ⁴

1. Clubs
2. Diamonds
3. L2S
4. Low-short, generic 6-5-2-0, so exactly 2=0=6=5

6. ♠ A83 ♥ K7654 ♦ Q10876 ♣ —

WEST	EAST
1 ♣	1♠ ¹
1NT	2♦ ²
2 ♥	2♠ ³
2NT	3♠ ⁴

1. Hearts
2. Diamonds, not a Reverser
3. L2S
4. Low-short, generic 5-5-3-0, so exactly 3=5=5=0

7. ♠ KQ875 ♥ A ♦ 8 ♣ QJ10962

WEST	EAST
1 ♣	1♥ ¹
1 ♠	2♣ ²
2♦	2♠ ³
2NT	3♦ ⁴
3♥	3♠ ⁵

1. Spades
2. Clubs
3. L2S
4. Equal short
5. Generic 5-6-1-1, so exactly 5=1=1=6

8. ♠ 872 ♥ — ♦ AK875 ♣ QJ862

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♦ ²
2♥	2♠ ³
2NT	3♠ ⁴

1. Clubs

2. Diamonds

3. L2S

4. Low-short, generic 5-5-3-0, so exactly 3=0=5=5

9. ♠ AK7 ♥ 943 ♦ K2 ♣ AQ875

WEST	EAST
1 ♣	1 ♠
1NT	2♦
2♥	2♠
2NT	3♣
3♦	3♥

1 ♠ shows hearts. 2♦ shows diamonds, not a Reverser. 2♠ shows a L2S. 3♣ shows high-short. 3♥ shows generic 5-5-2-1, so exactly 1=5=5=2. Two spade stoppers might not be enough for 3NT. Even though your hearts are weak, the 5-3 heart fit figures to be better.

10. ♠ A86 ♥ QJ7 ♦ AK93 ♣ K85

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♣
3 ♦	3 ♥

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 3 ♥ shows generic 5-5-2-1, so exactly 5=5=1=2. Normally hearts would be the better 5-3 fit, since you have the intermediates in hearts rather than in spades. Here, however, with partner having a doubleton club and a singleton diamond, protecting your king of clubs from the opening lead is more important. Partner bid hearts first and you bid spades first, so in order to declare from your side 4 ♠ looks best. If partner were instead 5=5=2=1 the lead wouldn't be as much of a consideration, so 4 ♥ would be better.

11. ♠ K954 ♥ KJ ♦ AQ3 ♣ KQ103

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2 ♠
2NT	3 ♥

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows a long two-suiter 3 ♥ shows low-short, generic 5-5-2-1, so exactly 2=5=5=1. You don't know the quality of partner's red suits. However, you have a solid club holding opposite his singleton, and your spade stopper figures to be okay opposite his doubleton. Therefore, 3NT looks like a better bet than 4 ♥ or 5 ♦. If he instead showed a singleton spade and a doubleton club, then spades would be a weak spot for notrump and either 4 ♥ or 5 ♦ probably would be better.

12. ♠ AJ3 ♥ A2 ♦ KJ9752 ♣ K7

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♦
3 ♥	3 ♠

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♦ shows equal-short. 3 ♠ shows generic 5-6-1-1, so exactly 1=5=1=6. The spade stopper is inadequate for 3NT opposite a stiff spade, and partner's hearts might not be strong enough to handle a 5-2 fit. Even though it is an 11-trick contract, 5 ♣ looks best.

13. ♠ AJ ♥ A3 ♦ K97652 ♣ AQ4

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♠
2NT	3 ♥

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 5=2=1=5. Your heart holding is too weak to try 3NT opposite a doubleton. While you have more clubs than spades, the red-suit distribution suggests that you may have 2 quick red-suit losers on a heart lead, which could be bad for an 11-trick contract. You do have the jack of spades, which could help cover the fourth round of spades. 4 ♠ in the 5-2 fit is probably best. If partner instead had a stiff heart and a doubleton diamond, then it probably would be better to play in 5 ♣.

14. ♠ Q752 ♥ AK85 ♦ Q7 ♣ AQ6

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	4 ♣

1NT shows clubs. 2 ♦ shows diamonds. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 4 ♣ shows generic 6-5-2-0, so exactly 0=2=6=5. While the club holding is stronger, it is better to play in the 6-2 diamond fit. The danger is getting tapped in spades if you play in clubs and the clubs are 4-1. The queen of diamonds may make it unnecessary to ruff a third-round diamond loser. 5 ♦ is probably better than 5 ♣.

15. ♠ AK9 ♥ QJ1052 ♦ K75 ♣ A2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2 ♠
2NT	3 ♠

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows a long two-suiter. 3 ♠ shows low-short, generic 5-5-3-0, so exactly 5=3=5=0. Even though your spades are stronger, it is better to play in hearts. Partner might have five small spades. You can easily ruff your losing club in the short hand and then draw trumps if playing in hearts. If you get a 4-1 trump split that won't generate an extra loser with hearts trump, while it might with spades trump. Also, there is more danger of losing control with spades trump, as the long hand will be taking the ruffs.

16. ♠ KQJ74 ♥ K7 ♦ AJ8 ♣ K93

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3 ♠

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 3 ♠ shows generic 5-5-3-0, so exactly 0=5=3=5. While 3NT with a void usually isn't a good idea, here your spades are good enough to handle things and, with all suits under control, there is no need to contract for more than 9 tricks. 3NT looks best.

THREE-SUITERS

Three-suiters are hands with three suits of four cards or longer. The only possible distributions are 4-4-4-1 and 5-4-4-0. Whenever Teller has one of these shapes, in order to show the three-suiter he will start by taking one of two special sequences reserved specifically for the three-suiters. Then, the short suit will be identified, and, as always, the final ESS call will show the exact shape.

Consider the sequence we use to show 5+ clubs:

WEST	EAST
1 ♣	1NT
2 ♣	?

1NT shows a club suit. Now:

- 2 ♦ shows a diamond suit.
- 2 ♠ and higher steps show a one-suiter.

But, 2 ♥ is undefined. We've seen earlier that there are no Reversers when Teller starts by showing a long minor, so the designated Reverser step (2 ♥) is idle in this sequence. But no steps go unused in the KK Relay structure.

Since we don't need 2 ♥ to show a Reverser here, we make use of that step to show a three-suiter. We've assigned it to specifically designate a three-suiter with a short major.

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥ ¹

1. Three-suiter, short major

Note that the three-suiter with a short major will always have a club suit by definition, which is consistent with clubs being the first-shown suit. Of course, the club suit might now be a 4-card suit (while it would

always be at least 5 cards if the hand were a one-suiter or a two-suiter); and there might be another 5-card suit in the hand when Teller is three-suited (even a 5-card major).

Now, consider the start of the sequence we use to show both majors:

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	?

1 ♥ shows a spade suit. 1NT shows a heart suit. Now:

- 2 ♥ shows a Reverser
- 2 ♠ shows a long two-suiter
- 2NT and higher show a short two-suiter, not a Reverser

But, 2 ♦ is undefined in this sequence. We don't need it to show two-suiters or one-suiters. It's "idle." As would be expected, we put this idle 2 ♦ step to work, in this case to show a three-suiter with a short minor.

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦ ¹

1. Three-suiter, short minor

Note that the three-suiter with a short minor will always include both majors, which is consistent with the first two calls (spades shown first, then hearts). But, in this case, once the three suiter is known, these majors might turn out to be 4–4 (which would never be the case with a two-suiter); but responder *does* have the majors, which helps the memory when learning the relay structure.

Clarifying the Exact Shape

After the three-suiter (plus the short-major or short-minor distinction) has been identified via one of the two special sequences defined above, Asker relays to get the rest of responder's shape. And then, as always, once his hand type is known (in this case a three-suiter), Teller's next call defines his short suit according to HEL principles (High, Equal, Low):

- **2NT:** High-short
- **3♣:** "Equal-short"
- **3♦ and higher:** Low-short

Because "short-minor" or "short-major" is already known at this point, there are only two remaining shortness possibilities here: high or low. We can't have equal shortness in a three-suiter. (We'll discuss the mysterious "equal-short" step shortly.) When Teller is known to hold a three-suiter with a short major, spades is high-short and hearts is low-short. If Teller has shown a three-suiter with a short minor, then diamonds is high-short and clubs is low-short.

The possible shapes for a three-suiter are:

- 4-4-4-1
- 4-4-5-0 (5-card suit lowest ranking)
- 4-5-4-0 (5-card suit middle ranking)
- 5-4-4-0 (5-card suit highest ranking)

4-4-4-1 is the most balanced (i.e., most frequent) and is thus shown first. The others can be seen as three-digit numbers, shown in numeric order: 445, 454, 544. The specific distribution is determined by the short suit.

For example, if you've shown a short major via 1♣-1NT; 2♣-2♥, then high shortness (via 2NT), then 4-5-4-0 (via 3♠), your exact shape must be 0=4=5=4.

The Pivot Point for three-suiters is again 3♦ (the same as for the one-suiters and the short two-suiters), making it easier to remember. 3♦ is the point in the three-suited structure at which low shortness is shown (end of line) and final shape clarification begins. The Pivot Point. Thus, the final shape-clarifying calls are:

- **3♦**: 4-4-4-1 (the Pivot Point)
- **3♥**: 4-4-5-0 (445)
- **3♠**: 4-5-4-0 (454)
- **3NT**: 5-4-4-0 (544)

Examples

Three-suiter, short in spades:

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♥ ²
2 ♠	2NT ³
3 ♣	?
1. Clubs	
2. Three-suiter, short major	
3. High-short	

Now,

- **3♦**: the Pivot Point, showing a generic 4-4-4-1, so exactly 1=4=4=4
- **3♥**: generic 4-4-5-0, so exactly 0=4=4=5 (445)
- **3♠**: generic 4-5-4-0, so exactly 0=4=5=4 (454)
- **3NT**: generic 5-4-4-0, so exactly 0=5=4=4 (544)

Three-suiter, short in clubs:

WEST	EAST
1 ♣	1♥ ¹
1 ♠	1NT ²
2 ♣	2♦ ³
2♥	?
1. Spades	
2. Hearts	
3. Three-suiter, short minor	

Now,

- **3♦**: low-short, generic 4-4-4-1, so exactly 4=4=4=1
- **3♥**: low-short, generic 4-4-5-0, so exactly 4=4=5=0
- **3♠**: low-short, generic 4-5-4-0, so exactly 4=5=4=0
- **3NT**: low-short, generic 5-4-4-0, so exactly 5=4=4=0

“EQUAL SHORT”

Did you notice that 3♣ is again the “Equal” step? Symmetric again. But there is no equal shortness in a three-suiter, so it’s an idle step, and available. We don’t waste it, of course.

The “Equal” 3♣ is used here to show a 4-4-4-1 hand with a singleton honor (ace, king, or queen, but not the jack). This information is often important for determining whether or not 3NT is playable. Since the singleton is not yet known, opener relays with 3♦ and responder shows whether his singleton is the high-short (first step) or the low-short (second step). For example:

♠ K ♥ AQ76 ♦ K632 ♣ J986

WEST

1 ♣

2 ♣

2 ♠

3 ♦

EAST

1NT¹

2♥²

3♣³

3♥⁴

1. Clubs, temporarily

2. Three-suiter, short major

3. 4-4-4-1, singleton honor

4. High-short, so exactly 1=4=4=4 with singleton spade honor

If Teller bid 3♠ instead of 3♥, he would have shown low shortness, so exactly 4=1=4=4 with a singleton heart honor.

Note also that this is consistent with a basic KK Relay feature: the final ESS call with known generic patterns is numeric. Here, the

remaining two suits are already known to be 1–4 or 4–1. 3♥ corresponds to 1–4 (the lower numeric), while 3♠ corresponds to 4–1.

As a corollary, if responder shows the generic 4-4-4-1 shape via 2NT then 3♦ or immediate 3♦, his singleton will, of course, be a small singleton.

Sharp readers will have noticed that the sequence:

WEST	EAST
1♣	1♥
1♠	1NT
2♣	2♦
2♥	2♠

is not defined. Teller responds 2NT, 3♣ or 3♦ to show high, equal or low shortness. But we don't waste space in KK Relay. As will be seen later, the idle 2♠ can optionally be used for a special hand type that's difficult for Teller to describe otherwise. We'll discuss it's role in Chapter 16 (Specialty Hands).

THREE-SUITERS QUIZ

First, you have the responding hand. Plan your full sequence, assuming that opener will relay until you have shown your exact distribution.

1. ♠ 8 ♥ A942 ♦ KJ87 ♣ Q964
2. ♠ K975 ♥ Q8642 ♦ — ♣ AJ87
3. ♠ KQ987 ♥ — ♦ A986 ♣ Q1032
4. ♠ Q975 ♥ A642 ♦ KQJ7 ♣ K
5. ♠ K972 ♥ QJ84 ♦ — ♣ AK954
6. ♠ — ♥ K986 ♦ AQ974 ♣ Q982
7. ♠ Q985 ♥ J ♦ A874 ♣ Q952
8. ♠ A ♥ Q875 ♦ KQ84 ♣ K752

Now try the 1 ♣ opener's hand. Determine responder's exact distribution from the auction, and assuming there is no slam, choose the best game.

9. ♠ A742 ♥ K954 ♦ AQ3 ♣ AJ

WEST

1 ♣

2 ♣

2 ♠

EAST

1NT

2 ♥

3 ♦

10. ♠ KJ3 ♥ AK4 ♦ AJ3 ♣ QJ52

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦

11. ♠ AQ974 ♥ K63 ♦ A2 ♣ KJ5

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3NT

12. ♠ KJ3 ♥ AK10852 ♦ AQ7 ♣ 5

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	3 ♠

13. ♠ K73 ♥ AQ ♦ KQ10842 ♣ KJ

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

14. ♠ QJ10975 ♥ 7 ♦ AK ♣ AQ75

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♦

15. ♠ AKQ95 ♥ AK5 ♦ J107 ♣ 87

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠

16. ♠ AQ ♥ AQ ♦ 109752 ♣ A854

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦

ANSWERS

1. ♠ 8 ♥ A942 ♦ KJ87 ♣ Q964

WEST

1 ♣

2 ♣

2 ♠

3 ♣

EAST

1NT¹

2♥²

2NT³

3♦⁴

1. Clubs

2. Three-suiter, short major

3. High-short

4. Generic 4-4-4-1, so exactly 1=4=4=4, singleton small spade

2. ♠ K975 ♥ Q8642 ♦ — ♣ AJ87

WEST

1 ♣

1 ♠

2 ♣

2 ♥

3 ♣

EAST

1♥¹

1NT²

2♦³

2NT⁴

3♠⁵

1. Spades

2. Hearts

3. Three-suiter, short minor

4. High-short

5. Generic 4-5-4-0, so exactly 4=5=0=4

3. ♠ KQ987 ♥ — ♦ A986 ♣ Q1032

WEST

1 ♣

2 ♣

2 ♠

EAST

1NT¹

2♥²

3NT³

1. Clubs

2. Three-suiter, short major

3. Low-short, generic 5-4-4-0, so exactly 5=0=4=4

4. ♠ Q975 ♥ A642 ♦ KQJ7 ♣ K

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♦ ³
2 ♥	3 ♣ ⁴
3 ♦	3 ♠ ⁵

1. Spades
2. Hearts
3. Three-suiter, short minor
4. Generic 4-4-4-1, singleton honor
5. Low-short, so exactly 4=4=4=1, singleton club honor

5. ♠ K972 ♥ QJ84 ♦ — ♣ AK954

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♦ ³
2 ♥	2NT ⁴
3 ♣	3 ♥ ⁵

1. Spades
2. Hearts
3. Three-suiter, short minor
4. High-short
5. Generic 4-4-5-0, so exactly 4=4=0=5

6. ♠ — ♥ K986 ♦ AQ974 ♣ Q982

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♥ ²
2 ♠	2NT ³
3 ♣	3♠ ⁴

1. Clubs
2. Three-suiter, short major
3. High-short
4. Generic 4-5-4-0, so exactly 0=4=5=4

7. ♠ Q985 ♥ J ♦ A874 ♣ Q952

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♥ ²
2 ♠	3♦ ³

1. Clubs
2. Three-suiter, short major
3. Low-short, generic 4-4-4-1, so exactly 4=1=4=4, singleton small heart

8. ♠ A ♥ Q875 ♦ KQ84 ♣ K752

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♥ ²
2 ♠	3♣ ³
3 ♦	3♥ ⁴

1. Clubs
2. Three-suiter, short major
3. Generic 4-4-4-1, singleton honor
4. High-short, so exactly 1=4=4=4, singleton spade honor

9. ♠ A742 ♥ K954 ♦ AQ3 ♣ AJ

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	3 ♦

1NT shows clubs. 2♥ shows three-suiter, short major. 3♦ shows low-short with small singleton, generic 4-4-4-1, so exactly 4=1=4=4. Clearly 4♠ in the 4-4 fit is best.

10. ♠ KJ3 ♥ AK4 ♦ AJ3 ♣ QJ52

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦

1♥ shows spades. 1NT shows hearts. 2♦ shows three-suiter, short minor. 2NT shows high-short. 3♦ shows generic 4-4-4-1 with small singleton, so exactly 4=4=1=4. The diamond holding isn't strong enough for 3NT opposite a small singleton. While either major could be okay, the long hand will be getting tapped and you don't know which is partner's stronger major. 5♣ in the 4-4 fit should play fine, even though 11 tricks are needed.

11. ♠ AQ974 ♥ K63 ♦ A2 ♣ KJ5

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3NT

1NT shows clubs. 2 ♥ shows three-suiter, short major. 2NT shows high-short. 3NT shows generic 5-4-4-0, so exactly 0=5=4=4. While your spade holding is decent, there figures to be a lot of value in a trump suit, so 4 ♥ in the 5-3 fit looks best.

12. ♠ KJ3 ♥ AK10852 ♦ AQ7 ♣ 5

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	3 ♠

1NT shows clubs. 2 ♥ shows three-suiter, short major. 3 ♠ shows low-short, generic 4-5-4-0, so exactly 4=0=5=4. 3NT is possible if partner has strong clubs, but you can't find that out. 4 ♠ in the 4-3 fit could be right if partner has good spades, but the hand could be difficult to handle. It looks best to play in the 8-card fit even though 11 tricks are needed, so 5 ♦.

13. ♠ K73 ♥ AQ ♦ KQ10842 ♣ KJ

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♠ shows generic 4-5-4-0, so exactly 4=5=0=4. There are two 7-card major-suit fits, but no guarantee that either is playable. 3NT looks ugly, but you figure to be able to take 9 tricks on sheer power as all suits are well under control.

14. ♠ QJ10975 ♥ 7 ♦ AK ♣ AQ75

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♦

1NT shows clubs. 2 ♥ shows three-suiter, short major. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with small singleton, so exactly 1=4=4=4. There is no assurance of adequate heart protection for notrump. There is a 4-4 club fit, but that contracts for 11 tricks and there may be some trump losers. Even opposite a stiff spade, 4 ♠ will have only 2 spade losers and probably no more than one other loser. That looks best.

15. ♠ AKQ95 ♥ AK5 ♦ J107 ♣ 87

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠

1NT shows clubs. 2♥ shows three-suiter, short major. 3♣ shows generic 4-4-4-1, singleton honor. 3♠ shows low-short, so exactly 4=1=4=4, singleton heart honor. The 5-4 spade fit might seem obvious. But partner has the singleton queen of hearts, so you start with 8 top tricks in notrump and the enemy suit triple-stopped. You can almost certainly develop the ninth trick in diamonds, and if you can't 4♠ isn't making either. There is no need to risk having 4 minor-suit losers in 4♠ when 3NT is cold.

16. ♠ AQ ♥ AQ ♦ 109752 ♣ A854

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦

1♥ shows spades. 1NT shows hearts. 2♦ shows three-suiter, short minor. 2NT shows high-short. 3♦ shows generic 4-4-4-1, so exactly 4=4=1=4, small singleton diamond. If partner had a diamond honor 3NT would be best. But unless his small singleton is the jack the opponents can take 4 diamond tricks, and you can't afford that in 3NT. Your best bet is 5♣.

SHAPE-SHOWING SUMMARY

This chapter contains a concise summary of responder's shape-showing sequences with a logical order and easy-to-follow description, to be used as a quick and easy reference. We've also included a comprehensive list of Pivot Points and Bell-Ringers. Distributions are initially given in generic form, such as 5-4-3-1. The actual distribution can be determined by taking into account which specific suit(s) and/or shortness responder has shown. This is given in the form 4=3=1=5, which translates to 4 spades, 3 hearts, 1 diamond, 5 clubs.

Hand Types/Definitions

Balanced Hand: No singletons or voids, no 5+ card suit

One-Suiter: One suit 5+ cards, no second suit of 4+ cards

Short Two-Suiter: 2 suits, one 5+ cards, the other exactly 4 cards

Reverser: Short two-suiter where the 4-card suit (major) is shown first

Long Two-Suiter: 2 suits, 5+ cards each

Three-Suiter: 3 suits of 4+ cards each

Sequences

1 ♣ – 1 ♥

One-suiter with spades or two-suiter including spades or three-suiter short minor

Then (after 1 ♠ relay):

- 1NT: two-suiter spades and hearts or three-suiter short minor

Then (after 2 ♣ relay):

- 2 ♦: three-suiter, short minor

Then (after 2 ♥ relay):

- 2 ♠: Specialty sequence for Responder's semi-solid suits, not used in the 3-suited structure, (See Chapter 16 for details.)
- 2NT: High-short

Then (after 3 ♣ relay) 3 ♦ and higher show exact shape numerically, as follows:

- 3 ♦: 4-4-4-1, small singleton, so exactly 4=4=1=4
- 3 ♥: 4-4-5-0, so exactly 4=4=0=5
- 3 ♠: 4-5-4-0, so exactly 4=5=0=4
- 3NT: 5-4-4-0, so exactly 5=4=0=4
- 3 ♣: 4-4-4-1, stiff ace, king, or queen (high-short OR low-short)

Then (after 3 ♦ relay) 3 ♥ and higher show exact shape as follows:

- 3 ♥: high-short, so exactly 4=4=1=4 with stiff honor
- 3 ♠: low-short, so exactly 4=4=4=1 with stiff honor
- 3 ♦ and higher: low-short (continuations as with high-short)

- 2♥: short two-suiter, Reverser (♠ + ♥)
Then (after 2♠ relay):
 - 2NT: high-short
Then (after 3♣ relay) 3♦ and higher show exact shape as follows:
 - 3♦: 5-4-3-1, so exactly 4=5=1=3
 - 3♥: 6-4-2-1, so exactly 4=6=1=2
 - 3♠: 6-4-3-0, so exactly 4=6=0=3
 - 3NT: 7-4-2-0, so exactly 4=7=0=2
 - 3♣: equal-short, 5-4-2-2 or 7-4-1-1, so exactly 4=5=2=2 or 4=7=1=1
 - 3♦ and higher: low-short (continuations as with high-short)
- 2♠: long two-suiter (♠ + ♥)
Then (after 2NT relay):
 - 3♣: high-short
Then (after 3♦ relay) 3♥ and higher show exact shape as follows:
 - 3♥: 5-5-2-1, so exactly 5=5=1=2
 - 3♠: 5-5-3-0, so exactly 5=5=0=3
 - 3NT: 5-6-2-0, so exactly 5=6=0=2
 - 4♣: 6-5-2-0, so exactly 6=5=0=2
 - 3♦: equal-short
Then (after 3♥ relay) 3♠ and higher show exact shape as follows:
 - 3♠: 5-6-1-1, so exactly 5=6=1=1
 - 3NT: 6-5-1-1, so exactly 6=5=1=1
 - 3♥ and higher: low-short (continuations as with high-short)
- 2NT and higher: short two-suiter, non-Reverser (♠ + ♥; continuations as with Reverser)

- 2♣: two-suiter, spades and clubs
Then (after 2♦ relay):
 - 2♥: short two-suiter, Reverser (♠ + ♣; continuations as with heart/spade Reverser)
 - 2♠: long two-suiter (♠ + ♣; continuations as with heart/spade long two-suiter)
 - 2NT and higher: short two-suiter (♠ + ♣), non-Reverser (continuations as with heart/spade short two-suiter, non-Reverser)
- 2♦: two-suiter, spades and diamonds, non-Reverser
Then (after 2♥ relay):
 - 2♠: long two-suiter (♠ + ♦; continuations as with heart/spade long two-suiter)
 - 2NT and higher: short two-suiter (♠ + ♦; continuations as with heart/spade non-Reverser)
- 2♥: short two-suiter, spades and diamonds, Reverser
Then (after 2♠ relay):
 - 2NT and higher: continuations as with heart/spade Reverser
- 2♠ and higher: one-suiter as follows:
- 2♠: high-short or 6-3-2-2 with high doubleton
Then (after 2NT relay):
 - 3♣: 6-3-2-2 with high doubleton
Then (after 3♦ relay) 3♥ and higher show exact shape as follows:
 - 3♥: 6-2-2-3, so exactly 6=2=2=3
 - 3♠: 6-2-3-2, so exactly 6=2=3=2
 - 3♦ and higher show exact shape as follows:
 - 3♦: 5-3-3-2, so exactly 5=2=3=3
 - 3♥: 6-3-3-1, so exactly 6=1=3=3
 - 3♠: 7-2-3-1, so exactly 7=1=2=3
 - 3NT: 7-3-2-1, so exactly 7=1=3=2
 - 4♣: 7-3-3-0, so exactly 7=0=3=3

- 2NT: middle short
Then (after 3 ♣ relay):
 - 3 ♦ and higher: continuations as with high-short
- 3 ♣: Equal short, 6-3-2-2 not high doubleton or 7-2-2-2
Then (after 3 ♦ relay) 3 ♥ and higher shows exact shape as follows:
 - 3 ♥: 7-2-2-2, so exactly 7=2=2=2
 - 3 ♠: 6-3-2-2, so exactly 6=3=2=2
- 3 ♦ and higher: low-short, continuations as with high-short

1 ♣ – 1 ♠

Hearts, one-suiter or two-suiter hearts and a minor

Then (after 1NT relay):

- 2 ♣: clubs, continuations as with spades and clubs
- 2 ♦: diamonds, non-Reverser, continuations as with spades and diamonds non-Reverser
- 2 ♥: diamonds, Reverser, continuations as with spades and diamonds Reverser
- 2 ♠ and higher: one-suiter, continuations as with spade one-suiter

1 ♣ – 1NT

5+ Clubs, one-suiter or minors two-suiter or three-suiter short major

Then (after 2 ♣ relay):

- 2 ♦: 5+ clubs, 4+ diamonds

Then (after 2 ♥ relay):

- 2 ♠: long two-suiter, continuations as with spades/hearts
- 2NT and higher: short two-suiter, continuations as with spades/hearts
- 2 ♥: three-suiter, short major, continuations as with three-suiter short minor
- 2 ♠ and higher: one-suiter, continuations as with spade one-suiter

1 ♣ – 2 ♣

Diamonds, one-suiter or 5+ diamonds, 4 clubs

Then (after 2 ♦ relay):

- 2 ♥: 5+ diamonds, 4 clubs, continuations as with spade/heart non-Reverser
- 2 ♠ and higher: one-suiter, continuations as with spade one-suiter

1 ♣ – 2 ♦**Balanced, 9–11 or 15+**

Then (after 2 ♥ relay):

- 2 ♠: 4-4-3-2, 2 suits same color or 4-3-3-3, 4-card major

Then (after 2NT relay):

- 3 ♣: 4-3-3-3, 4-card major

Then (after 3 ♦ relay) 3 ♥ and higher shows exact shape as follows:

- 3 ♥: 4 hearts, so exactly 3=4=3=3
- 3 ♠: 4 spades, so exactly 4=3=3=3

- 3 ♦ and higher show exact shape as follows:

- 3 ♦: doubleton diamond, so exactly 4=3=2=4
- 3 ♥: doubleton heart, so exactly 4=2=3=4
- 3 ♠: doubleton spade, so exactly 2=4=4=3
- 3NT: doubleton club, so exactly 3=4=4=2

- 2NT: 4-4-3-2, 2 suits same rank

Then (after 3 ♣ relay):

- 3 ♦ and higher: continuations as with 2 suits same color

- 3 ♣: 4-3-3-3, 4-card minor

Then (after 3 ♦ relay) 3 ♥ and higher shows exact shape as follows:

- 3 ♥: 4 clubs, so exactly 3=3=3=4
- 3 ♠: 4 diamonds, so exactly 3=3=4=3

- 3 ♦ and higher: 4-4-3-2, 2 suits same shape, continuations as with 2 suits same color

1 ♣ – 2 ♥

Optional special sequence reserved for Responder's solid suits.

We have not yet looked at this special sequence which proceeds somewhat differently than normal in KK relay. Details will be found in Chapter 16 on specialty hands.

1 ♣ – 2 ♠ and higher

Balanced 12–14, continuations as with balanced 9–11

BELL-RINGERS

It's called a "Bell-Ringer" because, when you hear one of these calls from Teller, it should ring a bell. It's possible, if not likely, that something special is happening. Some Bell-Ringers we have encountered thus far:

- 2 ♥: Reverser
- 2 ♠: Long Two-Suiter
- 3 ♣: The "Equal" or "Funny" step
- 3 ♣: Singleton Honor (occurs only in the 3-suited sequence)

Note that the Bell-Ringers occur in context of the specific auction, and thus do not always indicate that there is something special happening. For example, 2 ♠ is the Bell-Ringer for the Long Two-Suiter, but if you've shown a one-suiter or three-suiter, 2 ♠ will have an entirely different meaning.

PIVOT POINTS

The Pivot Point is the point in the auction at which shortness and hand type are both known, and we pivot to refining the specific shape. The Pivot Point is always the low-short step, and is usually 3♦.

- 3♦: The “universal” Pivot Point after 1♣, for all but the long two-suiters
- 3♥: Long two-suiters

GENERIC DISTRIBUTION DRILLS

This chapter is designed to help the reader transition easily into relay bidding. Since it's all about showing shape, and the shape-showing calls follow a repeating pattern, we've included a summary of the generic shapes, the pivot points for each, and the universal generic expansion calls for each distribution. At the end of this chapter you will find some drills for practicing the sequences.

When Teller has a unique shortest suit in a one-suiter, a short two-suiter, or a long two-suiter, his final shape-showing call (the ESS call which completes his pattern) will depend entirely upon his generic distribution. It won't matter precisely which suit is his longest suit, nor what his second longest suit is, nor which suit is his shortest suit. It won't matter exactly which bids were needed to show his long and short suits, nor will it matter exactly how he got to the point where he is ready for the final expansion to exact shape. That final call, the ESS, will always be the same for each generic distribution, regardless of his exact suits. For example, suppose responder has shown a short two-suiter and his generic shape is 5-4-3-1:

♠ KJ875 ♥ A43 ♦ 9 ♣ Q1052

WEST

1 ♣

1 ♠

2 ♦

EAST

1 ♥

2 ♣

3 ♦

1 ♥ shows spades. 2 ♣ shows clubs. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 5=3=1=4.

♠ QJ5 ♥ A873 ♦ K9874 ♣ 5

WEST	EAST
1 ♣	1 ♠
1NT	2 ♥
2 ♠	3 ♦

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=4=5=1.

♠ 8 ♥ A43 ♦ K874 ♣ KJ985

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦

1NT shows clubs. 2 ♦ shows diamonds. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=3=4=5.

♠ 8 ♥ A874 ♦ K75 ♣ QJ1096

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=4=3=5.

It didn't matter how we got there. Once it is established that responder has a short two-suiter with unique shortness, a final call of 3 ♦ (the ESS) will always show a generic 5-4-3-1 distribution. This will be true regardless of which suits are involved, whether or not responder

has a Reverser, and whether the shortness is high-short or low-short. 3♦ will always mean the same thing: a generic 5-4-3-1.

This theme is true for all other distributions with a unique short suit. It is one of the brilliant things about KK Relay: once you have memorized the meanings of each of the ESS bids for the various hand types, if you are responder you will know what your final bid must be when you pick up your hand. And, if you are opener, you know what partner's generic shape is when he makes that final ESS call.

The Pivot Point is also the cheapest of the ESS calls for all one-suiters and two-suiters with unique shortness, as well as the three-suiters. The Pivot Points are:

One-suiter:	3♦
Short two-suiter:	3♦
Long two-suiter:	3♥
Three-suiter:	3♦

For the one-suiter with unique shortness there are exactly five possible generic distributions. They are:

- 5-3-3-2
- 6-3-3-1
- 7-2-3-1 (doubleton higher ranking than tripleton)
- 7-3-2-1 (tripleton higher ranking than doubleton)
- 7-3-3-0

The final ESS bids for these generic distributions are:

- **3♦**: 5-3-3-2
- **3♥**: 6-3-3-1
- **3♠**: 7-2-3-1 (23 is less than 32)
- **3NT**: 7-3-2-1 (32 is greater than 23)
- **4♣**: 7-3-3-0

For the short two-suiter with unique shortness, there are only four possible generic distributions. They are:

- 5-4-3-1
- 6-4-2-1
- 6-4-3-0
- 7-4-2-0

The final ESS bids for the short two-suiter (S2S) generic distributions are:

- **3♦**: 5-4-3-1
- **3♥**: 6-4-2-1
- **3♠**: 6-4-3-0
- **3NT**: 7-4-2-0

Note that these final ESS calls all start at the Pivot Point (3♦).

For the long two-suiter with unique shortness, there are four possible generic distributions. They are:

- 5-5-2-1
- 5-5-3-0
- 5-6-2-0 (5-card suit higher ranking than 6-card suit)
- 6-5-2-0 (6-card suit higher ranking than 5-card suit)

The final ESS bids for the long two-suiter (L2S) generic distributions start at the Pivot Point of 3♥:

- **3♥**: 5-5-2-1
- **3♠**: 5-5-3-0
- **3NT**: 5-6-2-0 (56 is less than 65)
- **4♣**: 6-5-2-0 (65 is greater than 56)

For the three-suiter, there are four possible generic distributions. They are:

- 4-4-4-1
- 4-4-5-0
- 4-5-4-0
- 5-4-4-0

The final ESS bids for the three-suiter generic distributions are:

- **3♦**: 4-4-4-1
- **3♥**: 4-4-5-0
- **3♠**: 4-5-4-0
- **3NT**: 5-4-4-0

Note that the final expansion to exact shape starts, again, at the Pivot Point (which is 3♥ for the long two-suiter). With practice, these sequences should become second nature. Any experienced bridge player can pick up:

♠ AQ8742 ♥ KQ63 ♦ K5 ♣ 7

and in one look say “14 HCPs.” With a bit of practice you will soon be able to glance at this hand and say, “Short two-suiter, 6-4-2-1, 3♥.”

Equal Shortness

The bid one step below the Pivot Point is called the “Equal” or sometimes the “Funny.” This bid is:

One-suiter:	3 ♣
Short two-suiter:	3 ♣
Long two-suiter:	3 ♦
Three-suiter:	3 ♣

Hands that do not have a unique shortness must go through the “Equal” step, as follows:

For a one-suiter, there are four possible generic distributions with no unique shortness. They are:

- 6-2-2-3 (doubletons in the two highest-ranking suits)
- 6-2-3-2 (doubletons highest and lowest-ranking suits)
- 6-3-2-2 (doubletons in the two lowest-ranking suits)
- 7-2-2-2

The first two start with 2 ♠, then 3 ♣ (the “Slow Boat”) to show “high- and equal-short” The second two start with 3 ♣ immediately (the “Speedboat”) to show equal shortness (but not including high shortness). The full expansion is numeric, as per normal KK Relay principles:

2 ♠, then 3 ♣, then 3 ♥:	6-2-2-3 (223 is less than 232)
2 ♠, then 3 ♣, then 3 ♠:	6-2-3-2 (232 is greater than 223)
3 ♣, then 3 ♥:	7-2-2-2 (222 is less than 322)
3 ♣, then 3 ♠:	6-3-2-2 (322 is greater than 222)

For a short two-suiter, there is only one possible generic distribution with no unique shortness. This is:

- 5-4-2-2 (forget about 7-4-1-1 for now, we'll look at it later)

Thus, the only “expansion” is:

- **3♣**: 5-4-2-2

For a long two-suiter, there are two possible generic distributions with no unique shortness. They are:

- 5-6-1-1 (5-card suit higher ranking)
- 6-5-1-1 (6-card suit higher ranking)

These start with 3♦ (the “Equal” for a long two-suiter), and again the full expansion is numeric:

- **3♦, then 3♠**: 5-6-1-1 (56 is less than 65)
- **3♦, then 3NT**: 6-5-1-1 (65 is less than 56)

For the three-suiter, the “equal” shows a 4-4-4-1 hand with a singleton honor. There are two possible generic distributions. They are:

- **3♣, then 3♥**: High shortness
- **3♣ then 3♠**: Low shortness

Learning (and memorizing) these final ESS bids for the generic distributions is critical for ease of using KK Relay.

DRILL

This is just a drill for practice in recognizing the generic distributions and the final ESS calls for each. For further practice you can create your own drills simply by picking up any hand record and practicing the sequences to show your pattern.

First, you are responder. You are given your generic distribution. Tell what your hand type is and what your final ESS call(s) are.

1. 5-4-2-2
2. 6-3-2-2
3. 7-3-3-0
4. 4-5-4-0
5. 7-4-2-0
6. 6-5-1-1
7. 6-2-2-3
8. 7-2-3-1
9. 4-4-4-1 singleton honor
10. 5-5-2-1
11. 7-2-2-2
12. 6-3-3-1
13. 7-3-2-1
14. 5-3-3-2
15. 5-4-4-0
16. 6-4-2-1
17. 5-4-3-1
18. 4-4-4-1 small singleton
19. 6-2-3-2
20. 5-6-1-1
21. 5-5-3-0
22. 6-5-2-0

23. 4-4-5-0
24. 5-6-2-0
25. 6-4-3-0
26. 7-4-2-0
27. 7-3-2-1
28. 4-4-5-0
29. 6-4-2-1
30. 7-2-2-2
31. 5-6-2-0
32. 5-5-3-0
33. 5-4-4-0
34. 6-3-2-2
35. 6-3-3-1
36. 4-5-4-0
37. 7-2-3-1
38. 5-5-2-1
39. 5-3-3-2
40. 4-4-4-1 small singleton
41. 6-4-3-0
42. 5-4-3-1
43. 4-4-4-1 singleton honor
44. 7-3-3-0
45. 5-4-2-2
46. 6-2-3-2
47. 6-5-1-1
48. 6-5-2-0
49. 5-6-1-1
50. 6-2-2-3

Now you are the 1♣ opener. You are told partner's hand type and his final ESS bid(s). Give his generic distribution.

51. One-suiter, 3♣ then 3♥
52. Three-suiter, 3♦
53. One-suiter, 3NT
54. Long two-suiter, 3NT
55. One-suiter, 2♠ then 3♣ then 3♥
56. One-suiter, 2♠ then 3♣ then 3♠
57. Three-suiter, 3NT
58. One-suiter, 3♣ then 3♠
59. One-suiter, 3♦
60. One-suiter, 3♥
61. Three-suiter, 3♠
62. One-suiter, 3♠
63. Long two-suiter, 3♦ then 3NT
64. Short two-suiter, 3NT
65. Long two-suiter, 3♥
66. Three-suiter, 3♥
67. Short two-suiter, 3♥
68. Long two-suiter, 4♣
69. Short two-suiter, 3♠
70. Short two-suiter, 3♣
71. Long two-suiter, 3♠
72. Three-suiter, 3♣
73. Long two-suiter, 3♦ then 3♠
74. Short two-suiter, 3♦
75. One-suiter, 4♣
76. One-suiter, 3♥
77. One-suiter, 2♠ then 3♣ then 3♥

78. One-suiter, 3 ♦
79. One-suiter, 3 ♠
80. Three-suiter, 3NT
81. Long two-suiter, 3NT
82. Short two-suiter, 3 ♥
83. Three-suiter, 3 ♠
84. One-suiter, 4 ♣
85. One-suiter, 2 ♠ then 3 ♣ then 3 ♠
86. Short two-suiter, 3NT
87. Short two-suiter, 3 ♣
88. Long two-suiter, 4 ♣
89. Three-suiter, 3 ♦
90. One-suiter, 3 ♣ then 3 ♥
91. Short two-suiter, 3 ♦
92. Long two-suiter, 3 ♥
93. Three-suiter, 3 ♣
94. One-suiter, 2 ♠ then 3 ♣ then 3 ♠
95. Three-suiter, 3 ♥
96. One-suiter, 3NT
97. Short two-suiter, 3 ♠
98. Long two-suiter, 3 ♠
99. Long two-suiter, 3 ♦ then 3 ♠
100. Long two-suiter, 3 ♦ then 3NT

ANSWERS

1. 5-4-2-2
Short two-suiter, 3 ♣
2. 6-3-2-2
One-suiter, 3 ♣ then 3 ♠
3. 7-3-3-0
One-suiter, 4 ♣
4. 4-5-4-0
Three-suiter, 3 ♠
5. 7-4-2-0
Short two-suiter, 3NT
6. 6-5-1-1
Long two-suiter, 3 ♦ then 3NT
7. 6-2-2-3
One-suiter, 2 ♠ then 3 ♣ then 3 ♥
8. 7-2-3-1
One-suiter, 3 ♠
9. 4-4-4-1, singleton honor
Three-suiter, 3 ♣
10. 5-5-2-1
Long two-suiter, 3 ♥
11. 7-2-2-2
One-suiter, 3 ♣ then 3 ♥
12. 6-3-3-1
One-suiter, 3 ♥
13. 7-3-2-1
One-suiter, 3NT
14. 5-3-3-2
One-suiter, 3 ♦
15. 5-4-4-0
Three suiter, 3NT

16. 6-4-2-1
Short two-suiter, 3♥
17. 5-4-3-1
Short two-suiter, 3♦
18. 4-4-4-1, small singleton
Three-suiter, 3♦
19. 6-2-3-2
One-suiter, 2♠ then 3♣ then 3♠
20. 5-6-1-1
Long two-suiter, 3♦ then 3♠
21. 5-5-3-0
Long two-suiter, 3♠
22. 6-5-2-0
Long two-suiter, 4♣
23. 4-4-5-0
Three-suiter, 3♥
24. 5-6-2-0
Long two-suiter, 3NT
25. 6-4-3-0
Short two-suiter, 3♠
26. 7-4-2-0
Short two-suiter, 3NT
27. 7-3-2-1
One-suiter, 3NT
28. 4-4-5-0
Three-suiter, 3♥
29. 6-4-2-1
Short two-suiter, 3♥
30. 7-2-2-2
One-suiter, 3♣ then 3♥
31. 5-6-2-0
Long two-suiter, 3NT

32. 5-5-3-0
Long two-suiter, 3 ♠
33. 5-4-4-0
Three-suiter, 3NT
34. 6-3-2-2
One-suiter, 3 ♣ then 3 ♠
35. 6-3-3-1
One-suiter, 3 ♥
36. 4-5-4-0
Three-suiter, 3 ♠
37. 7-2-3-1
One-suiter, 3 ♠
38. 5-5-2-1
Long two-suiter, 3 ♥
39. 5-3-3-2
One-suiter, 3 ♦
40. 4-4-4-1, small singleton
Three-suiter, 3 ♦
41. 6-4-3-0
Short two-suiter, 3 ♠
42. 5-4-3-1
Short two-suiter, 3 ♦
43. 4-4-4-1, singleton honor
Three-suiter, 3 ♣
44. 7-3-3-0
One-suiter, 4 ♣
45. 5-4-2-2
Short two-suiter, 3 ♣
46. 6-2-3-2
One-suiter, 2 ♠ then 3 ♣ then 3 ♠
47. 6-5-1-1
Long two-suiter, 3 ♦ then 3NT

48. 6-5-2-0
Long two-suiter, 4 ♣
49. 5-6-1-1
Long two-suiter, 3 ♦ then 3 ♠
50. 6-2-2-3
One-suiter, 2 ♠ then 3 ♣ then 3 ♥
51. One-suiter, 3 ♣ then 3 ♥
7-2-2-2
52. Three-suiter, 3 ♦
4-4-4-1, small singleton
53. One-suiter, 3NT
7-3-2-1
54. Long two-suiter, 3NT
5-6-2-0
55. One-suiter, 2 ♠ then 3 ♣ then 3 ♥
6-2-2-3
56. One-suiter, 2 ♠ then 3 ♣ then 3 ♠
6-2-3-2
57. Three-suiter, 3NT
5-4-4-0
58. One-suiter, 3 ♣ then 3 ♠
6-3-2-2
59. One-suiter, 3 ♦
5-3-3-2
60. One-suiter, 3 ♥
6-3-3-1
61. Three-suiter, 3 ♠
4-5-4-0
62. One-suiter, 3 ♠
7-2-3-1
63. Long two-suiter, 3 ♦ then 3NT
6-5-1-1

64. Short two-suiter, 3NT
7-4-2-0
65. Long two-suiter, 3♥
5-5-2-1
66. Three-suiter, 3♥
4-4-5-0
67. Short two-suiter, 3♥
6-4-2-1
68. Long two-suiter, 4♣
6-5-2-0
69. Short two-suiter, 3♠
6-4-3-0
70. Short two-suiter, 3♣
5-4-2-2
71. Long two-suiter, 3♠
5-5-3-0
72. Three-suiter, 3♣
4-4-4-1, singleton honor
73. Long two-suiter 3♦ then 3♠
5-6-1-1
74. Short two-suiter, 3♦
5-4-3-1
75. One-suiter, 4♣
7-3-3-0
76. One-suiter, 3♥
6-3-3-1
77. One-suiter, 2♠ then 3♣ then 3♥
6-2-2-3
78. One-suiter, 3♦
5-3-3-2
79. One-suiter, 3♠
7-2-3-1

80. Three-suiter, 3NT
5-4-4-0
81. Long two-suiter, 3NT
5-6-2-0
82. Short two-suiter, 3♥
6-4-2-1
83. Three-suiter, 3♠
4-5-4-0
84. One-suiter, 4♣
7-3-3-0
85. One-suiter, 2♠ then 3♣ then 3♠
6-2-3-2
86. Short two-suiter, 3NT
7-4-2-0
87. Short two-suiter, 3♣
5-4-2-2
88. Long two-suiter, 4♣
6-5-2-0
89. Three-suiter, 3♦
4-4-4-1, small singleton
90. One-suiter, 3♣ then 3♥
7-2-2-2
91. Short two-suiter, 3♦
5-4-3-1
92. Long two-suiter, 3♥
5-5-2-1
93. Three-suiter, 3♣
4-4-4-1, singleton honor
94. One-suiter, 2♠ then 3♣ then 3♠
6-2-3-2
95. Three-suiter, 3♥
4-4-5-0

- 96. One-suiter, 3NT
7-3-2-1
- 97. Short two-suiter, 3 ♠
6-4-3-0
- 98. Long two-suiter, 3 ♠
5-5-3-0
- 99. Long two-suiter, 3 ♦ then 3 ♠
5-6-1-1
- 100. Long two-suiter, 3 ♦ then 3NT
6-5-1-1

END OF THE LINE

Not the Traveling Wilburys...

After Teller has shown his exact shape, if Asker has slam ambitions he will usually continue by asking for controls. To do so, he makes the cheapest suit-bid. For example, if Teller's final shape-showing call (the ESS) is 3♥, then 3♠ asks for controls.

In response to a Control Ask Teller shows his controls as follows:

- **Step 1:** 0–2 controls (ace = 2, king = 1)
- **Step 2:** 3 controls
- **Step 3:** 4 controls
- And so on

We'll look more closely at how the Control Ask works in the next chapter. For now, we only need to consider certain sequences where Teller is able to say something about his controls without being asked. He can sometimes do that simultaneously with his final ESS call, thereby eliminating the Control Ask altogether. This is another example of "Zooming," and its value in the KK Relay structure is that it saves room for subsequent inquiries by the Asker. Every step saved may be the step which gives Asker the room to find what he needs for a winning slam decision.

EOL

Teller's highest possible ESS call is, by definition, the last step in the shape-showing structure, so it's known as the End-of-the-Line call. (It's referred to as the End-of-Line or EOL.)

NOTE: It's very important in KK Relay to understand the distinction between an ESS call and an EOL call. The ESS call is the bid that shows the exact shape—the final expansion. The EOL call is the highest of the ESS calls. The cheapest ESS call is also known as the Pivot Point.

Consider the following sequence:

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3 ♠

2 ♦ shows balanced 9–11 (or 15+). 3 ♣ shows 4-3-3-3 with a 4-card minor. 3 ♠ says that the 4-card suit is diamonds (with four clubs Teller would have bid 3 ♥), and his shape is now fully known. So 3 ♠ is the end of shape-showing, and, since it's the last possible shape-shower, it's The End-of-the-Line (EOL).

Suppose Teller bids 3NT instead of 3 ♠. When we've reached the End-of-the-Line, what would a higher bid mean? Does it exist?

Clearly, Teller can't afford to bid any higher than 3NT with 9–11, since 3NT might be the limit of the hand. But, with 15+, Teller must not bid 3NT, since he can't afford to risk 3NT being passed when he holds unexpected extra strength. However, Teller can afford to bid 3NT with 9–11 (instead of 3 ♠). Obviously, 3NT will have a meaning. Space is a precious commodity in KK Relay—we don't waste it. So, the 3NT call is used to show the same distribution that 3 ♠ would have shown, but to give additional information about controls, as follows:

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	?

- **3♥:** 3=3=3=4
- **3♠:** 3=3=4=3 (the End-of-Line), 9–11 HCP, 0–2 controls
- **3NT:** 3=3=4=3, 9–11 HCP, 3+ controls

This extra information about controls is often quite helpful to Asker. For example, when Teller shows 0–2 controls that may be enough to tell Asker that there is no slam, so he can immediately sign off rather than having to ask for controls and possibly get too high. Or, if he is still interested in slam facing 0–2 controls, Asker is able to go directly into other asking bids without having to first stop to ask about controls.

The 3NT call in the sequence above is known as a Zoom, or a Run-On. When you’ve reached the End-of-the-Line, you can sometimes go automatically to the next piece of information. Zoom!

Before we move on, a few quick notes about Zooming will be helpful:

- Teller cannot always Zoom when he reaches the End-of-Line.
- We don’t Zoom to show controls when shape-showing ends above 3NT. If the EOL call is above 3NT, it IS the End-of-the-Line. We’ll see why this is true shortly.
- We don’t Zoom past 3NT to show controls, unless Teller has what we call a Super-Positive hand (see below for an explanation of the Super-Positive).

We’ll see Zooming in action in other situations as we delve deeper into KK Relay.

Note that when Teller shows 3+ controls with 3NT, if Asker has slam interest, he will usually check back with 4♣, Control Ask.¹ Since Teller is now known to have a minimum of 3 controls, by virtue of his

¹ See the next chapter, “After Shape is Known” for an in-depth discussion of the Control Ask.

Zoom to 3NT, his responses to the Control Ask will start with 3 rather than with 0–2, and a potentially crucial step has been saved.

NOTE: There are two other hand-types where 3♠ can be the End-of-Line call. The first is Teller's one-suiter, equal-short. The other is Teller's 4441 with a singleton heart honor or singleton club honor.

ONE-SUITER, EQUAL-SHORT

WEST	EAST
1♣	1♠
1NT	2♠
2NT	3♣
3♦	3♠

1♠ shows hearts. 2♠ shows a one-suiter, either high-short or 6-3-2-2 with high doubleton. 3♣ shows 6-3-2-2 with the high doubleton. 3♠ shows 3–2 in rank order for the remaining suits (3♥ would show 2–3 in rank order for the remaining suits), so exactly 2=6=3=2. Therefore, since 3♠ is the End-of-the-Line:

WEST	EAST
1♣	1♠
1NT	2♠
2NT	3♣
3♦	?

- 3♥: 2=6=2=3
- 3♠: 2=6=3=2, 0–2 controls
- 3NT: 2=6=3=2, 3+ controls

We'll look at the 4-4-4-1 where 3♠ is EOL shortly.

Teller's Super-Positive

There is an important consideration here. Asker could be intending to pass 3NT. That's fine if Teller is minimal, but unlike the balanced hand sequences where Teller's strength is known, when Teller has an unbalanced hand-type he is still unlimited. Consequently, Teller may be too strong to make a passable 3NT call. If this is the case, Teller will bid beyond 3NT, showing his controls. Look at the 2=6=3=2 auction from above:

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♦	4 ♣+

3 ♠ would show 2=6=3=2 with 0–2 controls, and 3NT would show the same shape with 3+ controls. By bidding beyond 3NT, Teller shows a hand with the EOL distribution (2=6=3=2) but a hand that is too good to allow opener to pass 3NT.

How strong must Teller be to bid beyond 3NT on his own? He definitely needs at least 4 controls, but that might not be enough. He may also need extra high-card points. For example, if Teller has two aces and nothing else 3NT could easily be the limit of the hand, despite the 4 controls.

We define Teller as having a “Super-Positive” if he has 4 controls and at least 13 HCP. In addition, we've found that anytime Teller has 5 or more controls, even with fewer than 13 HCP, he has a Super-Positive.² When Teller is this strong, 4NT will almost certainly be a safe contract if the hand is to be played in notrump, so Teller can afford to bypass 3NT. Thus, on the sequence above, Teller's bids mean:

²In the original Symmetric Relay, 5 controls were not thought to be enough to override a sign-off if Teller didn't have at least 13 HCP as well. We've found that this is not optimal. Any hand with 5 controls has proven to be good enough to treat as a “Super-Positive.”

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♦	?

- **3♥**: 2=6=2=3
- **3♠**: 2=6=3=2, 0–2 controls (The End-of-the-Line)
- **3NT**: 2=6=3=2, 3+ controls, less than a Super-Positive
- **4♣**: 2=6=3=2, 4 controls, Super-Positive (13+ HCP)
- **4♦**: 2=6=3=2, 5 controls
- **4♥**: 2=6=3=2, 6 controls
- And so on

The same is true, of course, when Teller takes the Speedboat (the fast route) to 3 ♣, showing equal-shortness in the lower-ranking suits. For example:

WEST	EAST
1 ♣	2 ♣
2 ♦	3 ♣
3 ♦	?

2 ♣ shows diamonds. 3 ♣ shows a one-suiter, either 7-2-2-2 or 6-3-2-2 without a high doubleton. Teller's ESS calls mean:

- **3♥**: 2=2=7=2
- **3♠**: 3=2=6=2, 0–2 controls (the End-of-the-Line)
- **3NT**: 3=2=6=2, 3+ controls, less than a Super-Positive
- **4♣**: 3=2=6=2, 4 controls, Super-Positive (13+ HCP)
- **4♦**: 3=2=6=2, 5 controls
- **4♥**: 3=2=6=2, 6 controls
- And so on

4-4-4-1 with Singleton Honor

The remaining hand-type where 3♠ is the End-of-Line is a three-suiter, 4-4-4-1 with a stiff honor in either hearts or clubs. For example:

WEST	EAST
1♣	1NT
2♣	2♥
2♠	3♣
3♦	3♠

1NT shows clubs. 2♥ shows three-suiter, short major. 3♣ shows a generic 4-4-4-1, singleton honor. Now 3♠ shows a singleton heart (3♥ would have shown a singleton spade). Since 3♠ is EOL:

WEST	EAST
1♣	1NT
2♣	2♥
2♠	3♣
3♦	?

- **3♥**: 1=4=4=4, singleton honor
- **3♠**: 4=1=4=4, singleton honor (the End-of-Line), 0–2 controls
- **3NT**: 4=1=4=4, singleton honor, 3+ controls, less than a Super-Positive
- **4♣**: 4=1=4=4, singleton honor, 4 controls, Super-Positive
- **4♦**: 4=1=4=4, singleton honor, 5 controls, Super-Positive
- **4♥**: 4=1=4=4, singleton honor, 6 controls, Super-Positive
- And so on

CAUTION!

As we saw above, in looking at Teller's Super-Positives, when Teller's final shape-showing call is 3NT, the 1♣ opener may pass 3NT to play. So, if his hand is too strong risk being passed in 3NT, it's important that Teller doesn't bid 3NT.

Teller handles this glitch slightly differently with a balanced hand than he does with an unbalanced hand, as follows:

Balanced hand: When Teller is in the 9–11 or 12–14 ranges he doesn't need to worry about this problem, since Asker knows his strength. However, if Teller has 15+ he must not bid 3NT (the call that shows a doubleton club with 4-4-3-2 distribution). Instead, with the 15+ hand, Teller bids past 3NT immediately, and Zooms to controls, starting with 4 (since 4 controls are required to categorize a balanced hand as 15+). For example:

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	?

2 ♦ shows a balanced 9–11 or 15+. 2 ♠ shows two suits of the same color or 4-3-3-3 with a 4-card major. With the 4-4-3-2 hand Teller now bids his doubleton other than clubs. With a doubleton club:

- **3NT:** 3=4=4=2, 9–11 (the End-of-Line, EOL)
- **4♣:** 3=4=4=2, 15+, 4 controls
- **4♦:** 3=4=4=2, 15+, 5 controls
- **4♥:** 3=4=4=2, 15+, 6 controls
- And so on

So, what happens in the (very rare) case where Teller has 15+ but only 3 controls? Teller simply downgrades to 12–14. If Teller is still too strong to risk getting dropped in 3NT (say 16+ with only 3 controls), he has a solution. After showing a hand in the 12–14 range, he then overrides a signoff. Asker will know that this is an impossible action with a hand in the 12–14 range so can only be based on extra HCP with fewer than 4 controls.

And what happens if Teller has 4 or 5 controls with fewer than 15 HCPs? Nothing at all! He's shown his HCP with his 12–14 response and makes no move after Asker's signoff. If he thinks his hand is too good to comfortably pass a sign-off in game, then he can upgrade it to 15+ initially.

Unbalanced hand: If Teller's final call would be 3NT, in order to avoid being passed in 3NT he must bid past 3NT when he has a Super-Positive.

3NT can be the End-of-Line for the following four hand-types:

- Teller's short two-suiter with 7-4-2-0 shape. For example:

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2NT
3 ♣	?

1 ♥ shows spades. 2 ♣ shows clubs 2NT shows high-short.
Now:

- 3 ♦: 5=1=3=4
- 3 ♥: 6=1=2=4
- 3 ♠: 6=0=3=4
- 3NT: 7=0=2=4 (the End-of-Line), less than a Super-Positive
- 4 ♣: 7=0=2=4, 4 controls, Super-Positive (13+ HCP)
- 4 ♦: 7=0=2=4, 5 controls
- 4 ♥: 7=0=2=4, 6 controls
- And so on
- Teller's long two-suiter, equal-short, long suits 6–5 in rank order. For example:

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2 ♠
2NT	3 ♦
3 ♥	?

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows a long two-suiter. 3 ♦ shows equal-short. Now:

- **3♠**: 5=1=6=1
- **3NT**: 6=1=5=1 (the End-of-Line), less than a Super-Positive
- **4♣**: 6=1=5=1, 4 controls, Super-Positive (13+ HCP)
- **4♦**: 6=1=5=1, 5 controls
- **4♥**: 6=1=5=1, 6 controls
- And so on
- Teller's three-suiter, 5-4-4 in rank order. For example:

WEST	EAST
1♣	1NT
2♣	2♥
2♠	2NT
3♣	?

1NT shows clubs. 2♥ shows a three-suiter, short major. 2NT shows high-short. Now:

- **3♦**: 1=4=4=4 small singleton
- **3♥**: 0=4=4=5
- **3♠**: 0=4=5=4
- **3NT**: 0=5=4=4 (the End-of-Line), less than a Super-Positive
- **4♣**: 0=5=4=4, 4 controls, Super-Positive (13+ HCP)
- **4♦**: 0=5=4=4, 5 controls
- **4♥**: 0=5=4=4, 6 controls
- And so on

The solution to the Super-Positive problem is a bit different if the EOL call is 4♣. (There are only a couple of infrequent hand-types where this can happen.) When 4♣ is End-of-Line, one of the ESS calls Teller will have bypassed is 3NT. As always, Teller cannot afford to bid 3NT with a Super Positive, so he will instead Zoom to show his controls. However, if 4♣ is EOL, he can't bid 4♣, as he will have shown a different shape than he holds.

As an example, suppose that Teller is 7-3-2-1 with a 4-control Super-Positive.

The ESS calls for a one-suiter with a 7-card suit are:

- **3♠:** 7-2-3-1
- **3NT:** 7-3-2-1
- **4♣:** 7-3-3-0

Teller's ESS call with a 7-3-2-1 is 3NT, but he can't afford to be passed there with a Super-Positive. And 4♣ is the EOL for one-suiters with a 7-card suit. So, he can't bid 4♣ either!

So, what does Teller do with the 7-3-2-1 Super-Positive? The solution is that his control-showing calls will have to start at 4♦, one step above the last ESS call, i.e., one step above the End-of-the-Line.

It's most important to note that, in this rare situation, Teller's bids above the End-of-the-Line will be showing the distribution he would have had for a 3NT call, not the shape for the 4♣ EOL call, because 3NT is the call that Teller can't risk being passed. This is why we said above that when the End-of-the-Line is above 3NT it IS the End-of-the-Line. Period. There is no Run-On to controls or Super-Positive when shape-showing ends above 3NT.

Stated simply: If you bid past the End-of-the-Line, you have a Super-Positive with the shape that would be shown by a 3NT bid.

- **3♠:** 7-2-3-1
- **3NT:** 7-3-2-1, less than a Super-Positive
- **4♣:** 7-3-3-0
- **4♦:** 7-3-2-1, 4 controls, Super-Positive
- **4♥:** 7-3-2-1, 5 controls, Super-Positive
- And so on

The 4♣ EOL call could have any number of controls and could be a Super-Positive. Note that this is a rare departure from our normal pattern for showing a Super-Positive. It's necessary because a lower ESS call, 3NT, is passable, something that can never happen unless EOL is above 3NT. We have to deal with that 7-3-2-1 Super-Positive as well as the 7-3-3-0 Super-Positive. It all works because 4♣ is "forcing" and 3NT is not.

After 4♣, showing 7-3-3-0, Asker will have to make a Control Ask bid of 4♦ to find out how many controls Teller has.

Just to clarify by example:

For a one-suiter, the final expansion to exact shape is:

- 3♦: 5-3-3-2
- 3♥: 6-3-3-1
- 3♠: 7-2-3-1
- 3NT: 7-3-2-1, less than a Super-Positive
 - 4♣ relay, then:
 - 4♦: 0-2 controls
 - 4♥: 3 controls
 - 4♠: 4 controls, less than 13 HCP
- 4♣: 7-3-3-0, any number of controls
 - 4♦ relay, then:
 - 4♥: 0-2 controls
 - 4♠: 3 controls
 - 4NT: 4 controls, etc.
- 4♦: 7-3-2-1, 4 controls, 13+ HCP, Super-Positive
- 4♥: 7-3-2-1, 5 controls
- 4♠: 7-3-2-1, 6 controls, etc.

There are only two auctions where 4♣ is EOL. One of these occurs when Teller has a one-suiter, as we saw above. The other 4♣ EOL occurs when Teller has a long two-suiter. For example:

WEST	EAST
1♣	1♠
1NT	2♣
2♦	2♠
2NT	3♣
3♦	?

1♠ shows hearts. 2♣ shows clubs. 2♠ shows a long two-suiter. 3♣ shows high-short. Now:

- **3♥**: 1=5=2=5
- **3♠**: 0=5=3=5
- **3NT**: 0=5=2=6, less than a Super-Positive
- **4♣**: 0=6=2=5, any number of controls (End-of-Line)
- **4♦**: 0=5=2=6, 4 controls, Super-Positive (13+ HCP)
- **4♥**: 0=5=2=6, 5 controls
- **4♠**: 0=5=2=6, 6 controls
- And so on

Summary

Here is a list of all of the possible the End-of-Line calls:

3♠ the End-of-Line

- Balanced hand, generic 4-3-3-3, four diamonds or four spades
- One-suiter, equal-shortness, generic 6-3-2-2 with lowest doubleton
- Three-suiter, generic 4-4-4-1 with singleton honor, singleton heart or club

3NT the End-of-Line

- Balanced hand, generic 4-4-3-2, doubleton club
- Short two-suiter, generic 7-4-2-0
- Long two-suiter, generic 6-5-1-1, 6-card suit higher ranking than 5-card suit
- Three-suiter, generic 5-4-4-0, 5-card suit higher ranking than 4-card suits

4♣ the End-of-Line

- One-suiter, generic 7-3-3-0
- Long two-suiter, generic 6-5-2-0, 6-card suit higher ranking than 5-card suit

Note that there are nine possible the End-of-Line calls. Each of the five hand-types except the short two-suiter has two End-of-Line calls, one for sequences with unique shortness and one for sequences which go through the “Equal.” The short two-suiter does not have an End-of-Line call for sequences that go through the “Equal,” since the equal-short is presumed to be a generic 5-4-2-2, so no further expansion is needed.

It is not necessary to memorize all the possible of the End-of-Line sequences. Simply be aware that you are at the End-of-Line when the final expansion to exact shape (ESS) is completed and act accordingly. The theme is as follows:

WHEN THE END-OF-LINE CALL IS 3♠, THEN:

- 3♠: 0–2 controls
- 3NT: 3+ controls, not a Super-Positive, (9–11 HCP if balanced hand) distribution which would have been shown by 3♠
- 4♣ and higher: 4+ controls, Super-Positive, (15+ HCP if balanced hand) distribution which would have been shown by 3♠

WHEN THE END-OF-LINE CALL IS 3NT, THEN:

- 3NT: Not a Super-Positive (9–11 if balanced hand)
- 4♣ and higher: 4+ controls, Super-Positive, (15+ HCP if balanced hand) distribution which would have been shown by 3NT

WHEN THE END-OF-LINE CALL IS 4♣, THEN:

- 3NT: Not a Super-Positive
- 4♣: The End-of-Line distribution, any strength, any number of controls
- 4♦ and higher: 4+ controls, Super-Positive, distribution which would have been shown by 3NT.

EOL QUIZ

For each hand, determine Teller's full sequence. Assume that Asker relays until Teller has shown his exact shape. Specify what the EOL call would be, what it would show, and what Teller's final call shows.

1. ♠ A87 ♥ 95 ♦ 82 ♣ AQ8642
2. ♠ — ♥ A742 ♦ AK97652 ♣ 93
3. ♠ A85 ♥ K742 ♦ A1074 ♣ 85
4. ♠ 984 ♥ AK7 ♦ Q752 ♣ 863
5. ♠ A7652 ♥ QJ74 ♦ QJ65 ♣ —
6. ♠ 83 ♥ AKJ42 ♦ KQ7652 ♣ —
7. ♠ AK87542 ♥ A74 ♦ — ♣ Q63
8. ♠ AQ9542 ♥ K8643 ♦ 8 ♣ 7
9. ♠ K983 ♥ 8752 ♦ AQ64 ♣ Q
10. ♠ KJ5 ♥ K2 ♦ AQ98643 ♣ 2

Now you are the Asker. Determine from the auction Teller's exact shape and anything else you know about his hand.

11.	WEST	EAST
	1 ♣	2 ♦
	2 ♥	2NT
	3 ♣	3 ♠

12.	WEST	EAST
	1 ♣	1 ♠
	1NT	2 ♠
	2NT	3 ♣
	3 ♦	3 ♠

13.	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♦
	2 ♥	2 ♠
	2NT	3 ♣
	3 ♦	3NT

14.	WEST	EAST
	1 ♣	1 ♥
	1 ♠	2 ♥
	2 ♠	4 ♣

15.	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♥
	2 ♠	2NT
	3 ♣	3NT

16.	WEST	EAST
	1 ♣	1 ♠
	1NT	2 ♣
	2 ♦	2 ♠
	2NT	3 ♣
	3 ♦	4 ♦
17.	WEST	EAST
	1 ♣	1 ♥
	1 ♠	3 ♣
	3 ♦	3NT
18.	WEST	EAST
	1 ♣	1NT
	2 ♣	4 ♥
19.	WEST	EAST
	1 ♣	1 ♥
	1 ♠	1NT
	2 ♣	2 ♦
	2 ♥	3 ♣
	3 ♦	4 ♣
20.	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♦
	2 ♥	2 ♠
	2NT	3 ♣
	3 ♦	4 ♥

ANSWERS

1. ♠ A87 ♥ 95 ♦ 82 ♣ AQ8642

WEST

1 ♣

2 ♣

3 ♦

EAST

1NT¹

3 ♣²

3NT³

1. Clubs
2. One-suiter, equal-short, either 6-3-2-2 not high doubleton or 7-2-2-2
3. Generic 6-3-2-2 not high doubleton, so exactly 3=2=2=6. 3+ controls, not a Super-Positive

3♠ is the End-of-Line and would show 3=2=2=6 with 0-2 controls. This hand has 4 controls but needs more in high cards to go beyond 3NT.

2. ♠ — ♥ A742 ♦ AK97652 ♣ 93

WEST

1 ♣

1NT

2 ♠

3 ♣

EAST

1 ♠¹

2 ♥²

2NT³

4 ♦⁴

1. Hearts
2. Diamonds, Reverser
3. High-short
4. Generic 7-4-2-0 so exactly 0=4=7=2, 5 controls

3NT is the End-of-Line and would show 0=4=7=2, not a Super-Positive. 5 controls make it a Super-Positive, so show the controls by going beyond 3NT.

3. ♠ A85 ♥ K742 ♦ A1074 ♣ 85

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2 ♠ ²
2NT	3NT ³

1. 9–11 or 15+ balanced
2. 4-4-3-2 two suits same color or 4-3-3-3 with a 4-card major
3. 9–11, two suits same color, doubleton club, so exactly 3=4=4=2

3NT is the End-of-Line. Even though there are 5 controls, since strength is known do not go above 3NT. Bidding above 3NT would show 3=4=4=2, 15+ HCP.

4. ♠ 984 ♥ AK7 ♦ Q752 ♣ 863

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	3 ♣ ²
3 ♦	3NT ³

1. 9–11 or 15+ balanced
2. 4-3-3-3, 4-card minor
3. 9–11, exactly 3=3=4=3, 3+ controls

3♠ is the End-of-Line and would show 3=3=4=3 with 0–2 controls.

5. ♠ A7652 ♥ QJ74 ♦ QJ65 ♣ —

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♦ ³
2 ♥	3NT ⁴

1. Spades
2. Hearts
3. Three-suiter, short minor
4. Low-short, generic 5-4-4-0, so exactly 5=4=4=0, not a Super-Positive

3NT is the End-of-Line. Higher bids would show 5=4=4=0, Super-Positive.

6. ♠ 83 ♥ AKJ42 ♦ KQ7652 ♣ —

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	2 ♠ ³
2NT	4 ♦ ⁴

1. Hearts
2. Diamonds, not a Reverser
3. Long two-suiter
4. Low-short, generic 5-6-2-0 so exactly 2=5=6=0, 4 controls, 13+ HCP

4♣ is the End-of-Line, which would show 2=6=5=0, any number of controls. 3NT would show 2=5=6=0, not a Super-Positive, so Super-Positive 2=5=6=0 starts at 4♦.

7. ♠ AK87542 ♥ A74 ♦ — ♣ Q63

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2NT ²
3 ♣	4 ♣ ³

1. Spades
2. One-suiter, middle-short
3. Generic 7-3-3-0, so exactly 7=3=0=3

4 ♣ is the End-of-Line. 3NT would show 7=3=1=2, not a Super-Positive. Bids higher than 4 ♣ would show 7=3=1=2, Super-Positive, since could not risk being passed in 3NT with that. With the 7=3=0=3 shape, controls can be shown later.

8. ♠ AQ9542 ♥ K8643 ♦ 8 ♣ 7

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♠ ³
2NT	3 ♦ ⁴
3 ♥	3NT ⁵

1. Spades
2. Hearts
3. Long two-suiter
4. Equal-short
5. Generic 6-5-1-1, so exactly 6=5=1=1, not a Super-Positive

3NT is the End-of-Line. Bidding 3 ♠ would show 5=6=1=1. 4 ♣ and higher would show 6=5=1=1, at least 4 controls, with Super-Positive.

9. ♠ K983 ♥ 8752 ♦ AQ64 ♣ Q

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♦ ³
2 ♥	3 ♣ ⁴
3 ♦	3NT ⁵

1. Spades
2. Hearts
3. Three-suiter, short minor
4. Generic 4-4-4-1, singleton honor
5. Low-short, so exactly 4=4=4=1, singleton club honor, 3+ controls, not a Super-Positive

3♠ is the End-of-Line. Bidding 3♠ would show 4=4=4=1, singleton club honor, 0–2 controls. 4♣ and higher would show 4=4=4=1, singleton club honor, at least 4 controls, with a Super-Positive.

10. ♠ KJ5 ♥ K2 ♦ AQ98643 ♣ 2

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	4 ♦ ²

1. Diamonds
2. One-suiter, low-short, generic 7-3-2-1, so exactly 3=2=7=1, 4 controls, 13+ HCP

4♣ is the End-of-Line. Bidding 3NT would show 3=2=7=1, not a Super-Positive. 4♣ would show 3=3=7=0, any number of controls. 4♦ and higher would show 3=2=7=1, at least 4 controls, with a Super-Positive.

11.	WEST	EAST
	1 ♣	2 ♦
	2 ♥	2NT
	3 ♣	3 ♠

2 ♦ shows 9–11 or 15+ balanced. 2NT shows 4-4-3-2, two suits same rank. 3 ♠ shows doubleton spade, so exactly 2=3=4=4. Since 3NT is the End-of-Line, you don't know anything more about partner's hand at this point. Had partner instead bid 3NT, you would know he was exactly 4=4=3=2 with 9–11, since with the 15+ hand and a doubleton club he would bid beyond 3NT showing his controls.

12.	WEST	EAST
	1 ♣	1 ♠
	1NT	2 ♠
	2NT	3 ♣
	3 ♦	3 ♠

1 ♠ shows hearts. 2 ♠ shows a one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3 ♠ shows 3=2 in rank order for the two lower suits, so exactly 2=6=3=2. Since 3 ♠ is the End-of-Line, the 3 ♠ call also shows 0–2 controls. With the same shape and 3+ controls but not a Super-Positive, Teller would bid 3NT. With the same shape and a Super-Positive, Teller would bid 4 ♣ or higher, showing his number of controls.

13.	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♦
	2 ♥	2 ♠
	2NT	3 ♣
	3 ♦	3NT

1NT shows clubs. 2♦ shows diamonds. 2♠ shows a long two-suiter. 3♣ shows high-short. 3NT shows a generic 5-6-2-0, so exactly 0=2=5=6. 4♣ is the End-of-Line, showing 0=2=6=5, so higher bids would show the shape shown by 3NT with a Super-Positive. Thus, you also know that partner has 0–3 controls, or 4 controls but fewer than 13 HCP. With 0=2=5=6, 4+ controls and 13+ HCP or 5+ controls, Teller would bid 4♦ or higher.

14.	WEST	EAST
	1 ♣	1 ♥
	1 ♠	2 ♥
	2 ♠	4 ♣

1♥ shows spades. 2♥ shows diamonds, Reverser. 3NT is the End-of-Line, and would show low-short, generic 7-4-2-0, so exactly 4=2=7=0, and not a Super-Positive. Therefore, the 4♣ call shows exactly 4=2=7=0, 4 controls, 13+ HCP.

15.	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♥
	2 ♠	2NT
	3 ♣	3NT

1NT shows clubs. 2♥ shows three-suiter, short major. 2NT shows high-short. 3NT shows a generic 5-4-4-0, so exactly 0=5=4=4. 3NT is the End-of-Line, so also shows 0–3 controls or 4 controls but fewer than 13 HCP. 4♣ would show 0=5=4=4, 4 controls, 13+ HCP.

16.	WEST	EAST
	1 ♣	1 ♠
	1NT	2 ♣
	2 ♦	2 ♠
	2NT	3 ♣
	3 ♦	4 ♦

1♠ shows hearts. 2♣ shows clubs. 2♠ shows a long two-suiter. 3♣ shows high-short. The End-of-Line call is 4♣, which would show a generic 6-5-2-0 with the long suits 6–5 in rank order. However, bids above 4♣ are needed for the shape that is shown with 3NT, since 3NT is the bid which might be passed. Therefore, partner is 5–6 in the long suits in rank order, so exactly 0=5=2=6 with 4 controls and 13+ HCP.

17.	WEST	EAST
	1 ♣	1 ♥
	1 ♠	3 ♣
	3 ♦	3NT

1 ♥ shows spades. 3 ♣ shows one-suiter, equal-short, 6-3-2-2 not high doubleton or 7-2-2-2. The End-of-Line bid is 3 ♠, which would show the 6-3-2-2 hand, so 3NT shows exactly 6=3=2=2 with either 3 controls or with 4 controls but fewer than 13 HCP. With 6=3=2=2 and 0-2 controls Teller would bid 3 ♠. With 6=3=2=2 and a Super-Positive Teller would bid 4 ♣ or higher.

18.	WEST	EAST
	1 ♣	1NT
	2 ♣	4 ♥

1NT shows clubs. Bids of 2 ♠ or higher show a one-suiter, and immediate bids of 3 ♦ or higher show low-short. 4 ♣ is the End-of-Line call, which would show a generic 7-3-3-0. Bids higher than 4 ♣ show the shape of a 3NT call, since that is the call which might be passed, and 3NT shows a generic 7-3-2-1 (3-2 in rank order). Thus, the 4 ♥ call shows exactly 3=2=1=7 with 5 controls. 4 ♦ would show 3=2=1=7, 4 controls, 13+ HCP.

19.	WEST	EAST
	1 ♣	1 ♥
	1 ♠	1NT
	2 ♣	2 ♦
	2 ♥	3 ♣
	3 ♦	4 ♣

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows a three-suiter, short minor. 3 ♣ shows a generic 4-4-4-1, singleton honor. 3 ♠ would have been the End-of-Line showing low-short, so exactly 4=4=4=1 with singleton club honor and 0-2 controls. 3NT would have shown 4=4=4=1 with singleton club honor, 3+ controls, not a Super-Positive. 4 ♣ shows 4=4=4=1 with singleton club honor, 4 controls, 13+ HCP.

20.	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♦
	2 ♥	2 ♠
	2NT	3 ♣
	3 ♦	4 ♥

1NT shows clubs. 2 ♦ shows diamonds. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 4 ♣ would be the End-of-Line, generic 6-5-2-0. 3NT would show a generic 5-6-2-0, so exactly 0=2=5=6, less than a Super-Positive. 4 ♣ would show 0=2=6=5. 4 ♦ would show 0=2=5=6, 4 controls, Super-Positive. So 4 ♥ shows 0=2=5=6, 5 controls.

AFTER SHAPE IS KNOWN

If Teller has completed his shape-showing but has not yet shown his number of controls, his final call will be 4♣ or lower. Asker then has several options available.

1. Sign-off
2. Control Ask
3. Natural Slam Try
4. RKC

In addition, Asker has the ability to generate a cuebidding sequence, but he will always have to start by ascertaining the number of controls first.

Sign-off. As a rule, Asker will sign off only when he knows there cannot be enough strength for slam (this is often the case when Teller has shown a balanced hand, since Teller's strength will be known). In addition, Asker will occasionally decide to sign-off when he can't risk a Control Ask for fear that the response may get the partnership too high.

- Asker's 3NT is always a sign-off.
- 4♦ is an artificial sign-off step known as *Piss-Off*, puppeting to 4♥, provided Teller's last call was 3NT or lower
- If Teller's last call was 4♣, then any game bid is a signoff.

Control Ask. If Asker bids the next step (other than 3NT, which is to play) it asks Teller for the number of controls he holds. An ace is counted as 2 controls, a king is counted as 1 control. A singleton king is not counted at all.

Responses to the Control Ask are:

- Step 1: 0–2 controls
- Step 2: 3 controls
- Step 3: 4 controls
- Step 4: 5 controls
- Step 5: 6 controls
- Step 6: 7 controls
- Step 7: 8 controls

Note that End-of-Line sequences may alter these responses. If Teller's controls are already known, there will be no Control Ask. If Teller's controls aren't exactly known but something is known about them, the responses to the Control Ask are altered to take this into account. For example:

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3NT
4 ♣	?

2 ♦ shows a balanced 9–11 or 15+. 3 ♣ shows 4-3-3-3 with a 4-card minor. 3NT shows exactly 3=3=4=3 with 3+ controls and 9–11 HCP (Teller would have bid higher than 3NT with 3=3=4=3 and 15+ HCP), since 3 ♠ would have been an End-of-Line call showing 3=3=4=3 with 0–2 controls. Since Teller is known to have at least 3 controls, the responses to the 4 ♣ Control Ask start at 3, so:

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3NT
4 ♣	?

- 4 ♦: 3 controls, 9–11 HCP
- 4 ♥: 4 controls, 9–11 HCP
- 4 ♠: 5 controls, 9–11 HCP

There is one special situation to cover in the equal-shortness expansion: when Teller has a short two-suiter, equal-short, he is usually 5-4-2-2, but will occasionally be 7-4-1-1 (aka the Swan). Teller's last call will be 3♣ to show equal shortness. Asker assumes that Teller is 5-4-2-2, and proceeds accordingly, since that is what he will be over 95% of the time. The auction is so low that Asker can almost always afford to make a Control Ask with 3♦ regardless of his hand—he does not need to sign off. Now, Teller's 3-level bids are the normal Control Ask responses. 3♥ (1st step): 0 to 2 controls, etc.

However, if Teller responds specifically 4♣ to the Control Ask that is not a control response. 4♣ is a special call, a Bell-Ringer, reserved to show that rare 7-4-1-1 hand, the Swan. After 4♣, showing the Swan, Asker can Control Ask again with 4♦ or sign off somewhere.

When Teller has the normal 5-4-2-2 with 5+ controls, he must remember to skip over the 4♣ step—his control-showing responses pick up again with 4♦. For example:

WEST	EAST
1♣	1♠
1NT	2♦
2♥	3♣
3♦	?

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. 3♣ shows equal-short, presumably a generic 5-4-2-2, so exactly 2=5=4=2 (but 1=7=4=1 is possible). 3♦ is a Control Ask. Teller's responses are:

- **3♥**: 0–2 controls, 2=5=4=2
- **3♠**: 3 controls, 2=5=4=2
- **3NT**: 4 controls, 2=5=4=2
- **4♣**: 1=7=4=1 (I have the Swan!), any number of controls
- **4♦**: 5 controls, 2=5=4=2
- **4♥**: 6 controls, 2=5=4=2
- And so on

It's most important for both players to be aware of this special sequence when Teller has shown a short two-suiter with equal-shortness; other-

wise Asker may think Teller has a different number of controls than he actually has.

A good memory tool is that a 4♣ call never shows 5 controls.

Control Ask or Not?

Since Teller's strength is still unlimited at the point in the auction where he has finished showing his shape with an unbalanced hand, the Control Ask is the most common route for Asker to take. Even if Asker is minimal, he should still make the Control Ask provided he can handle the responses.

If Asker is planning on playing game in a suit contract, it generally can't hurt to ask even when Asker has a minimal 1♣ opener. Usually, Teller won't have the necessary controls, and Asker will subside in game. When Teller does have enough controls, Asker can continue probing for slam.

CAUTION! Asker has to watch out for a couple of pitfalls in the Control Ask structure or the consequences may be disastrous.

- If Asker is planning on subsiding in 3NT unless Teller happens to have a lot of controls, he needs to be careful that Teller's response to the Control Ask won't get the partnership above 3NT when that is the limit of the hand. A couple of examples will serve to illustrate this potential stumbling block:

♠ AQJ2 ♥ K3 ♦ QJ107 ♣ KQ3

WEST	EAST
1♣	1♥
1♠	2♠
2NT	3♦
?	

1♥ shows spades. 2♠ shows a one-suiter, high-short or 6-3-2-2 with high doubleton. 3♦ shows a generic 5-3-3-2, so exactly 5=2=3=3. You will be playing in spades, of course. Most likely

there is no slam. Partner needs two aces and the king of spades, for starters; even with that, you might be off the ace and king of diamonds, or you may need a diamond finesse to make 6♠. However, if partner has 3 aces or 2 aces and 2 kings, you want to be in slam. It can't hurt to find out with a Control Ask of 3♥. You plan on signing off if partner has fewer than 6 controls. The highest partner step will be bidding with fewer than 6 controls is 4♦ (step 4, 5 controls), and you can sign off in 4♠. And, if it happens that Teller has 6 or more controls you will find out (he'll bid 4♥) and can bid the slam.

♠ KJ3 ♥ AQJ9 ♦ 82 ♣ KQJ5

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♥
?	

2♣ shows diamonds. 2NT shows a one-suiter, middle-short. 3♥ shows a generic 6-3-3-1, so exactly 3=1=6=3. Obviously, the best game is 3NT. Slam is possible if partner has a Super-Positive, but you do not dare make a 3♠ Control Ask. If partner has 3 controls, he will respond 4♣. Not only will there be no slam, but 9 tricks may be the limit of the hand. With this hand, you must sign off with 3NT. But all is not lost. As we saw in the preceding chapter, if Teller has a Super-Positive he is permitted to override your sign-off.

- Another important consideration, when deciding whether or not to use the Control Ask is what we call the Death Response. After Teller's response to the Control Ask, Asker's next step will be another relay, not a sign-off (unless it's 3NT or game in Teller's known 6-card suit). The next-step call continues the relay and starts an asking sequence that will reveal the exact location of Teller's high cards. Thus, if Asker is planning on making a Control Ask and then signing off when Teller doesn't show enough controls, Asker has to be prepared for the Death Response—that's the call that's one step under the planned trump

suit where Asker will want to sign off. If Teller makes the Death Response, Asker will not be able to sign off when he wants to; his next-step bid will be a relay. In these circumstances, if Asker wants to sign off after the Death Response, the Control Ask is probably not the route to take.

To illustrate the problem:

♠ A72 ♥ AQ3 ♦ A975 ♣ QJ7

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♠
?	

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♠ shows low-short, generic 5-5-3-0, so exactly 3=5=0=5. It is easy to picture partner with something like:

♠ xxx ♥ Kxxxx ♦ — ♣ AKxxx

which would make slam good (or very good if we add in the jack of hearts). 4 ♣ would be the Control Ask. It's tempting to blast away with 4 ♣, planning on getting to slam if partner has 4 controls. If partner has 3 controls slam won't be so good, but Teller will be bidding 4 ♥ with 3 controls and we can pass that. No problem. But what if partner has 0–2 controls? He will bid 4 ♦—the Death Response! We want to stop in 4 ♥ facing 0–2 controls, but we won't be able to after that 4 ♦ response, since 4 ♥ is a relay. We'd be forced to get to 5 ♣ or 5 ♥ and that would be in jeopardy opposite 0–2 controls.

This is too great a risk to take. It's better to sign off in 4 ♥, which as we will soon see, is accomplished by bidding 4 ♦—a puppet to 4 ♥ for a sign-off somewhere. And again, if Teller has a strong enough hand he will override the sign-off and we can still reach slam.

Natural slam try. Asker may have a hand where controls aren't much of an issue, but he needs secondary stuff from Teller to make a slam. This will be a control rich but trick poor hand. Instead of making the decision himself, Asker does better to bring partner into the loop. For example:

♠ AK7 ♥ AJ6 ♦ A432 ♣ J108

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2NT
3 ♣	3 ♥

1 ♠ shows hearts. 2 ♣ shows clubs. 2NT shows high-short. 3 ♥ shows a generic 6-4-2-1, so exactly 1=6=2=4. Asker doesn't need much in the way of controls for a slam to be good. As little as two kings in the right places will be enough, provided Teller has the queens to back them up. Instead of asking for controls, Asker should make a natural slam try in hearts. Teller will have a pretty good idea about what Asker is after (fillers), since Asker didn't ask for controls, and he is likely to make the right decision.

As we'll see shortly, the natural slam try here would be to simply bid 4 ♥ rather than go through the 4 ♦ *Piss-Off* sequence.

RKC. There are rare hands where all Asker cares about are keycards, and the Control Ask route might not get the desired information in time. For these hands, Asker may be able to use RKC to find out what he wants. For example:

♠ A ♥ AKQ102 ♦ A852 ♣ J84

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♥

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♥ shows a generic 6-4-2-1, so exactly 4=1=2=6. Finding controls won't really help, since ♣ KQxxxx by itself gives you good play for 6 ♣ and ♠ AKQxxx makes 7 ♣ fine, while the spade and diamond kings are virtually worthless. If you take the Control Ask route you probably won't be able to find out in time exactly what partner has. It can sometimes take many rounds of asking bids to get through the hands where partner has the wrong cards. But a straightforward RKC inquiry in clubs will tell you what you need to know.

Woolberry

There is a fairly common convention called Mulberry, which we've modified for KK Relay and call Woolberry. In KK Relay, when one partner has shown his exact shape, and the last bid was 3 ♥ or lower, the captain may sign off, make a slam try in any strain, or bid RKC for any suit, as follows:

- 4 ♣ is a relay to 4 ♦. The follow-up call is RKC for a specific suit, the suit to be determined by the length Teller has shown (longest to shortest, with ties going to the lower-ranking suit¹). Now,

¹Normally, "Ties Go High" in KK Relay, in order to be consistent with the HML coding necessary for some parts of the structure. But "Ties Go Low" is more efficient in the RKC sequence, so we recommend it.

- **4♥**: RKC for Teller's longest suit
- **4♠**: RKC for Teller's second longest suit
- **4NT**: RKC for Teller's third longest suit
- **5♣**: RKC for Teller's shortest suit²
- **4♦** is a relay to **4♥**. The follow-up call is a sign-off. If the captain (Asker) wants to play **4♥**, he just passes. It's easy to see why we call this **4♦** "Piss-Off."
- **4♥**, **4♠**, **4NT**, **5♣**, and **5♦** are natural slam tries.

The original Mulberry does this the other way around (**4♣** starts the natural slam tries; **4♥+** is RKC in a specific suit). We'll see why we swapped **4♣** with **4♥+** in a moment.

An example of Woolberry at work after Teller has shown a one-suiter:

WEST	EAST
1♣	2♣
2♦	3♥
?	

2♣ shows diamonds. **3♥** shows a one-suiter, low-short, generic 6-3-3-1, so exactly 3=3=6=1. Now:

- **4♣**: relay to **4♦**. Teller's next call is RKC:
 - **4♥**: RKC in diamonds, Teller's longest suit
 - **4♠**: RKC in hearts, Teller's next longest suit (ties go low)
 - **4NT**: RKC in spades, Teller's next longest suit
 - **5♣**: RKC in clubs
- **4♦**: relay to **4♥**. Piss-Off! Teller's next call is a sign-off.
- **4♥/4♠/4NT/5♣/5♦**: Natural slam tries.

²**5♣** is getting pretty high for RKC. You can save one step by taking advantage of an idle sequence in the **4♦** Piss-Off structure. If Asker follows **4♦** with **4NT** he can't really want to sign off in **4NT** (he'd sign off in **3NT**), and we don't need this sequence for an invitation since Asker's direct **4NT** is invitational. Since it's idle, some KK Relayers use **4♦** followed by **4NT** to replace the last RKC ask (i.e., RKC in Teller's shortest suit).

Here's why the original Mulberry had to be modified for KK Relay: in KK Relay, Teller's final ESS call is frequently 3♠ or 3NT. When that's the case, Asker needs 4♣ for the vital Control Ask. If we want it (and we do) we have to drop something from the structure. We can't do it all.

Since the slam try need is far more frequent than the RKC need (because the information from RKC can usually be found via the Control Ask approach), we drop RKC completely when 4♣ is needed for the Control Ask.

When this happens we call it "Partial Woolberry." 4♦ is still Piss-Off (relay to 4♥ for sign-off), and 4♥ thru 5♦ are still natural slam tries. But, when 4♣ is needed for the Control Ask, then 4♣ relay for RKC follow-up is gone and RKC is just not available.

An example of partial Woolberry, after responder has shown a one-suiter.

WEST	EAST
1♣	2♣
2♦	3♠
?	

2♣ shows diamonds. 3♠ shows one-suiter, low-short, generic 7-2-3-1, so exactly 2=3=7=1. Now:

- **4♣**: Control Ask. The first priority.
- **4♦**: Piss-Off relay to 4♥. Teller's next call is a sign-off.
- **4♥/4♠/4NT/5♣/5♦**: Natural slam tries.

Since the Control Ask is our first priority, and we're starting Woolberry at 4♣, there's no room for RKC. So, we've lost it; but this is not a catastrophe. Asker will still be able to maneuver quite well with the Control Ask and Denial Cue-Bidding follow-ups (which will be discussed in Chapter 14).

In the rare case where the final ESS call is 4♣ (which is possible with a couple of the more distributional shapes), the next step, 4♦, is needed for the Control Ask. The priority for the Control Ask is considerably higher than that for the artificial 4♦ sign-off. So, 4♥ and higher bids are needed for signing off. In this case, there is no natural slam try available (and, in turn, there is no Woolberry at all when ESS is 4♣, because 4♦ is not available for Piss-Off).

After the Natural Slam Try

When Asker makes a natural slam try, Teller should put his focus on his secondary cards. His trump holding is important, and the queen of trumps is the most important card of all. Intermediate holdings in his longest suit other than the trump suit also may make a difference. Controls aren't likely to be critical, since if those are what Asker needs he would probably have made a Control Ask rather than a general slam try. Asker figures to have the controls, but he needs to find fillers or a source of tricks in Teller's hand.

If Teller chooses to accept the natural slam try, he simply bids as if he is responding to RKC in the trump suit. It's good to be sure that slam isn't reached missing 2 keycards. This allows us to stop in five of the major when the slam try is in a major. In addition, since the natural slam try in a major is 4M instead of 4M+1, it gives us an extra step to use in making the final slam evaluation. We use that extra step to show or deny extras. For example, if spades are trump and Asker has made a natural slam try of 4♠, then if Teller is accepting:

- **4NT**: 0 or 3 keycards
- **5♣**: 1 or 4 keycards
- **5♦**: 2 keycards, no queen of trumps
- **5♥**: 2 keycards, queen of trumps, nothing extra
- **5♠**: 2 keycards, queen of trumps, something extra

After the 5♦ call, showing two without the queen, Asker can bid 5♥ inviting slam if he isn't sure, and Teller can make the final decision.

After the 5♣ call, showing 1 or 4 keycards, Asker can bid 5♥ asking for the queen of trumps. In addition, he can bid 5♦, general slam try. Teller can accept, reject, or toss the ball back with 5♥.

Note that while it's usual is to use the next step as the Queen Ask in a keycard sequence, and the second idle step as the general try, the KK Relay structure is more efficient, since it leaves more probing room—we have an extra “ball-toss” step. The usual reason for putting the Queen Ask first is to save room for cue-bidding kings. But, this is a small slam try auction, not a grand try. There is no need to cue-bid kings once the trump queen has been located.

After the 4NT call, in addition to the bids available over a 5♣ response, Asker has a 5♣ bid to play with. We use this extra step to ask for queens in Teller's longest and second-longest side suit. Teller bids the first step with the queen in longest suit, and the second step with the queen in next longest suit. With neither queen Teller signs off in 5♠. With both queens Teller gets to slam.

In all cases, if Teller is willing to drive to slam his bid is 5NT, not six of the presumed trump suit! This gives Asker the option to pick the right slam, which might not be in the same strain where Asker was making his slam try.

Cue-Bidding

Cue-bidding is done a bit differently in KK Relay. We use what's called Denial Cue-Bidding rather than traditional cue-bidding of controls. This means that we cue-bid the first suit where we *don't* have a control.

Another difference from standard methods is that Asker doesn't cue-bid at all; instead, he asks Teller to do so. When he's interested in hearing cue-bids from Teller he must first ask for controls (see the Control Ask above); then he continues to relay, initiating Denial Cue-Bidding, aka DCB, once controls are known.

DCB will be discussed in detail in the next chapter.

After Asker Signs Off

When Asker signs off in game, either by bidding 3NT to play or 4♦ (forcing 4♥), Teller may override the sign-off if he has an appropriately strong hand (a Super-Positive).³ This strong hand is handled as follows:

³See Chapter 12 (End-of-the-Line) for the requirements for a Super-Positive.

When Teller has a Balanced Hand:

Teller has already shown his point range if he's balanced. When he has either 9–11 or 12–14 he never overrides a sign-off, since Asker knows the limits on Teller's hand. This is just a point-count auction and Asker knows enough to get it right. However, when Teller has the 15+ hand he must override a sign-off, since Asker is expecting 9–11. He does so by showing the number of controls he holds, starting at 4 (because 4+ controls were required to classify his hand as 15+), as follows:

- If Asker has signed off at 3NT and Teller has the 15+ hand, he bids:
 - **4♣**: 4 controls, 15+
 - **4♦**: 5 controls, 15+
 - **4♥**: 6 controls, 15+
 - **4♠**: 7 controls, 15+
 - **4NT**: 8 controls, 15+
- If Asker has bid 4♦, that is the *Piss-Off* relay to 4♥ for a sign-off. If Teller has the 15+ hand, he doesn't bid 4♥ as instructed. Opener might pass! Instead, he bids past 4♥ immediately:
 - **4♥**: accepting the puppet, fewer than 15 HCP
 - **4♠**: 4 controls, 15+
 - **4NT**: 5 controls, 15+
 - **5♣**: 6 controls, 15+
 - **5♦**: 7 controls, 15+
 - **5♥**: 8 controls, 15+
- When Teller has a 4-4-3-2 hand with a doubleton club, his final ESS call will be 3NT. But, if he has 15+ he must not bid 3NT, since Asker will assume 9–11 and may be passing, missing a slam. Therefore, Teller overrides Asker's decision immediately, in the same way he would override if Asker had signed off at 3NT. For example, consider the auction:

WEST	EAST
1 ♣	2 ♦
2 ♥	4 ♥

What happened here!?

The 2 ♦ call shows a balanced hand with 9–11 or 15+ HCP. When Teller then rebids 3 ♦ or higher immediately, that shows a 4-4-3-2 hand with two suits of the same shape. Normally, Teller will be showing his exact distribution by bidding his doubleton, with 3NT showing a doubleton club. 3NT is the End-of-the-Line, so Asker isn't expecting a higher call from Teller. When he hears one he will know that Teller must have 15+. So, with 15+ and a doubleton club, Teller simply shows his controls by bidding 4 ♣ or higher, starting with 4 controls.

The 4 ♥ call above shows 6 controls, so Teller has exactly 4=3=4=2 distribution with 15+ HCP and 6 controls. If Teller had a different doubleton he would bid the doubleton, and then override Asker's expected sign-off later, using exactly the same structure (4 ♣: 4 controls, etc.).

- What if Teller has 15+ HCP but doesn't have 4 controls? He can't afford to show a control he doesn't have, since that will mislead Asker for the rest of the auction. With a bare 15 HCP Teller should probably just downgrade the hand to the 12–14 range. If Teller thinks his hand is too strong to do that he can choose to show 12–14, planning on overriding a sign-off. Since Teller would never normally override with the 12–14 hand, Asker will know what has happened.
- When Teller has 5+ controls but fewer than 15 HCP, he is normally defined as having a Super-Positive. But, with a balanced hand we don't override a sign-off with fewer than 15 HCP. It's a point-count thing when both hands are balanced. Teller could decide to upgrade to 15+ immediately, as always, if he has a 14 he really likes, with 5-6 controls. But there is no override with fewer than 15 once you've decided it's 12–14.

When Teller is Unbalanced

With an unbalanced hand, Teller will not yet have shown his strength. Since he's unlimited, when he has a Super-Positive it's important that Teller overrides Asker's sign-off, lest a slam is missed. The usual requirement for Teller to override is a Super-Positive: at least 4 controls and 13+ HCP or any hand with 5+ controls. Teller will usually override with a Super-Positive if Asker signs off at 3NT, although as we shall soon see, there are sequences where Teller needs a little more than a minimal Super-Positive.

Things are a bit different when Asker bids 4♦ (Piss-Off (relay to 4♥ for sign-off)), so Teller should use his head. When Asker has plenty of room and is never planning on playing 3NT, he can usually ask for controls safely and still be able to sign off if Teller doesn't have enough controls. For example:

WEST	EAST
1♣	1♥
1♠	2♠
2NT	3♥
4♦	?

1♥ shows spades. 2♠ shows a one-suiter, high-short or 6-3-2-2 with high doubleton. 3♥ shows a generic 6-3-3-1, so exactly 6=1=3=3. 4♦ says that Asker is planning on signing off somewhere. It could be 4♥ for all Teller knows, so if Teller has a hand too strong to respect a sign-off, he can't afford to bid 4♥ and see what Asker does as that might end the auction.

However, if Teller has a minimal Super-Positive, something like:

♠ AK8732 ♥ 8 ♦ QJ7 ♣ K43

which would normally be worth an override (4 controls, 13 HCP), Teller might ask himself why Asker didn't ask for controls with 3♠ if 4 controls would have been sufficient for Asker to have slam interest. The answer may be that Asker is worried about the Death Response (the step one-below his planned sign-off), which would leave him unable to sign off. Or, it may just be that Asker has a dead minimum. In either

case, with this responding hand there is no slam. So, Teller should just bid 4♥ as instructed and pass whatever Asker bids. Teller would need another queen or king to justify overriding the sign-off.

However, had Asker signed off in 3NT, rather than 4♦ *Piss-Off*, Teller should override the sign-off with this Super-Positive hand. That's because Asker wouldn't have had the luxury of a Control Ask if he wanted to stop in 3NT. He wouldn't have been able to risk a 3-control response which would take us past his planned sign-off.

On the other hand, suppose Teller has something like:

♠ AQJ74 ♥ AQ974 ♦ 873 ♣ —

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♠
4 ♦	?

1♥ shows spades. 1NT shows hearts. 2♠ shows a long two-suiter. 3♠ shows low-short, generic 5-5-3-0, so exactly 5=5=3=0. Asker's 4♦ call is a relay to 4♥ for a sign-off. But, Teller has a Super-Positive. In order for Asker to make a Control Ask he would have had to bid 4♣, and it's not unlikely that he was concerned that the response might get him too high, depending upon what the response is and what strain Asker is planning on playing. Therefore, there could easily be a slam even with Asker signing off, so Teller should be willing to override the sign-off.

If Teller does override, he does so by showing number of controls (not keycards; when he wasn't invited to bid a slam Teller shows controls). Since Teller must have at least 4 controls to override a sign-off, his first step shows exactly 4 controls. Thus:

If Asker signs off at 3NT, Teller's override bids are:

- 4♣: 4 controls and 13+ HCP
- 4♦: 5 controls
- 4♥: 6 controls
- And so on

If Asker signs off by bidding 4♦ (relay to 4♥ for sign-off), Teller's override bids are:

- **4♠**: 4 controls and 13+ HCP
- **4NT**: 5 controls
- **5♣**: 6 controls
- And so on

AFTER SHAPE IS KNOWN QUIZ

You are Teller, and have described your shape. Determine the meaning of Asker's last call, and decide what you would do.

1. ♠ 82 ♥ K85 ♦ AQ97643 ♣ K

WEST

1 ♣

2 ♦

4 ♣

EAST

2 ♣¹

3 ♠²

?

1. Diamonds

2. One-suiter, low-short, generic 7-2-3-1, so exactly 2=3=7=1

2. ♠ 82 ♥ AK107 ♦ AK95 ♣ 843

WEST

1 ♣

2NT

4 ♦

EAST

2 ♠¹

3 ♠²

?

1. Balanced 12-14, 2 suits same color or 4-3-3-3 with a 4-card major

2. Doubleton spade, so exactly 2=4=4=3

3. ♠ AQ9852 ♥ — ♦ QJ743 ♣ A2

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♦ ²
2 ♥	2 ♠ ³
2NT	3 ♣ ⁴
3 ♦	4 ♣ ⁵
4 ♦	?

1. Spades
2. Diamonds, not a Reverser
3. Long two-suiter
4. High-short
5. Generic 6-5-2-0, so exactly 6=0=5=2

4. ♠ AQ2 ♥ AKJ ♦ J74 ♣ 9842

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	3 ♣ ²
3 ♦	3 ♥ ³
3NT	?

1. Balanced, 9–11 or 15+
2. 4-3-3-3, 4-card minor
3. Four clubs, so exactly 3=3=3=4

5. ♠ A73 ♥ KQ9872 ♦ 8 ♣ J74

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2NT ²
3 ♣	3 ♥ ³
4 ♣	?

1. Hearts
2. One-suiter, middle-short
3. Generic 6-3-3-1, so exactly 3=6=1=3

6. ♠ Q ♥ 984 ♦ KQ3 ♣ KJ8632

WEST	EAST
1 ♣	1NT ¹
2 ♣	2 ♠ ²
2NT	3 ♥ ³
4 ♠	?

1. Clubs
2. One-suiter, high-short or equal-short with high doubleton
3. Generic 6-3-3-1, so exactly 1=3=3=6

7. ♠ A87652 ♥ 973 ♦ — ♣ AK84

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♣ ²
2 ♦	3 ♠ ³
4 ♦	?

1. Spades
2. Clubs
3. Low-short, generic 6-4-3-0, so exactly 6=3=0=4

8. ♠ AQ7 ♥ KQJ10843 ♦ — ♣ Q82

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2NT ²
3 ♣	4 ♣ ³
4 ♥	?

1. Hearts
2. One-suiter, middle-short
3. Generic 7-3-3-0, so exactly 3=7=0=3

9. ♠ 8 ♥ AQJ109 ♦ KQ10852 ♣ 7

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	2 ♠ ³
2NT	3 ♦ ⁴
3 ♥	3 ♠ ⁵
3NT	?

1. Hearts
2. Diamonds, not a Reverser
3. Long two-suiter
4. Equal-short
5. Generic 5-6-1-1, so exactly 1=5=6=1

10. ♠ 972 ♥ AQ83 ♦ AQ95 ♣ 62

WEST	EAST
1 ♣	2 ♠ ¹
2NT	3NT ²
4NT	?

1. 12-14, two suits same color or 4-3-3-3 with a 4-card major
2. Doubleton club, so exactly 3=4=4=2

Now you are the 1 ♣ bidder and have relayed to find partner's shape. Determine what that shape is and decide on your next course of action and game plan.

11. ♠ A2 ♥ KJ54 ♦ AQJ ♣ KQ32

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♠
?	

12. ♠ A72 ♥ QJ5 ♦ AKQ4 ♣ K43

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♦
?	

13. ♠ 854 ♥ AQJ ♦ AQ654 ♣ AK

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♥
?	

14. ♠ 6 ♥ AQJ ♦ AQ7 ♣ AK9842

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
?	

15. ♠ AK84 ♥ KQ ♦ A874 ♣ QJ3

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
?	

16. ♠ KJ ♥ AKQJ9 ♦ Q7 ♣ J932

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♥
?	

17. ♠ 982 ♥ KJ6 ♦ AJ4 ♣ AKJ2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♥
?	

18. ♠ Q87 ♥ 6 ♦ KQJ2 ♣ AKJ52

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	4 ♣
?	

19. ♠ AK ♥ 82 ♦ AQ974 ♣ KJ83

WEST	EAST
1 ♣	1 ♠
1NT	3 ♠
?	

20. ♠ AJ32 ♥ K2 ♦ A985 ♣ AJ3

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
?	

ANSWERS

1. ♠ 82 ♥ K85 ♦ AQ97643 ♣ K

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	3 ♠ ²
4 ♣	?

1. Diamonds

2. One-suiter, low-short, generic 7-2-3-1, so exactly 2=3=7=1

Your last call was 3 ♠. 3NT would be a sign-off, so 4 ♣ is the Control Ask—not a relay for RKC. Your stiff king of clubs is not counted as a control, so you have 3 controls. (We'll discuss why we don't count singleton kings in the next chapter.) Your bid is 4 ♥.

2. ♠ 82 ♥ AK107 ♦ AK95 ♣ 843

WEST	EAST
1 ♣	2 ♠ ¹
2NT	3 ♠ ²
4 ♦	?

1. Balanced 12–14, 2 suits same color or 4-3-3-3 with a 4-card major

2. Doubleton spade, so exactly 2=4=4=3

Partner's 4 ♦ call is a relay for sign-off. Even though you have 6 controls you must respect the sign-off and bid 4 ♥, since your strength is known to be 12–14 HCP. If partner wanted to know your controls, he would have asked.

3. ♠ AQ9852 ♥ — ♦ QJ743 ♣ A2

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♦ ²
2 ♥	2 ♠ ³
2NT	3 ♣ ⁴
3 ♦	4 ♣ ⁵
4 ♦	?

1. Spades
2. Diamonds, not a Reverser
3. Long two-suiter
4. High-short
5. Generic 6-5-2-0, so exactly 6=0=5=2

Your 4 ♣ call did not say anything about controls even though it is End-of-Line, since higher bids would show 5=0=6=2 (the shape which 3NT would show) with a Super-Positive. Since 4 ♦ is the next step, it is a Control Ask rather than a relay for sign-off. You have 4 controls, so your bid is 4NT.

4. ♠ AQ2 ♥ AKJ ♦ J74 ♣ 9842

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	3 ♣ ²
3 ♦	3 ♥ ³
3NT	?

1. Balanced, 9–11 or 15+
2. 4-3-3-3, 4-card minor
3. Four clubs, so exactly 3=3=3=4

Partner's 3NT call is a sign-off. He is expecting you to have 9–11 HCP, and you have 15. You must override, even though your hand doesn't look like anything to get excited about. You have 5 controls, so your bid is 4 ♦.

5. ♠ A73 ♥ KQ9872 ♦ 8 ♣ J74

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2NT ²
3 ♣	3 ♥ ³
4 ♣	?

1. Hearts
2. One-suiter, middle-short
3. Generic 6-3-3-1, so exactly 3=6=1=3

Partner had 3 ♠ available for a Control Ask. That makes 4 ♣ a relay to 4 ♦, to be followed by an RKC call for some suit. You must bid 4 ♦. His follow-up bids would be: 4 ♥ is RKC for hearts, 4 ♠ is RKC for clubs (ties go low in Woolberry), 4NT is RKC for spades, and 5 ♣ is RKC for diamonds.

6. ♠ Q ♥ 984 ♦ KQ3 ♣ KJ8632

WEST	EAST
1 ♣	1NT ¹
2 ♣	2 ♠ ²
2NT	3 ♥ ³
4 ♠	?

1. Clubs
2. One-suiter, high-short or equal-short with high doubleton
3. Generic 6-3-3-1, so exactly 1=3=3=6

Partner's 4 ♠ call is a slam try in spades. If partner had bid 4 ♥, slam try in hearts, you wouldn't be able to pass fast enough on this junky hand. However, he is making his slam try in spades knowing that you have a singleton spade and expecting it to be a small spade. Your singleton queen is gold, as it plugs a hole which partner isn't expecting to be plugged, and he was willing to make a slam try anyway. You must respond to RKC, bidding 4NT showing 0 or 3 keycards.

7. ♠ A87652 ♥ 973 ♦ — ♣ AK84

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♣ ²
2 ♦	3 ♠ ³
4 ♦	?

1. Spades
2. Clubs
3. Low-short, generic 6-4-3-0, so exactly 6=3=0=4

Partner's 4♦ call is a relay to 4♥, and that might be where he is planning on landing. With 5 controls, you must override. In order to show those 5 controls, your bid is 4NT.

8. ♠ AQ7 ♥ KQJ10843 ♦ — ♣ Q82

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2NT ²
3 ♣	4 ♣ ³
4 ♥	?

1. Hearts
2. One-suiter, middle-short
3. Generic 7-3-3-0, so exactly 3=7=0=3

Since your last call was 4♣, 4♦ by partner would be a Control Ask. That means he has no natural slam try available. 4♥ is a sign-off. Much as you like your hand, since you don't have those magic 4 controls you must respect his decision and pass.

9. ♠ 8 ♥ AQJ109 ♦ KQ10852 ♣ 7

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	2 ♠ ³
2NT	3 ♦ ⁴
3 ♥	3 ♠ ⁵
3NT	?

1. Hearts
2. Diamonds, not a Reverser
3. Long two-suiter
4. Equal-short
5. Generic 5-6-1-1, so exactly 1=5=6=1

Partner's 3NT call is a sign-off. Even though your hand doesn't look like notrump, you have shown your shape and must respect partner's decision. Since you have only 3 controls, if you do anything but pass, you will be showing controls you don't have.

10. ♠ 972 ♥ AQ83 ♦ AQ95 ♣ 62

WEST	EAST
1 ♣	2 ♠ ¹
2NT	3NT ²
4NT	?

1. 12–14, two suits same color or 4-3-3-3 with a 4-card major
2. Doubleton club, so exactly 3=4=4=2

Partner could bid 4 ♣ for a Control Ask, or 4 ♦ as a relay to sign off. Higher calls are natural slam tries, and that is what 4NT is. Your hand looks nice. However, you have shown 12–14 HCP, and in the context of this you have a minimum. You should reject the invite and pass.

11. ♠ A2 ♥ KJ54 ♦ AQJ ♣ KQ32

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♠
?	

2 ♦ shows a balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♠ shows a doubleton spade, so exactly 2=4=4=3. Assuming 9–11, the maximum combined count is 31. There is nothing magic about the fit, so 31 HCP doesn't appear to be enough. Simply bid 4 ♦, planning on passing the forced 4 ♥ call. If partner has the 15+ hand he will override, and you can then drive to slam.

12. ♠ A72 ♥ QJ5 ♦ AKQ4 ♣ K43

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♦
?	

1 ♥ shows spades. 2NT shows a one-suiter, middle-short. 3 ♦ shows a generic 5-3-3-2, so exactly 5=3=2=3. 3NT looks to be clearly the best game, but there could be a slam. However, partner needs 4 controls, since with 3 controls you are off an ace and a king. The best bet is to make a Control Ask with 3 ♥. If partner bids 3 ♠ or 3NT, you plan to stop in 3NT. However, if partner bids 4 ♣ or higher he has at least 4 controls, and you can afford to probe further in whatever manner seems best.

13. ♠ 854 ♥ AQJ ♦ AQ654 ♣ AK

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♥
?	

1 ♥ shows spades. 2NT shows a one-suiter, middle-short. 3 ♥ shows a generic 6-3-3-1, so exactly 6=3=1=3. All you care about is partner's spade holding, since if there is only one spade loser slam will be at worst on a finesse. This is a perfect hand for RKC. Fortunately his last bid was 3 ♥, so 3 ♠ would be the Control Ask, leaving the 4 ♣ relay available for RKC. Over partner's forced 4 ♦ call you will continue with 4 ♥, RKC for spades, partner's longest suit. If he has 0 keycards he will bid 4 ♠, which you can pass. If he has 1 keycard you will ask for the queen of trumps, bidding slam only if he has it. If he has 2 keycards but no queen of trumps, you will settle for 6 ♠. If he has 2 keycards with the queen of trumps, you can ask for kings, and bid the grand if he has a king.

14. ♠ 6 ♥ AQJ ♦ AQ7 ♣ AK9842

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
?	

2 ♦ shows a balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. 3 ♥ shows four hearts, so exactly 3=4=3=3. You aren't going to risk 3NT, as you could be off the spade suit. 5 ♣ will be better on balance, but 6 ♣ is possible. Finding partner's controls won't help much. He could have 2 controls and slam is cold (queen of clubs, kings of diamonds and hearts), or he could

have 3 controls and slam is poor (AK of spades, assorted jacks). You can't find all this information, but the most important card is the queen of clubs. If partner has that slam will at least be decent, while if he doesn't have it slam is likely to be poor. Your best shot is to bid 5♣, natural slam try. Partner will like holding the queen of clubs a lot, while if he is weak in clubs he will tend to not bid the slam unless the rest of his hand is very good. There is no guarantee he will go right, but the odds are in your favor.

15. ♠ AK84 ♥ KQ ♦ A874 ♣ QJ3

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
?	

1♥ shows spades. 2♣ shows clubs. 2♥ shows a Reverser. 3♦ shows low-short, generic 5-4-3-1, so exactly 4=3=1=5. This is a perfect hand for a Control Ask. If partner has 2 controls you are off the king of clubs, and slam will be at best on a finesse. However, if partner has 3 controls he has the king of clubs and an ace. Remember that a singleton king is not counted as a control, and you know partner has a singleton diamond. All you will need is for partner to have the queen of spades, and slam will at worst need the spades to split. Picture partner with

♠ Qxxx ♥ xxx ♦ x ♣ AKxxx

and on a 3–2 spade split you take 5 spade tricks, 5 club tricks, 1 heart trick, and 1 diamond trick playing in 6♠. However, if partner doesn't have the queen of spades, you won't want to be in slam. If partner has 4 controls he has 2 aces, but he probably needs to have the queen of spades for slam to be a good bet. If he has 5 controls he will have AK of clubs and ace of hearts. Now the queen of spades will produce a grand, and if he doesn't have

it you will know to play slam in clubs, not spades, since there might be additional chances. As we will see in the next chapter, you will be able to find out about the queen of spades in time to make the right decision.

16. ♠ KJ ♥ AKQJ9 ♦ Q7 ♣ J932

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♥
?	

1 ♥ shows spades. 2NT shows a one-suiter, middle-short. 3 ♥ shows a generic 6-3-3-1, so exactly 6=3=1=3. Even with your minimal hand the fit is nice, and it is easy to picture a slam if partner has enough controls. For example, partner might hold:

♠ Axxxxx ♥ xxx ♦ x ♣ AKx

and 6 ♥ would be a fine contract. It is tempting to blast away with 3 ♠, Control Ask, planning on getting to slam if partner has 5 controls but stopping in 4 ♥ if partner has fewer than 5 controls. But what if partner has exactly 4 controls? His response will be 4 ♦. This is the Death Response for 4 ♥, since your 4 ♥ call would be a relay rather than a sign-off, and the 5-level could be in jeopardy. However, you have an out. You also have an 8-card spade fit. While hearts is the superior strain, you can play in 4 ♠ if need be and that figures to be safe if partner has 4 controls. Therefore, you can take your chances with the 3 ♠ Control Ask, planning on signing off in 4 ♠ if partner bids 4 ♦ showing 4 controls.

17. ♠ 982 ♥ KJ6 ♦ AJ4 ♣ AKJ2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♥
?	

1 ♥ shows spades. 2 ♠ shows a one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♥ shows a generic 6-3-3-1, so exactly 6=1=3=3. Clearly you will play in spades, since you may have only a single heart stopper for notrump. Your hand is terrible. Even if partner has 5 controls, slam might not be very good unless he has some fillers to go with these controls. You should simply bid 4 ♦, planning on signing off in 4 ♠. Partner will know you have a terrible hand, since you didn't make the Control Ask when you had room to do so and safely sign off opposite the 4-control response of 4 ♦. Therefore, partner will need even more than usual to justify an override.

18. ♠ Q87 ♥ 6 ♦ KQJ2 ♣ AKJ52

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	4 ♣
?	

1 ♠ shows hearts. 2NT shows a one-suiter, middle-short. 4 ♣ shows a generic 7-3-3-0, so exactly 3=7=0=3. Clearly you want to sign off in 4 ♥. But be careful. Since partner's last call was 4 ♣, 4 ♦ is not a relay for sign-off. It is a Control Ask. 4 ♥ is a sign-off, not a slam try. You must bid 4 ♥.

19. ♠ AK ♥ 82 ♦ AQ974 ♣ KJ83

WEST	EAST
1 ♣	1 ♠
1NT	3 ♠
?	

1 ♠ shows hearts. 3 ♠ shows a one-suiter, low-short, generic 7-2-3-1, so exactly 2=7=3=1. 4 ♣ would be your Control Ask. Three controls won't be enough, but 4 ♥ is the 3-control response and you can pass that. If partner has 4 controls he will be bidding 4 ♠, after which you can find out more with the knowledge that 5 ♥ figures to be safe. You don't have to worry about a 4 ♦ response. It isn't a Death Response, since partner has shown 6+ hearts: your 4 ♥ call over 4 ♦ will not be a relay, it will be a sign-off. Therefore, you can safely make the Control Ask bid of 4 ♣.

20. ♠ AJ32 ♥ K2 ♦ A985 ♣ AJ3

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
?	

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 3 ♣ shows equal-short, presumably a generic 5-4-2-2, so exactly 4=5=2=2. It looks very likely that you will wind up in 4 ♠. However, the auction is so low that it can't hurt to make a 3 ♦ Control Ask. You can always sign off later. In addition to finding out at a low level how many controls partner has, there is always the possibility that partner is 4=7=1=1. If so he will bid 4 ♣, and that will change your assessment of the hand considerably.

DENIAL CUE-BIDDING

After Teller has shown his controls Asker normally has three options¹:

1. Sign-off
2. Slam try
3. Denial Cue-Bidding (DCB)

Sign-Off

If Teller's last call was at the 3-level, 4♦ by Asker is *Piss-Off* (a relay to 4♥ for a sign-off), as we've seen before. And, as we've also seen, if Teller's last call was at the 4-level, Asker must bid game to sign off because 4♦ *Piss-Off* is not available. Normally, this is pretty straightforward.

However, there is a pitfall that Asker needs to watch out for. Asker's next-step call (through 6♠) is defined as relay, not a sign-off. So, if Teller's last call was 4♦, for example, then Asker's 4♥ is a relay, not a sign-off in 4♥. This is true even when it is a game-bid in Teller's known 5-card suit. So, caution is called for, and Asker may have to do some advance planning in order to avoid trapping himself.

Note that there is an important exception to the "next-step-is-relay" rule—when Teller has shown 6+ cards in a suit, then any call by Asker in that suit is to play (so long as we've reached the game level, of course). Thus, if Teller has shown 6+ cards in the next-step suit, the next step is to play, not relay. This caveat applies to all of Asker's calls in Teller's 6+ suit from 4♥ thru 6♠; so, Asker must be very careful not to make that call inadvertently when he's not intending to play there. It's an easy mistake to make.

Whenever it happens that the next step is the sign-off in Teller's known 6+ suit, then we simply slide up one step, and the next step

¹ Asker may occasionally have a 4th option: RKC in any suit, but only if controls are known by 3♥, which rarely happens.

above the sign-off step becomes the relay step. So, if we're at 4♦, and Teller has shown 6 or more hearts, then 4♥ is a sign-off and 4♠ is the relay.

Otherwise, when Teller has just shown his number of controls, the next-step relay call will be asking for a cue-bid from Teller. In KK Relay that cue-bid will be in coded steps. Teller skips over suits in which he has a control, so the bid he actually makes corresponds to the first suit where Teller has no control. So it's actually a denial cue-bid (DCB for short).

A couple of examples will illustrate the sort of situation where Asker could potentially run into trouble when trying to sign off.

WEST	EAST
1♣	1♠
1NT	2♣
2♥	2♠
2NT	3♥
3♠	4♦
4♥	

1♠ shows hearts. 2♣ shows clubs. 2♠ shows a long two-suiter. 3♥ shows low-short, generic 5-5-2-1, so exactly 2=5=1=5. 4♦ shows 4 controls. Since Teller has not shown a 6-card heart suit, 4♥ is DCB, asking Teller to cue-bid the first suit where he doesn't have a control. 4♥ is not a sign-off. If Asker wants to play in hearts at this point, he will have to go to at least the 5-level. (Note that Asker's 4♠ *would* be a sign-off.)

Obviously, we don't want to propel ourselves beyond our last making contract, so it's extremely important for Asker to consider what will happen if Teller bids the step one below where he may want to sign off. This is the Death Response that could kill Asker's plan to sign off where he wants to play.

Therefore, before relaying for controls or DCB, Asker should ask himself, "Can I handle the Death Response?" If the answer is "No," he will be well-advised to find a different auction.

WEST	EAST
1 ♣	1 ♠
1NT	3 ♥
3 ♠	4 ♦
4 ♥	

1 ♠ shows hearts. 3 ♥ shows one-suiter, low-short, generic 6-3-3-1, so exactly $3=6=3=1$. 4 ♦ shows 4 controls. Since Teller has shown 6+ hearts, Asker's 4 ♥ call is a sign-off, not DCB. Of course, if Asker is planning on playing in hearts, he doesn't have to be concerned about a 4 ♦ Death Response.

In this case, since 4 ♥ is a sign-off, 4 ♠ would be the DCB call. But, suppose that Asker is planning on playing in spades? In such a case he would have to be worried about both a 4 ♦ and a 4 ♥ response to his Control Ask, as these would both be Death Responses for playing in 4 ♠. Bottom line: watch your step when Teller has shown a 6-card suit.

The logic behind having the next step be sign-off, rather than relay, when Teller has shown 6+ cards in the suit is as follows: Normally, we would want the DCB call to be as cheap as possible, since every step saved may be the step that allows Asker to find the critical piece of information for a slam investigation. However, when Teller has a 6+ suit it's quite common for that suit to be the trump suit. So, having his game-bid in that suit be a sign-off relieves Asker of the usual pressure of having to worry about a Death Response when, as would be expected, Teller's 6+ suit is indeed his planned trump suit. He gains a step when Teller's 6+ suit is going to be trumps, but he loses one when he's planning to play in a different suit. It's worth occasionally sacrificing a step in order to give Asker more freedom with his asks on the most frequent deals.

Unlike a sign-off after shape-showing is completed, where Teller can override Asker with a Super-Positive, here Asker's immediate sign-off after the control response is almost an absolute command. After a Control Ask, Asker knows what Teller has—and most of the time we are simply off too many controls for slam. Teller may bid on only if he can infer from his hand, and Asker's sequence, that there must be sufficient controls. If Teller does bid on over Asker's sign-off, he responds RKC, since controls are already known (note that we would normally respond controls when bidding on voluntarily).

Slam Try

Whenever 4♦ is defined as Piss-Off (relay to 4♥ for sign-off), we're in Woolberry. This means that Asker's game-bids above 4♦ are used for natural slam tries.

Teller will have already shown his exact shape, and partner either knows or chose not to ask for his number of controls, so he can ignore these factors when deciding whether or not to accept the slam try. His decision will be based almost entirely upon his queens, particularly the queen of trumps, and also on any potential source of tricks that is still unknown to Asker. For example, if he's shown Axxxxx in a side suit, and he holds AJT9xx, that will be a big incentive to accept. Once again, when Teller is accepting, he bids as if responding to RKC. (The rule: When you're invited, and you choose to accept, show keycards.)

In sequences where 4♦ is not available for Piss-Off, Asker does not have a natural slam try available.

DCB

This is the fun stuff. Once controls are known, Asker's next relay starts Denial Cue-Bidding (DCB). Usually, the DCB relay will be the next step (unless that call is defined as a sign-off because it's a game-bid in Teller's 6+ suit). In response to the DCB call, Teller shows the exact location of his honors in an unusual manner, which will be described below. After the first DCB response, the next step by Asker will be another DCB ask (again, unless that call is defined as a sign-off in Teller's 6+ suit, in which case the following step is DCB). DCB continues through 6♠, until Asker breaks the relay to set the final contract. Any call by Asker, other than the next-step DCB relay, ends the auction. Asker has placed the contract.

Thus, the only calls by Asker that are not eligible for DCB are:

- 3NT
- 4, 5, or 6 of Teller's 6+ major
- 5 or 6 of Teller's 6+ minor
- 6NT
- 7 of anything

All of these are defined as sign-off bids.

It's very important for Asker to be aware of which bids are sign-offs and, thus, not eligible for DCB. A disastrous oversight could easily occur if he isn't careful. For example, Teller has shown a 6-card suit, but Asker is planning on playing in a different strain and forgets that his next-step call is a bid in Teller's long suit. He thinks it's a relay, but it's actually a sign-off. Teller doesn't know what Asker is planning, so he will pass any bid in his 6-card suit.

Be careful—this is one of the most common errors made by new KK Relay players.

After the DCB Call

Teller answers to DCB as follows:

Starting with his longest suit, Teller scans each suit in order (by length) to see if he has an ace or a king (but not both). If he has one of the two, that is a “Yes,” and he moves on to scan his next longest suit. If he has two suits of equal length, ties go to the higher-ranking suit.² As soon as Teller hits a suit where he doesn't have an ace or a king (or has both the ace and the king), that is a “No.” Teller stops scanning there. Asker already knows Teller's exact distribution, so Asker knows the order of the suits Teller is scanning.

Teller continues scanning, skipping a step for every “Yes” until he hits a “No.” Then he simply counts the number of “Yesses.” His replies are coded, not natural (this is relay after all), so the number of steps needed to say “No” determines his actual call. Two “Yesses” and a “No” means that he will “cue-bid” the third step, saying “No” in the third suit scanned.

For example, suppose Teller's hand is

♠ K83 ♥ K2 ♦ A9832 ♣ Q43

The bidding starts:

²The general rule in KK Relay is “Ties Go High,” in order to be consistent with the HML coding used throughout the structure. But note that Asker switches to “Ties Go Low” after making a Woolberry RKC relay call of 4♠.

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2NT ²
3 ♣	3 ♦ ³
3 ♥	4 ♣ ⁴
4 ♦	?

1. Diamonds
2. One-suiter, middle-short
3. Generic 5-3-3-2, so exactly 3=2=5=3
4. 4 controls

Since Teller's last call was 4 ♣, 4 ♦ is not a relay for sign-off. It's needed for DCB. (If Teller's last call had been 3 ♠ or 3NT, then 4 ♣ would be the DCB bid and 4 ♦ would be *Piss-Off*.)

Teller looks first at his diamonds, his longest suit. He has the ace of diamonds. "Yes."

Teller looks next at his second-longest suit. He has two second-longest suits of equal length, so he scans the higher of these two suits—spades (Rule: *Ties Go High*). He has the king of spades. Another "Yes."

Teller looks next at his clubs, the lower-ranking of his two equal-length suits. He doesn't hold the ace or king of clubs. "No."

That's two "Yesses" and a "No," {"Yes" in diamonds, "Yes" in spades, "No" in clubs}. So, Teller's answer is the third step. Asker has bid 4 ♦, so Teller replies with 4NT (the third step).

If Teller's hand had been ♠ Q43 ♥ K2 ♦ A9832 ♣ K83 his answer would have been the second step saying one "Yes" and one "No," {"Yes" in diamonds, "No" in spades}. He would make the second-step call of 4 ♠.

If Teller's hand had been ♠ A83 ♥ K2 ♦ Q9832 ♣ K83 his answer would have been {"No" in diamonds}, so he would make the first-step reply of 4 ♥.

After the DCB Response

After Teller has made his DCB response, Asker may continue asking with the next available step, through 6♠ (always keeping in mind that Teller's 6+ suit is not available for DCB). If Asker bids anything other than the DCB call, he is placing the contract.

WE DON'T SCAN SINGLETONS

An important note about scanning. In KK Relay, Teller doesn't scan his singleton (even if it's an ace or a king) because the information gained would be negligible relative to the space it would take. Teller would have to stop and say "No" 11 times out of 13, wasting two steps in order to deny an ace or king in the singleton suit, and that doesn't make sense.

In case you were wondering, this is the reason that we don't count a singleton king as a control when we're responding to the Control Ask. If we did count it, Asker would have a very hard time knowing exactly where Teller's kings lie, since it would never be scanned. As a result, it's possible that a singleton king will remain unknown to Asker. New KK Relayers are often troubled about this, but don't worry. Asker will know about your singleton ace when he needs to, and he may even be able to find your singleton king sometimes.

♠ KQ85	♠ AJ854
♥ A	♥ 8732
♦ 8742	♦ A
♣ AQJ6	♣ 873

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	4 ♠
6 ♠	

1♥ shows spades. 1NT shows hearts. 2NT shows high-short. 3♦ shows generic 5-4-3-1, so exactly 5=4=1=3. 4♣ shows 4 controls. 4♠ is {“Yes” in spades, “No” in hearts}. Asker knows teller has 2 more controls, so they can only be the stiff ace of diamonds.

A singleton king can be a problem, since it’s often unknown to Asker. Usually it won’t matter, but sometimes it will.

♠ AQ65	♠ K9752
♥ AQ3	♥ K
♦ A63	♦ 842
♣ QJ2	♣ A854

WEST	EAST
1♣	1♥
1♠	2♣
2♦	2NT
3♣	3♦
3♥	3NT
4♦	4♥
4♠	Pass

1♥ shows spades. 2♣ shows clubs. 2NT shows high-short. 3♦ shows generic 5-4-3-1, so exactly 5=1=3=4. 3NT is 3 controls. From Asker’s point of view Teller would need an absolutely perfect hand for slam, and probing would be too risky as 5♠ could be in jeopardy, so Asker quits. The singleton king of hearts is the key, which Asker can’t know about.

Fortunately, this doesn’t happen often. And, as we’ll soon see, Asker does have a way to ask for a singleton king sometimes, particularly when it matters for a grand.

♠ AK5
♥ A73
♦ Q842
♣ KQJ

♠ Q87
♥ Q98643
♦ K
♣ A82

WEST

1 ♣

1NT

3 ♣

3 ♠

4 ♦

EAST

1 ♠

2NT

3 ♥

3NT

4 ♥

1 ♠ shows hearts. 2NT shows middle-short. 3 ♥ shows generic 6-3-3-1, so exactly 3=6=1=3. 3NT is 2 controls. Opener knows that 2 controls are not enough, and that even a singleton diamond king will still not be enough. So, he signs off in 4 ♥ without knowing, or caring, whether Teller's singleton is a king.

There is another possible solution to the singleton king difficulty, but it's not without risk and is rarely used. Teller could decide at the outset to show a different shape than the one he actually holds, mentally turning his singleton king into Kx. That way, his king will show up when we get to DCB. Otherwise it will be lost and gone forever.

For example, suppose you hold ♠ A104 ♥ KQJ1065 ♦ 832 ♣ K when partner opens 1 ♣. You have a promising hand for slam—that club king could turn out to be important. So, you might choose to make it a doubleton king and show ♠ Axx ♥ KQJ10xx ♦ xx ♣ Kx instead of the 3=6=3=1 you actually hold. More than likely it will work out well.

If Asker's hand is:

♠ K95 ♥ A3 ♦ A108 ♣ AQJ74

he will be very happy to hear about your club king—it's the difference between bidding the laydown grand and stopping in six.

It turns out fine here to distort your shape slightly, because your hand is powerful, and you know this at the outset. That said, lying about shape could backfire, so it's not something we do willy-nilly. It's a rare occurrence, but there are times when it's the wisest move.

We've made a couple of important observations about lying:

1. Don't lie about major-suit length (partner needs that information more often than he needs to know about minor-suit length).
2. Don't lie unless your hand is slammish (that's when knowing about your singleton king is most likely to matter to Asker's final decision).

WE DON'T SCAN THE SHORTEST SUIT

We've already seen that when Teller has a singleton we don't scan that suit.

In addition, even when Teller has no singleton or void, we don't scan the shortest suit for aces and kings—not even when Teller's shortest suit is a doubleton or tripleton. So, we will never be scanning all four suits for aces and kings.

♠ Q8	♠ K2
♥ KQ62	♥ A9854
♦ AQ5	♦ K63
♣ AKQ3	♣ 872

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♦
3 ♥	4 ♣
4 ♦	4NT
6NT	Pass

1 ♠ shows hearts. 2 ♠ shows a one-suiter, high-short or equal-short with the high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=5=3=3. 4 ♣ shows 4 controls. 4NT is {“Yes” in hearts, “Yes” in diamonds, “No” in clubs}. Teller doesn't scan spades (the shortest suit), since there's no need to do so. Asker knows that Teller has the spade king since he has 4 controls, and that's all that's left for him. Asker can count 12 tricks.

♠ KQ985
♥ KQ5
♦ QJ85
♣ A

♠ AJ74
♥ 863
♦ AK9
♣ QJ2

WEST

1 ♣

2 ♥

2NT

3 ♦

4 ♥

5 ♣

6 ♠

EAST

2 ♦

2 ♠

3 ♣

4 ♦

4NT

5 ♦

Pass

2♦ shows 9–11 or 15+ balanced. 2♠ shows two suits of the same color, or 4-3-3-3 with a 4-card major. 3♣ shows the 4-3-3-3 hand with a 4-card major. 4♦ shows four spades, so exactly 4=3=3=3, 15+ HCP and 5 controls. He wouldn't have gone past 3NT without the 15+ hand, and controls start at 4 for the balanced 15+. 4NT is {"Yes" in spades, "No" in hearts}. 5♦ is {"No" in diamonds, since we treat AK as a no}.

Teller won't scan clubs (the shortest suit); he stops at 5♦ when he has a "no" in diamonds, and Asker knows all that he needs to know. He knows that Teller has no control in clubs because, in order to get to 5 controls with only the spade ace accounted for, Teller must have 3 more controls. He can't get there without a diamond honor, so he must have both the ace and the king of diamonds for his "No" in diamonds. Ergo, no club control.

SKIP THE THIRD SUIT

When Teller has a singleton or void, not only do we not scan the singleton for aces and kings, we don't scan the third longest suit either. This is because Asker can nearly always figure out the location of your aces and kings once he's heard about your holdings in your two longest suits. It's important to save space in KK Relay, and this is a step we rarely if ever need. The saved space can be quite valuable when Asker is investigating for slam.

Therefore, whenever we have a singleton (or void) we are scanning only two suits.

♠ Q7542	♠ 5
♥ KQJ	♥ A1065
♦ A4	♦ K83
♣ AJ10	♣ KQ942

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	?

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=4=3=5. 4 ♣ shows 4 controls. Now, after 4 ♦, Teller will scan clubs and then hearts, and say “Yes” in both suits. But he will not scan diamonds, his third longest suit, because he has a singleton. Opener will know that he has ♦ Kxx, because he needs another king to get up to 4 controls; and he won’t count the spade king, of course, since it’s a singleton.

So, what does Teller scan next? We’ll see exactly how he proceeds from here when we discuss getting to Queensland later in this chapter.

DCB ROLLS ON

Teller continues scanning in the manner described above, as many times as he’s asked to do so, until he’s shown all of his aces and kings.

For example, Teller holds:

♠ QJ95 ♥ 863 ♦ A742 ♣ K8

WEST	EAST
1 ♣	2 ♦
2 ♥	3NT
4 ♣	4 ♥
4 ♠	4NT
5 ♣	5 ♥

2♦ shows balanced 9–11 or 15+ HCP. 3NT shows two suits same shape, doubleton club, so exactly 4=4=3=2 with 9–11 HCP (he would have bid higher with 15+). 4♥ shows 3 controls. 4NT is {“No” in spades}—Teller’s longest suit since ties go to higher-ranking suit. 5♥ is {“Yes” in diamonds, “No” in hearts}. Note that Asker will be able to deduce that Teller has the king of clubs, since Teller is known to have 3 controls and has shown only 2 of them. Thus, Teller will not need to scan clubs for aces and kings. As we will soon see, this shortcut will save a vital step.

Queensland

When Teller has shown all of his aces and kings, he moves on to showing his queens. When he travels to Queensland, Teller will be showing his queens by looping back to scan his longest suit first and then scanning through the other suits in the same manner (longest to shortest).

Now that we’re in Queensland, we scan all the suits, except singletons. Skipping over the shortest suit, and/or the third suit, applies only when we’re showing aces and kings, because we’ve already shown controls and partner can infer the controls in the short suits. We don’t scan for a singleton queen.

♠ AK7	♠ Q10954
♥ QJ104	♥ K83
♦ AK8	♦ 952
♣ K73	♣ A6

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	4NT
5 ♣	5 ♥
6NT	Pass

1 ♥ shows spades. 3 ♦ shows low-short, generic 5-3-3-2, so exactly 5=3=3=2. 3NT shows 3 controls. 4 ♦ is {"No" in spades}. 4NT is {"Yes" in hearts, "No" in diamonds}. We don't scan the shortest suit, but Asker is presumed to know what Teller has in the shortest suit, so Teller's next scan is for queens. Teller loops back to his longest suit when he enters Queensland, so 5 ♥ is {"Yes" in spades [queen], "No" in hearts [no queen]}. Asker knows about the ♣A and can now count 12 tricks if spades split 3-2.

As is often the case, knowing that Teller held the right queen was the key to bidding the good slam. We'll delve more deeply into Queensland and how it works later in this chapter.

What's next? Jacks, of course.

JackScan

When he has finished showing all of his queens, Teller will once again loop back to his longest suit to show his jacks. We call it the JackScan.

Just as we saw in Queensland, Teller will scan all of the suits for jacks, except singletons. He does so in exactly the same manner as in the previous scan for queens.

We never scan for a singleton queen or jack. There is no scanning for tens.

Singleton King Scan

Finally, after Teller has shown all of his queens and jacks, if he has a singleton, he makes one final scan for a singleton king. We'll see how this works shortly.

DCB WRINKLES

Sometimes, the DCB auction will not be quite so straightforward as the examples we've seen up to this point. There are a few anomalies and wrinkles with hands that must be handled slightly differently.

0–2 Controls

There is one special problem that may delay the start of DCB. When Teller shows 0–2 controls³! Asker doesn't know the exact number. Of course, it's virtually impossible for Teller to have 0 controls and have a positive, and if he holds that hand, he can just make a negative response and then make sure he gets to game. So, we don't worry about zero controls.

However, Teller will occasionally have only 1 control and a hand that clearly qualifies for a positive response. If Asker is expecting 2 controls, he will misinterpret Teller's DCB responses. Therefore, when Teller has shown 0–2 controls and Asker initiates DCB, the first step response by Teller shows 1 control. If Asker is still interested facing 1 control, he continues with DCB, with the knowledge that Teller has exactly 1 control.

In the more common case, where Teller has 2 controls, he makes his normal DCB response, but he starts with the second step to say {"Yes" 2 controls}, reserving that first step for the hand with only 1 control.

³The original Symmetric Relay required 2 controls for a positive response. We've found that to be a totally unnecessary requirement and have done away with it. Better to respond 2♠ than 1♦ with ♠KQJx ♥QJT ♦QJT ♣xxx

♠ KQ3 ♥ 5 ♦ QJ10842 ♣ Q74

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♥
3 ♠	3NT
4 ♣	4 ♦
4 ♥	4 ♠

2 ♣ shows diamonds. 2NT shows middle-short. 3 ♥ shows generic 6-3-3-1, so exactly $3=1=6=3$. 3NT shows 0–2 controls. 4 ♦ shows 1 control. 4 ♠ is “No” in diamonds.

♠ A74 ♥ QJ982 ♦ Q754 ♣ 9

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♦
3 ♥	3 ♠
4 ♣	4 ♥

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly $3=5=4=1$. 3 ♠ shows 0–2 controls. 4 ♥ is {2 controls, “No” in hearts} because hearts is Teller’s longest suit.

Shortcuts

Every single step is potentially important in KK Relay, so we continually seek ways to save a step or two wherever we can.

In particular, it’s vital to get to Queensland as quickly as possible, as queens are so often the difficult-to-find cards that will make or break a slam. In order to save space for DCB and to get to Queensland without delays, there are several shortcuts built into the DCB structure. We’ve already glimpsed some of these above, so here’s a detailed recap.

Once Teller has shown all of his aces and kings, he goes directly to Queensland without any further scanning for control cards. He assumes that Asker knows, from his DCB replies, exactly which aces and kings he holds, so he skips over the rest of the suits. We don't want to waste space saying "No" when Asker already knows the answer. This means that once he's shown his aces and kings, he starts showing or denying queens immediately without being asked. He assumes that Asker would have continued with DCB, and that the question has been asked, thereby saving a vital step.

♠ AQ764 ♥ 93 ♦ 72 ♣ KJ95

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3 ♠
4 ♣	4NT

1 ♥ shows spades. 2 ♣ shows clubs. 3 ♣ shows equal-short, generic 5-4-2-2, so exactly 5=2=2=4. 3 ♠ shows 3 controls. 4NT is {"Yes" in spades, "Yes" in clubs, "Yes" in spades [queen], "No" in clubs [no queen]}

Teller has scanned all of his 3 controls when he says "Yes" in clubs, so he automatically goes straight to Queensland, looping back to his longest suit (spades) to scan for the queens. He Zooms, as if Asker has asked the next question.

♠ J7542	♠ 8
♥ AJ	♥ K74
♦ AJ3	♦ KQ865
♣ KQJ	♣ A842

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	5 ♣
6 ♦	Pass

2 ♣ shows diamonds. 2 ♥ shows clubs. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=3=5=4. 4 ♣ shows 4 controls. 5 ♣ is {“Yes” in diamonds, “Yes” in clubs, “Yes” in diamonds [queen], “No” in clubs [no queen]}.

Teller doesn’t scan hearts (we don’t scan the third suit when Teller has a singleton). Asker knows that Teller has the heart king; he needs it to get to 4 controls. Teller assumes that Asker knows all of his controls when he says yes in clubs, so he goes straight to Queensland and starts showing queens, beginning with his longest suit (diamonds).

An amusing thing can happen when Teller has shown 3 controls and holds AK in his long suit, he will scan only one suit! And he will give partner a great deal of information, with only one bid.

♠ 875	♠ AKQ974
♥ AK6	♥ 832
♦ 543	♦ 9
♣ AKQJ	♣ 1093

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♥
3 ♠	4 ♣
4 ♦	4 ♥
4NT	5 ♦
6 ♠	Pass

1 ♥ shows spades. 2NT shows middle-short. 3 ♥ shows generic 6-3-3-1, so exactly 6=3=1=3. 4 ♣ shows 3 controls. 4 ♥ is {"No" in spades}. (Remember, a "No" answer is actually no control or *both* the ace and king.) Asker's 4 ♠ now would be sign-off (Teller's 6+ suit), so 4NT is the DCB call. 5 ♦ is {"Yes" in spades [queen], "No" in hearts [no queen]}.

Once Teller scans spades, he knows that Asker "knows" he holds both the ace and king, and that accounts for his 3 controls. So, he returns to spades to scan for the queen without looking at his other suits.

JACKSCAN

Similarly, when he's scanned all of his suits for queens, Teller Zooms to the JackScan in exactly the same manner, looping back to his longest suit. But here he must scan all four suits for queens (other than singletons) before moving to the jacks.

Once again, we scan all four suits for jacks, except singletons. We never scan for a singleton queen or jack. There is no scanning for tens.

♠ AQ8 ♥ 985 ♦ KQJ964 ♣ 8

WEST	EAST
1 ♣	2 ♣
2 ♦	3 ♥
3 ♠	4 ♣
4 ♦	5 ♦
5 ♥	5NT

2 ♣ shows diamonds. 3 ♥ shows a one-suiter, low-short, generic 6-3-3-1, so exactly $3=3=6=1$. 4 ♣ is 3 controls. 5 ♦ is {"Yes" in diamonds, "Yes" in spades, yes in diamonds [queen], "Yes" in spades [queen], "No" in hearts [no queen]}. 5NT is {"Yes" in diamonds [jack], "No" in spades [no jack]}.

♠ 8732	♠ AQJ5
♥ AJ54	♥ 9
♦ AJ	♦ KQ942
♣ AK6	♣ Q75

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	3NT
4 ♣	5 ♦
5 ♥	5NT
6 ♠	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 2NT is high-short. 3 ♦ shows generic 5-4-3-1, so exactly $4=1=5=3$. 3NT shows 3 controls. 5 ♦ is {"Yes" in diamonds, "Yes" in spades, "Yes" in diamonds [queen], "Yes" in spades [queen], yes in clubs [queen], "No" in diamonds [no jack]}. Teller doesn't scan his third-longest suit for controls when he has a singleton, so after scanning diamonds and spades for aces and kings he goes directly to Queensland without scanning clubs. Once

Teller shows all three queens, Asker is safe to look for the spade jack—the card he needs to make 6♠ a good contract. 5NT is {“Yes” in spades [jack], no in clubs [no jack]}. Asker would have passed 5♠ {“No” in spades} if Teller had not held the spade jack.

Teller never scans a singleton or void suit. The reason is that, unless it’s an ace, which Asker will know about from the control count, it is usually just a small card, and even when it’s an honor it’s not necessarily a useful card most of the time. It’s true that a singleton king or queen might come in handy, but generally there are more important things Asker needs to know, and space is limited; we don’t want to waste it in a place where there is little to gain.

Teller never scans his shortest suit for aces and kings, even when his shortest suit is not a singleton or void. The reason for this is that Asker will already know the answer. Asker knows how many controls Teller has and knows what Teller has shown in the other three suits. Sherlock can deduce the fourth.

To see this at work, consider the example we saw earlier in this chapter where Teller’s hand was:

♠ K83 ♥ K2 ♦ A9832 ♣ Q43

Teller had shown 4 controls, Asker bid 4♦, DCB, and Teller replied with 4♠ {“Yes” in diamonds, “Yes” in spades, “No” in clubs}. Armed with this information, Asker will look at his own hand and be able to figure out what Teller holds in his shortest suit (hearts).

Imagine Asker holding:

♠ AQ7654 ♥ 63 ♦ K5 ♣ AK7

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2NT ²
3 ♣	3 ♦ ³
3 ♥	4 ♣ ⁴
4 ♦	4NT ⁵

1. Diamonds
2. One-suiter, middle-short
3. Generic 5-3-3-2, so exactly 3=2=5=3
4. 4 controls
5. “Yes” in diamonds, “Yes” in spades, “No” in clubs

Asker now knows that Teller has the ace of diamonds (since he’s looking at the king in his own hand). He also knows about the king of spades because he’s holding the ace himself. And Teller has no ace or king of clubs. That’s 3 controls accounted for, but Teller has shown 4 controls. Therefore, he must have the king of hearts. No need to scan for it.

If Asker’s hand were weaker, he might not know all this for sure, but then Asker would not have moved towards slam with DCB with that weaker hand because there would be too many missing controls.

It might seem like magic, but it virtually always works out that Asker knows about the aces and kings in Teller’s shortest suit without asking.

Ergo, we don’t scan the shortest suit.

If Teller has a singleton or void, he doesn’t scan his third-longest suit for aces and kings. It won’t be necessary to do so, since Asker will virtually always know the answer when there are enough controls to justify DCB.

For example, say Asker holds:

♠ KQ ♥ KJ3 ♦ QJ5 ♣ AJ942

The bidding:

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	3 ♦ ³
3 ♥	4 ♦ ⁴
4 ♥	5 ♣

1. Hearts
2. Diamonds, not a Reverser
3. Low-short, generic 5-4-3-1, so exactly 3=5=4=1
4. 5 controls

Before bidding 3 ♥, Asker considers the Death Response of 4 ♦ (showing 5 controls). He will not be able to stop in 4 ♥ if Teller bids 4 ♦ since 4 ♥ will be DCB. Asker sees that if Teller has 5 controls the 5-level will be pretty safe, so Asker can afford to ask for controls. If the 5-level were not safe opposite 5 controls, Asker would need to take some other approach.

5 ♣ is the third step, so {“Yes,” “Yes,” “No”}. Two “Yesses.” Let’s see what Asker knows:

- The first scan is hearts (Teller’s longest suit) and that is a “Yes,” so Teller has the ace of hearts.
- The second scan is diamonds and that is also a “Yes,” so Teller has either the ace or king of diamonds (not both, since with AK he would have said “No”). But which one? Can we figure it out? Teller has shown 5 controls. They must be two aces and one king, since Asker has two kings. Teller has a singleton club, and a singleton king is not counted as a control. Therefore, Teller must hold the king of diamonds; and so, he does not have the ace of diamonds (he would have said “No” with both the ace and king).
- That takes care of 3 of Teller’s 5 controls, so he must have the ace of spades to get up to 5 controls, since Asker can see from his own ace of clubs that Teller doesn’t have it.
- So, we see that Asker is able to work all of this out without Teller having to scan spades. It nearly always works out this way—Teller doesn’t need to scan his third-longest suit when he has a singleton. And he doesn’t scan his singleton club. So, Teller goes

straight to Queensland after showing his diamond king, and his third scan is for the queen of hearts. His “No” says he doesn’t have it.

- In summary, Teller’s 5♣ call is {“Yes” in hearts, “Yes” in diamonds, “No” in hearts [no queen]}, so his barebones hand looks like:

♠ Axx ♥ Axxxx ♦ Kxxx ♣ x

Asker can see that slam is not great, so he screeches to a halt with a 5♥ sign-off.

If Teller had the queen of hearts, slam would be pretty good. If he held it, Teller would have bid 5♦ {“Yes” in hearts, “Yes” in diamonds, “Yes” in hearts [queen], “No” in diamonds [no queen]} and Asker would have bid the slam. Note that Asker must be prepared to bid the slam if Teller bids 5♦, since Asker could no longer stop in 5♥—a 5♥ call would have been DCB over 5♦. As we’ve seen before with the Control Ask, it’s vital that Asker plan ahead and make sure he can handle the Death Response before making a DCB ask.

It may seem scary that Teller makes the same “No” call for his DCB if he has AK in the suit that he makes when he has neither. How will Asker know the difference? The answer is that Asker will virtually always know which Teller has. Consider the previous hand, where Asker held:

♠ KQ ♥ KJ3 ♦ QJ5 ♣ AJ942

Teller had shown 5 controls. Suppose Teller had bid 4NT {“Yes” in hearts, “No” in diamonds} in response to the 4♥, DCB. If he has nothing in diamonds, those 5 controls can’t exist, so Teller must have AK of diamonds. Therefore, Asker knows that Teller has nothing in spades, since Teller will have shown all of his controls. So, Teller’s next scan will be for the queen of his longest suit, hearts.

Similarly, if Teller has two singletons, he doesn’t scan his second-longest suit. The principle is the same as when Teller has a singleton and doesn’t scan his 3rd longest suit. Once you’ve scanned

one of your long suits, Asker is presumed to know your aces and kings in the other when there are only two.

So, in this instance, when we're scanning for aces and kings, we scan only one suit!

♠ AJ975 ♥ KQ8632 ♦ 7 ♣ 8

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♦
3 ♥	3 ♠
4 ♣	4 ♥
4 ♠	5 ♦

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows a long two-suiter. 3 ♦ shows equal-short. 3 ♠ shows 5–6 so exactly $5=6=1=1$. 4 ♥ is 3 controls. 5 ♦ is {“Yes” in hearts, “Yes” in hearts [queen], “No” in spades [no queen]}. Teller Zoomed to the heart queen immediately after showing the heart king. Asker knows about the spade ace already, because Teller has shown 3 controls and they're not all in hearts when he says, “Yes” in hearts. Teller wouldn't have counted a singleton king in diamonds or clubs as a control, so to have 3 controls he must have the spade ace. No need to ask! No need to tell! Note that Teller does scan for the spade queen. In Queensland we scan all suits except singletons.

There are a couple of other more unusual space-saving opportunities available to Asker which come up rarely. They will be discussed later in the chapter covering Asker's options.

7 ♣ STOP

There is one restriction on the level of Teller's DCB replies (but only one): he is not permitted to make a call higher than 7 ♣, since, for all he knows, clubs is the trump suit. Otherwise he simply follows the formula and makes his predetermined coded reply, wherever it takes us, whatever the level.

If Teller's final reply to DCB would normally have taken him past 7♣, he simply stops at 7♣. Asker is counting on that when he asks, so Teller doesn't have the option to overrule the rule.

Playing Sherlock

Sometimes the specific meaning of Teller's DCB response will depend upon what he's already shown. But Asker will know. Like any good detective, he adds up all the evidence and relates what Teller has shown to his own hand, then solves the puzzle.

Suppose that Teller has one of the following hands:

♠ 5 ♥ KJ974 ♦ KQJ82 ♣ J8

♠ 5 ♥ AQ865 ♦ J10982 ♣ Q6

He will bid both in exactly the same way through 4NT.

WEST	EAST
1♣	1♠
1NT	2♦
2♥	2♠
2NT	3♣
3♦	3♥
3♠	3NT
4♣	4NT

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. 2♠ shows long two-suiter. 3♣ shows high-short. 3♥ shows generic 5-5-2-1, so exactly 1=5=5=2. 3NT shows 0-2 controls.

If he holds the first example hand, then 4NT is {2 controls, "Yes" in hearts, "Yes" in diamonds, "No" in hearts [no queen]}. But if he holds the second hand, 4NT is {2 controls, "Yes" in hearts, "Yes" in hearts [queen], "No" in diamonds [no queen]}.

Asker has to work out which hand Teller has. A bit of Sherlock Holmes detective work is called for. The answer will depend upon what Asker holds himself. He will virtually always be able to tell which it is by looking at his own hand.

Say that Asker's hand is:

♠ A754 ♥ Q2 ♦ A7654 ♣ AK

He can see, by looking in his own hand, that Teller must have the first hand above (the hand with two kings), since if he had the second hand that would be inconsistent with the second “Yes” in hearts (showing the heart queen). Asker knows he can bid the slam.

Singleton Honors

In KK Relay, one special problem, which we encountered earlier, is a singleton king in Teller's hand (and, to a lesser extent, singleton queen). Both are treated as a small singleton. If a singleton king were treated as a control, then the singleton suit would need to be part of the DCB scan, which would cost important steps. However, an honor is an honor, and sometimes a singleton king or queen may be the card that makes a slam.

Most of the time, there's not much we can do about a singleton queen. But, as we saw earlier, one way to handle the problem of a singleton king is to mentally re-sort your hand at the outset so that your singleton king becomes a doubleton king.

Since this will mean mentally removing a card from another suit, you must be very careful. It's important to not represent a major suit that is shorter than it actually is, since that could cost you a good four-of-a-major contract.

This sort of adjustment is often made on slam-going hands, as we saw above. But it can also be made with notrump-oriented hands, since these are the hands that will probably evaluate the same if your singleton honor were a doubleton. And, of course, the “re-sorting” can be done with very strong hands, where it might be vital for Asker to know about your king.

For example:

♠ A8752 ♥ QJ4 ♦ K ♣ 9852

You can't be sure, but on balance it is probably best to pretend that your hand is:

♠ A8752 ♥ QJ4 ♦ K2 ♣ 985

and bid accordingly, showing a 5=3=2=3 shape, then 3 controls in response to a Control Ask. Your hand is strongly notrump oriented and the singleton king is likely to matter.

Aside from ignoring a singleton honor, or distorting your shape to show it, it may occasionally be possible for Teller to override Asker's final decision, if he can determine that a singleton honor is key. Here are a couple of examples from real life.

The first deal is from one of Kit's recent e-mail bidding practices with Bart Bramley. Kit's hand was:

♠ K73 ♥ Q ♦ KQ87 ♣ KQJ52

The bidding:

WEST	EAST
1 ♣	1NT ¹
2 ♣	2♦ ²
2♥	3♦ ³
3♥	3NT ⁴
4 ♣	5♣ ⁵
6♥	?

1. Clubs

2. Diamonds

3. Low-short, generic 5-4-3-1, so exactly 3=1=4=5

4. 3 controls

5. "Yes" in clubs, "Yes" in diamonds, "Yes" in clubs [queen], "Yes" in diamonds [queen], "No" in spades [no queen]

The 6♥ call was a surprise to Kit (Teller). He knows that Bart is assuming a small singleton heart, so he is expecting a heart loser. How can he expect to make 6♥ without the trump queen if he doesn't have first-round control of all the other suits? Kit knows that, if he has those first-round controls, the grand slam is either laydown or at worst will have good play. 7♥ is surely the call.

Bart's hand was exactly as expected:

♠ AQ4 ♥ AK87653 ♦ AJ10 ♣ —

The second deal occurred in the 2018 Spingold match in Atlanta that Kit and Bart played against Chip Martel and Marty Fleisher. As responder to 1♣, Kit held:

♠ KQ964 ♥ K ♦ 98 ♣ A10986

WEST	EAST
1♣	1♥ ¹
1♠	2♣ ²
2♦	2♠ ³
2NT	3♣ ⁴
3♦	3♥ ⁵
3♠	4♣ ⁶
4♦	5♣ ⁷
5♦	5♥ ⁸
5♠	5NT ⁹
6♣	6♦ ¹⁰
6♠	?

1. Spades
2. Clubs
3. Long two-suiter
4. High-short
5. Generic 5-5-2-1, so exactly 5=1=2=5
6. 3 controls—singleton king not counted as a control
7. “Yes” in spades, “Yes” in clubs, “Yes” in spades [queen],
“No” in clubs [no queen]
8. “No” in diamonds [no queen]
9. “No” in spades [no jack]
10. “No” in clubs [no jack]

This time it’s Teller who has a surprise for Asker.

6♠ is meant to end the auction. It’s almost unheard of for Teller to overrule Asker’s final decision. But Kit bid 6NT over Bart’s sign-off in 6♠. Much like standard bidding, if the crew overrules the captain and does something entirely unexpected, it’s because he has a surprise for partner. In KK Relay, that surprise will probably be a singleton honor. (Occasionally, it may be an unusual distribution that can’t be described in KK Relay, such as a 6–6 or 7–5.)

In this case, Kit (Teller) reasoned that Bart had to be prepared to play in 6NT or a grand if Kit had shown the jack of clubs over 6♣, since a 6♥ reply (showing the club Jack) would have been the Death Response for playing 6♠. Bart's clubs have to be KQ or KQx for this to make sense. Why else would he care about the club jack? Also, Kit could infer that Bart had to have all the aces, and probably the king of diamonds as well, or he wouldn't have been probing at the 6-level. 6NT pretty much has to be safe, and 7♠ might be on.

The bid is 6NT over 6♠. Bart will know that this shows the stiff king of hearts since Kit has otherwise bid his entire hand and would have no reason to override Asker's presumably final decision to play in 6♠. Armed with this new information, Bart can choose the final contract. Bart's hand was:

♠ A103 ♥ A9832 ♦ AK3 ♣ KQ

With Teller having neither black jack, the grand slam appeared to be an underdog. Discovering the stiff king of hearts allows Asker to re-evaluate accurately and bid the grand in spades.

SingKingScan

As we mentioned earlier, Asker will occasionally have the opportunity to find Teller's singleton king on his own. After the JackScan has been completed, if Teller is known to hold a singleton, there is one last scan available for a singleton king, the SingKingScan.

Teller's first step reply is "No," as always in DCB. The second step is a "Yes" to the singleton king. Teller makes no other call beyond the second step since he can't be sure what Asker intends to do with the information.

♠ K985 ♥ AQ3 ♦ AK74 ♣ A6	♠ AQJ7 ♥ K ♦ 983 ♣ K9852

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	3NT
4 ♣	4 ♠
4NT	5 ♦
5 ♥	5 ♠
5NT	6 ♦
6 ♥	6NT
7 ♠	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 4=1=3=5. 3NT shows 3 controls. 4 ♠ is {"Yes" in clubs, "Yes" in spades, "No" in clubs [no queen]}. 5 ♦ is {"Yes" in spades [queen], "No" in diamonds [no queen]}. 5 ♠ is {"No" in clubs [no jack]}. 6 ♦ is {"Yes" in spades [jack], "No" in diamonds [no jack]}.

So, Teller's barebones hand is known to be ♠ AQJx ♥ x ♦ xxx ♣ Kxxxx, with no other queen or jack (other than possibly his singleton heart, which can't be found and won't be helpful anyway). But, there's room for one more scan, and that scan will be for the singleton king of hearts—the SingKingScan. If he has it, Asker can see 13 tricks in spades. It's not likely, but why not?

6NT is {"Yes" in hearts [singleton king]}.

Voila!

Imperfection

Playing KK Relay, it's easy to get used to one hand knowing partner's exact hand and getting to the right contract nearly every time. But not

quite. If there were unlimited room, Teller would always be able to show his entire hand. Unfortunately, there is not unlimited room.

Asker may occasionally need to stop short of a good slam when he finds that Teller doesn't have a critical card. And sometimes Asker may have to stop in a small slam and not have room to investigate for a grand slam that turns out to be one we'd like to bid.

We live with imperfection, as we do in standard bidding, knowing that we're so much closer to perfection with KK Relay.

Using the DCB Concepts

Let's look a typical relay auction employing a number of the DCB concepts we've seen above. Suppose Teller's shape is 3=3=5=2 and he has 0-2 controls. Teller's final ESS call will have been 3♦ (showing a one-suiter, low-short). Asker bids 3♥, Control Ask, and Teller bids 3♠, 0-2 controls. Now if Asker bids 4♣, DCB, Teller's replies are:

- 4♦: {1 control}. Then 4♥ by Asker would be continued DCB
- 4♥: {"Yes" 2 controls, "No" in diamonds}, (because diamonds is Teller's longest suit)
- 4♠: {"Yes" 2 controls); EITHER
 - {"Yes" 2 controls, "Yes" in diamonds, "No" in spades}, if Teller has the diamond king; OR
 - {"Yes" 2 controls, "Yes" in diamonds, "No" in diamonds [no queen]}, if Teller has the ace of diamonds.
 - This ambiguity occurs because when Teller has the diamond king, he has to scan his next longest suit(s) for his other control. But, when he has the diamond ace, Teller's first "Yes" will have shown all of his controls, so he loops back to Queensland immediately after showing the diamond ace.
- 4NT: {"Yes" 2 controls); EITHER
 - {"Yes" 2 controls, "Yes" in diamonds, "Yes" in spades, "No" in diamonds [no queen]}, if Teller has the diamond king, OR

- o {“Yes” 2 controls, “Yes” in diamonds, “Yes” in diamonds [queen], “No” in spades [no queen]}, if Teller has the ace of diamonds.
- o And so on

Pulling It All Together

The following deal illustrates the sort of thinking process Asker needs to go through in order to make the most of KK Relay. Opener holds:

♠ KQJ1074 ♥ A32 ♦ KQJ ♣ A

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♦

1NT shows clubs. 2 ♠ shows a one-suiter, either high-short or equal-short with a high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=3=3=5.

It’s safe to make a Control Ask of 3 ♥. 4 ♥ would be the Death Response for playing in 4 ♠, and that would show 6 controls. You will know what to do if that happens! If Teller has 0–2 controls, you will know to stop in game; either you are off two aces or you are off an ace and the king of hearts, so slam can’t be good. If Teller has 3 or more controls, you may have a slam.

WEST	EAST
3 ♥	3NT

3NT shows 3 controls. You know Teller has an ace and a king. Slam is certainly in the picture. If Teller has KQ in either hearts or clubs there are 12 tricks. It looks right to initiate DCB with 4 ♣, but it is important to examine the possible Death Response of 4 ♥, since you will not be able to stop in 4 ♠ over 4 ♥. 4 ♥ is the second step {“Yes”, “No”}, thus would

show the king of clubs and no king of hearts. Would a 5♠ contract be safe if Teller has nothing else? Suppose Teller's hand is:

♠ Ax ♥ Jxx ♦ xxx ♣ KJxxx

No problem. On a heart lead you can win, unblock the ace of clubs, cross to the ace of spades, and discard a heart on the king of clubs. It would take very bad splits to defeat 5♠. You don't have to worry about the 4♥ Death Response, so you can safely go ahead with DCB bid of 4♣.

WEST

4♣

EAST

4♦

4♦ is {"No" in clubs}, showing no ace or king of clubs (or both the ace and king). You have the ace of clubs, so you know that he doesn't have the king. That means partner has the king of hearts. You are safe through 5♠, so you can continue with DCB.

WEST

4♥

EAST

4NT

4NT is {"Yes" in hearts, "No" in diamonds}. You now know what partner's barebones hand looks like:

♠ Ax ♥ Kxx ♦ xxx ♣ xxxxx

If he has the queen of hearts, you want to be in slam. If he doesn't have it, you want to stop in 5♠. It looks right to continue with DCB in order to find out about the queen of hearts. But you need to be prepared for the Death Response of 5♥, since if partner bids that you will not be able to stop in 5♠.

Your DCB bid will be 5♣. Partner will not be showing his controls in spades, since it's his shortest suit; and you already know them, as expected. He will be headed to Queensland and scanning for the queen of clubs and, if he has that, for the queen of hearts. His Death Response bid of 5♥ would be {"Yes" in clubs [queen], "No" in hearts [no queen]}. That isn't so good, since that is what you don't want to hear. It looks at first glance that you cannot risk bidding more DCB. But wait! You

won't be able to sign off in 5♠ if he bids 5♥, but you will be able to sign off in 5NT. You will have 11 top tricks (6 spades, 2 hearts, 2 diamonds, 1 club) after you knock out the ace of diamonds. So, you're not afraid of the Death Response. Sure, on a bad day you could get a club lead, LHO has the ace of diamonds, and RHO has the king of clubs and you're down in 5NT. However, even if the cards are wrong, they would still have to find the club lead, and they know nothing about your hand. Partner would be declarer since he bid notrump first, and he would be known to have queen-fifth of clubs. Do you really think RHO would find a lead away from the king of clubs? Not a chance. Thus, continuing DCB is safe.

WEST	EAST
5♣	5♦

5♦ is “No” in clubs [no queen]. Now what will happen if you continue with DCB, which would be 5♥? There is no Death Response. It would have been 5♥, but that's your relay call. Partner's next scan will be for the queen of hearts. If he doesn't have it, he will bid 5♠, which you can pass. If he does have it, he will bid 5NT {“Yes” in hearts [queen], “No” in diamonds [no queen]}, and you can bid the cold 6♠ slam.

WEST	EAST
5♥	5NT
6♠	Pass

Suppose you had found out that partner has the queen of clubs, but there were no safe way to find out if partner also has the queen of hearts. Should you bid the slam or not? Partner will have already shown up with 9 HCP, so he doesn't need the queen of hearts for his positive response. He has two hearts other than the king you already know he has. That leaves the opponents seven hearts. Thus, the odds are seven to two that partner doesn't have the queen of hearts. He could have the jack, which would make slam on a finesse, but the odds are he doesn't have that either. Your percentage action would be to stop in 5♠.

Let's go back and re-examine the deal we considered in the introduction to this book, now that we understand what the bids mean.

The 1♣ opener holds:

♠ A6 ♥ A1074 ♦ K53 ♣ AQ104

The bidding:

WEST	EAST
1♣	1♠
1NT	2♥
2♠	2NT
3♣	3♦

1♠ shows hearts. 2♥ shows diamonds, Reverser. 2NT shows high-short. 3♦ shows generic 5-4-3-1, so exactly 1=4=5=3.

Even though we are minimal, the hands fit well. Slam is possible. So, it looks right to ask for controls. But first, let's make sure there is no Death Response problem. We might want to stop in 4♥. After a 3♥ Control Ask, 4♦ would be the Death Response. That shows 5 controls. Since Asker holds 7 controls, he knows that Teller can't have more than 4 (the king of spades doesn't count as a control since it would be singleton). The Death Response is not an issue: there will be no 4♦ reply. So a 3♥ Control Ask is completely safe.

WEST	EAST
3♥	4♣

4♣ shows 4 controls. We know these must be king of hearts, ace of diamonds, and king of clubs. It looks right to move on with DCB. The worst hand Teller can have is:

♠ x ♥ Kxxx ♦ Axxxx ♣ Kxx

and even if he has that, 5♥ will make if trumps split 3-2. But he could be better. Give Teller either the heart queen or the diamond queen and we want to be in slam. However, before we take the DCB route we must make sure that we will be able to stop below slam if partner has neither of the key queens. We have to be concerned about a Death Response of 5♦, one step below the 5♥ safety point. What will happen if we bid 4♦, DCB? We know Teller will produce "Yes" in diamonds, "Yes" in

hearts. He will not be scanning clubs for aces and kings since clubs is his third-longest suit and he has a singleton spade (when Teller has a singleton, he doesn't scan his third-longest suit). So, Teller's third scan will be for the queen of diamonds. If he doesn't have it, he will bid 4NT, the third step, and we can stop in 5♥ if we so choose. If he does have the queen of diamonds, he'll bid 5♣ (or higher), and slam will be at worst on a 3–2 heart split. We plan to bid it in that scenario, so there so there won't be a problem in continuing. It's safe to DCB with 4♦.

WEST	EAST
4♦	5♣

5♣ is the fourth step, so {"Yes," "Yes," "Yes," "No"}. That translates to {"Yes" in diamonds, "Yes" in hearts, "Yes" in diamonds [queen], "No" in hearts [no queen]}. His barebones hand now looks like

♠ x ♥ Kxxx ♦ AQxxx ♣ Kxx

We are willing to play in 6♥ opposite that. However, there is no rush to bid 6♥. Perhaps there is a better slam. For example, if Teller has the jack of diamonds then 6♦ is a safer slam, since there won't be a trump loser and the fourth round of clubs might come home. We are so far below the safety level of 6♥ that it can't hurt to look. We can DCB with 5♦, although we know what Teller is going to say. His next scan is for the club queen (all suits are in the scans for queens and jacks, except singletons) and we already know he doesn't have it.

WEST	EAST
5♦	5♥

That is the first step, so "No." That translates to {"No" in clubs [no queen]}. We knew that was coming, but since Teller didn't know that we knew it was necessary to go through the step. Now for the jacks. Teller won't be scanning in spades, of course, since he has a singleton spade. Checking for the Death Response before continuing, we find that there isn't one. A 6♣ reply would be inconvenient, as it would prevent us from stopping in 6♦, but we can always fall back on 6♥.

WEST

5 ♠

EAST

6 ♣

That is the second step, so “Yes, No.” That translates to {“Yes” in diamonds [jack], “No” in hearts [no jack]}. Teller’s barebones hand is now:

♠ x ♥ Kxxx ♦ AQJxx ♣ Kxx

Reviewing, our hand is:

♠ A6 ♥ A1074 ♦ K53 ♣ AQ104

If we stop in a small slam 6♦ is the safest contract. However, we can’t stop there since 6♦ is DCB. We can stop in 6♥, which is okay unless hearts split badly and there are two heart losers. Is it worth continuing with 6♦, DCB to find out if partner has the jack of clubs? If he doesn’t have it, he will bid 6♥, which we can pass. If he does have it 6NT will be safe since we can count 5 diamond tricks, 4 club tricks, 2 heart tricks, and 1 spade trick, so we won’t be at the mercy of a decent heart split. Therefore, we may as well continue with DCB.

WEST

6 ♦

EAST

6 ♠

That is the second step, so “Yes, No.” That translates to {“Yes” in clubs [jack], “No” in spades}.

His exact hand is, then:

♠ x ♥ Kxxx ♦ AQJxx ♣ KJx

But what was that “No” in spades at the end? The SingKingScan! Once we finish with jacks, Asker has one final scan available for a singleton king (if Teller is known to have a singleton). 6♠ said “No,” he doesn’t have it.

Even when we’re below 6♠, scanning stops after the SingKingScan. Since we don’t scan for tens, we’re done.

We can see now that 6NT is cold. However, with the help of a spade ruff in the short hand, so is 7♣. Assuming clubs aren’t 5–1 and

diamonds aren't 5-0, we can count 5 diamond tricks, 5 club tricks, 2 heart tricks, and 1 spade trick. If Teller had said "Yes" in spades, showing the singleton king, we could bid 7NT. But we've done well to reach 7♣.

We began this book with responder, holding ♠7♥K852♦AQJ64♣KJ3, hearing partner open a strong club. A nice hand with so much to say. Were you wishing that you could just say: "Hey, partner, I hold singleton, king-fourth, ace-queen-jack-fifth, king-jack-third," so that partner would be able to place the contract with 100% accuracy?

You just did it. With KK Relay.

DCB QUIZ

WARNING: These are not trivial problems. On many of them you will have to use imagination and foresight in order to achieve the optimal result.

First, you are the responding hand (the Teller). Assume that Asker relays until he gets your exact shape, then he makes a Control Ask if you haven't already shown your controls, and then he DCBs all the way to 6NT. Give the entire bidding sequence, with all his relays and all your responses.

1. ♠ J85 ♥ AQ762 ♦ K4 ♣ QJ3
2. ♠ KJ84 ♥ A ♦ KJ754 ♣ Q63
3. ♠ 82 ♥ QJ3 ♦ AQ9754 ♣ Q2
4. ♠ 92 ♥ AQ10874 ♦ AKJ2 ♣ 3
(Asker bids 4♦ after Teller completes his shape-showing)
5. ♠ QJ8 ♥ 983 ♦ Q5 ♣ AKQJ3
6. ♠ A ♥ Q7642 ♦ AQJ832 ♣ 7
7. ♠ KQ43 ♥ A85 ♦ KJ74 ♣ Q2
8. ♠ Q2 ♥ 10854 ♦ KQJ732 ♣ K
9. ♠ Q9872 ♥ AJ8643 ♦ — ♣ K2
10. ♠ KJ74 ♥ K5 ♦ Q2 ♣ AKJ97
11. ♠ KJ85 ♥ J74 ♦ AQ4 ♣ 932
12. ♠ 972 ♥ 54 ♦ KQJ5 ♣ AKJ2

Now you are the 1♣ Opener. You have asked for shape and controls. Interpret the bidding up to the point shown and decide upon your next action and your general game plan as far as possible.

13. ♠ AQ74 ♥ AKQ3 ♦ A8 ♣ QJ7

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3 ♥
?	

14. ♠ AK ♥ K87 ♦ QJ75 ♣ AK42

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	3NT
?	

15. ♠ K975 ♥ KQ964 ♦ AQ3 ♣ A

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥
3 ♠	4 ♣
?	

16. ♠ J74 ♥ K854 ♦ AKQ84 ♣ A

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3NT
?	

17. ♠ 9 ♥ A106 ♦ KJ109 ♣ AQ872

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♦
3 ♥	4 ♣
?	

18. ♠ J4 ♥ 8 ♦ AQJ1097 ♣ AKJ2

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♥
3 ♠	4 ♦
?	

19. ♠ KJ1075 ♥ AQ643 ♦ Q7 ♣ A

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3 ♥	3NT
?	

20. ♠ AQ1094 ♥ AJ4 ♦ KQ7 ♣ A5

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3 ♥	3NT
?	

21. ♠ KQ6 ♥ AQ43 ♦ Q7 ♣ A832

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	4 ♣
?	

22. ♠ AQ5 ♥ AQ32 ♦ A10864 ♣ 5

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♥
3 ♠	3NT
?	

23. ♠ AQ7 ♥ K953 ♦ 6 ♣ AKQ107

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	2NT
3 ♣	3 ♠
4 ♣	4 ♥
?	

24. ♠ AJ1095 ♥ Q ♦ AK95 ♣ KQ10

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠
?	

Again, you are the 1 ♣ opener. You are in the middle of a DCB auction. Construct what you know about Teller's hand and decide how you will proceed, taking various possible responses by Teller into account.

25. ♠ AK632 ♥ K87 ♦ K83 ♣ K5

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3 ♥	4 ♣
4 ♦	5 ♣
?	

26. ♠ AK4 ♥ Q ♦ AQ52 ♣ KQ974

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦
3 ♥	4 ♣
4 ♦	4 ♥
4 ♠	4NT
?	

27. ♠ AQJ54 ♥ K83 ♦ AQJ ♣ KJ

WEST	EAST
1 ♣	1NT
2 ♣	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
4 ♥	4NT
?	

28. ♠ AJ5 ♥ K3 ♦ AQJ74 ♣ A32

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	5 ♦
?	

29. ♠ A107 ♥ A643 ♦ A32 ♣ AQ2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2NT
3 ♣	3 ♦
3 ♥	3NT
4 ♣	4NT
?	

30. ♠ KJ10 ♥ KJ ♦ K852 ♣ AQ64

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	3 ♦
3 ♥	4 ♣
4 ♦	4 ♠
?	

31. ♠ KJ82 ♥ A ♦ AQJ95 ♣ A74

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	4 ♦
4 ♥	5 ♦
5 ♥	5NT
?	

32. ♠ AKJ972 ♥ AQ3 ♦ K ♣ A54

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♦	4 ♠
?	

33. ♠ A10 ♥ AJ103 ♦ J109 ♣ AQJ8

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♥
3 ♠	4 ♣
4 ♦	5 ♣
?	

34. ♠ AK ♥ — ♦ A98752 ♣ AJ864

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	4 ♣
4 ♦	4 ♠
?	

35. ♠ Q32 ♥ AKJ ♦ KJ74 ♣ AKJ

WEST

1 ♣

3 ♠

4 ♦

?

EAST

3 ♥

4 ♣

4NT

36. ♠ K7 ♥ AKJ10 ♦ A542 ♣ 983

WEST

1 ♣

1 ♠

2 ♥

3 ♥

4 ♣

?

EAST

1 ♥

2 ♦

3 ♦

3NT

4NT

ANSWERS

1. ♠ J85 ♥ AQ762 ♦ K4 ♣ QJ3

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2NT ²
3 ♣	3 ♦ ³
3 ♥	3NT ⁴
4 ♣	4 ♥ ⁵
4 ♠	4NT ⁶
5 ♣	5 ♥ ⁷
5 ♠	6 ♣ ⁸
6 ♦	6 ♥ ⁹
6 ♠	7 ♣ ¹⁰

1. Hearts
2. One-suiter, middle-short
3. Generic 5-3-3-2, so exactly 3=5=2=3
4. 3 controls
5. "Yes" in hearts, "No" in spades
6. "No" in clubs
7. "Yes" in hearts [queen], "No" in spades [no queen]
8. "Yes" in clubs [queen], "No" in diamonds [no queen]
9. "No" in hearts [no jack]
10. "Yes" in spades [jack]

Do not scan diamonds for aces and kings, since Asker already knows the controls owned in the shortest suit. (Teller never scans his shortest suit.) At the end of scanning, 7 ♣ is the highest call Teller is permitted to make, so you might or might not have the jack of clubs or diamonds.

2. ♠ KJ84 ♥ A ♦ KJ754 ♣ Q63

WEST

1 ♣

1 ♠

2 ♠

3 ♣

3 ♥

4 ♦

5 ♣

5 ♥

EAST

1 ♥¹

2 ♥²

2NT³

3 ♦⁴

4 ♣⁵

4NT⁶

5 ♦⁷

6 ♦⁸

1. Spades

2. Diamonds, Reverser

3. High-short

4. Generic 5-4-3-1, so exactly 4=1=5=3

5. 4 controls

6. “Yes” in diamonds, “Yes” in spades, “No” in diamonds [no queen]

7. “No” in spades [no queen]

8. “Yes” in clubs [queen], “Yes” in diamonds [jack], “Yes” in spades [jack], “No” in clubs [no jack]

Do not scan clubs for aces and kings. (You have a singleton, so your third-longest suit (clubs) is not scanned.) Asker is assumed to know what you have in clubs. The final scan is for the jack of clubs. There is no SingKingScan for the heart king because you are known to have the ace of hearts.

3. ♠ 82 ♥ QJ3 ♦ AQ9754 ♣ Q2

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2 ♠ ²
2NT	3 ♣ ³
3 ♦	3 ♠ ⁴
4 ♣	5 ♣ ⁵
5 ♥	5NT ⁶
6 ♣	6 ♥ ⁷
6 ♠	6NT ⁸

1. Diamonds
2. One-suiter, either high-short or equal-short with the high doubleton
3. 6-3-2-2 with high doubleton
4. Generic 6-2-3-2 so exactly 2=3=6=2, 0-2 controls
5. "Yes" 2 controls, "Yes" in diamonds, "Yes" in diamonds [queen], "Yes" in hearts [queen], "No" in spades [no queen]
6. "Yes" in clubs [queen], "No" in diamonds [no jack]
7. "Yes" in hearts [jack], "No" in spades [no jack]
8. "No" in clubs [no jack]

Since 3 ♠ is EOL, the 3 ♠ call shows 0-2 controls, along with the 3-2 final ESS. Since you have shown 0-2 controls, the first step of DCB would show 1 control, so Teller starts with {"Yes" [two controls], "Yes"}. The "Yes" shows all of your controls (Teller assumes that Asker knows this), so you Zoom straight to Queensland. Since you've shown a 6-card diamond suit, Asker's 5 ♦ would be a sign-off, making 5 ♥ the DCB call.

4. ♠ 92 ♥ AQ10874 ♦ AKJ2 ♣ 3

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	3 ♥ ³
4 ♦	4NT ⁴
5 ♣	5 ♥ ⁵
5 ♠	6 ♣ ⁶
6 ♦	6 ♥ ⁷
6 ♠	6NT ⁸

1. Hearts
2. Diamonds, not a Reverser
3. Low-short, generic 6-4-2-1, so exactly 2=6=4=1
4. 5 controls
5. “Yes” in hearts, “No” in diamonds
6. “Yes” in hearts [queen], “No” in diamonds [no queen]
7. “No” in spades [no queen]
8. “No” in hearts [no jack]

4 ♦ is a relay to 4 ♥ for a sign-off, but with 5 controls Teller must override. 4 ♠ would have shown 4 controls and 13+ HCP, so 4NT is 5 controls. With AK of diamonds, Teller gives a “No” in diamonds.

5. ♠ QJ8 ♥ 983 ♦ Q5 ♣ AKQJ3

WEST	EAST
1 ♣	1NT ¹
2 ♣	3 ♦ ²
3 ♥	3NT ³
4 ♣	4 ♦ ⁴
4 ♥	5 ♣ ⁵
5 ♦	6 ♣ ⁶
6 ♦	6 ♥ ⁷

1. Clubs
2. One-suiter, low-short, generic 5-3-3-2, so exactly 3=3=2=5
3. 3 controls
4. “No” in clubs
5. “Yes” in clubs[queen], “Yes” in spades [queen],
“No” in hearts [no queen]
6. “Yes” in diamonds [queen], “Yes” in clubs [jack],
“Yes” in spades [jack], “No” in hearts [no jack]
7. “No” in diamonds [no jack]

AK of clubs says “No” in clubs. Since your controls have been shown, the next scan is for queens. Scanning is finished at 6♥ since Teller has no singleton king, of course, and there is no scanning for tens.

6. ♠ A ♥ Q7642 ♦ AQJ832 ♣ 7

WEST	EAST
1 ♣	1 ♠ ¹
1NT	2 ♦ ²
2 ♥	2 ♠ ³
2NT	3 ♦ ⁴
3 ♥	3 ♠ ⁵
4 ♣	4 ♠ ⁶
4NT	5NT ⁷
6 ♣	6 ♦ ⁸

1. Hearts
2. Diamonds, not a Reverser
3. Long two-suiter
4. Equal-short
5. Generic 5-6-1-1, so exactly 1=5=6=1
6. 4 controls
7. “Yes” in diamonds, “Yes” in diamonds [queen],
“Yes” in hearts [queen], yes in diamonds [jack],
“No” in hearts [no jack]
8. “No” in clubs [no king]

With two singletons we don’t scan the second-longest suit—Asker will know what you have in that suit. So the only suit you will scan for controls is diamonds, your longest suit. When you show only one diamond honor, you’re “known” to have the singleton ace of spades, but you might still have the singleton king of clubs, so there is a final scan for that card.

Are you wondering why Teller couldn’t have the club ace rather than the spade ace? How does Asker know? Go back to the basic DCB principle: Asker is assumed to know which controls you have when the scanning for aces and kings is finished. So, when Asker DCBs for queens, he “knows” you have the ace of spades. If he doesn’t know, that’s his problem, but Teller assumes that he *does* know. If Teller holds the singleton club ace instead of the singleton spade ace, he makes the same assumption. Asker knows.

7. ♠ KQ43 ♥ A85 ♦ KJ74 ♣ Q2

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	4 ♣ ²
4 ♦	5 ♦ ³
5 ♥	5 ♠ ⁴
5NT	6 ♦ ⁵
6 ♥	6NT ⁶

1. 9–11 or 15+ balanced
2. Two suits same shape, doubleton club,
so exactly 4=3=4=2, 15+, 4 controls
3. “Yes” in spades, “Yes” in diamonds, “Yes” in hearts,
“Yes” in spades [queen], no in diamonds [no queen]
4. “No” in hearts [no queen]
5. “Yes” in clubs [queen], “No” in spades [no jack]
6. “Yes” in diamonds [jack], “No” in hearts [no jack]

With the 15+ hand Teller cannot bid 3NT to show the doubleton club—he must anticipate a potential sign-off and override with 4 ♣ to show 4 controls and a hand in the 15+ range.

8. ♠ Q2 ♥ 10854 ♦ KQJ732 ♣ K

WEST

1 ♣

1NT

2 ♠

3 ♠

4 ♣

4 ♥

5 ♥

6 ♥

EAST

1 ♠¹

2 ♥²

3 ♥³

3NT⁴

4 ♦⁵

5 ♣⁶

6 ♣⁷

6 ♠⁸

1. Hearts

2. Diamonds, Reverser

3. Low-short, generic 6-4-2-1, so exactly 2=4=6=1

4. 0–2 controls

5. 1 control

6. “Yes” in diamonds, “Yes” in diamonds [queen],

“No” in hearts [no queen]

7. “Yes” in spades [queen], “Yes” in diamonds [jack],

“No” in hearts [no jack]

8. “No” in spades [no jack]

When you have shown 0–2 controls, the first DCB reply shows 1 control. The stiff king is not counted as a control. Having shown your only control with the first “Yes,” scanning goes directly to queens, so you loop back to diamonds to show the diamond queen first. Teller has shown a 6-card diamond suit, so 5♦ is not available for DCB—the DCB call is 5♥. Similarly, 6♦ is not available for DCB—the DCB call is 6♥. There is no room to locate the singleton king of clubs.

9. ♠ Q9872 ♥ AJ8643 ♦ — ♣ K2

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	1NT ²
2 ♣	2 ♠ ³
2NT	3 ♣ ⁴
3 ♦	3NT ⁵
4 ♣	4 ♥ ⁶
4 ♠	5 ♣ ⁷
5 ♦	5 ♥ ⁸
5 ♠	6 ♣ ⁹
6 ♦	6 ♠ ¹⁰

1. Spades
2. Hearts
3. Long two-suiter
4. High-short
5. Generic 5-6-2-0, so exactly 5=6=0=2, not a Super-Positive
6. 3 controls
7. "Yes" in hearts, "No" in spades
8. "No" in hearts [no queen]
9. "Yes" in spades [queen], "No" in clubs [no queen]
10. "Yes" in hearts [jack], "No" in spades [no jack]

4 ♣ is EOL (6=5=0=2), so 4 ♦ would show 5=6=0=2 shape (the same shape 3NT would have shown) with a Super-Positive: 4 controls and 13+ HCP. The 3NT call shows 5=6=0=2 and not a Super-Positive. Since Teller is void in diamonds, he doesn't scan clubs (his third-longest suit) for aces or kings; instead he loops back to Queensland with 5 ♥, denying the heart queen.

10. ♠ KJ74 ♥ K5 ♦ Q2 ♣ AKJ97

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♣ ²
2 ♦	2 ♥ ³
2 ♠	3 ♣ ⁴
3 ♦	4 ♦ ⁵
4 ♥	4 ♠ ⁶
4NT	5 ♥ ⁷
5 ♠	5NT ⁸
6 ♣	6 ♦ ⁹
6 ♥	7 ♣ ¹⁰

1. Spades
2. Clubs
3. Reverser
4. Equal-short, presumably generic 5-4-2-2, so exactly 4=2=2=5
5. 5 controls
6. "No" in clubs
7. "Yes" in spades, "Yes" in hearts, "No" in clubs [no queen]
8. "No" in spades [no queen]
9. "No" in hearts [no queen]
10. "Yes" in diamonds [queen], "Yes" in clubs [jack]

4♣ would have been a stop-off to show the Swan (4=1=1=7), so Teller bypasses 4♣; 4♦ shows 5 controls. It's easy to make a mistake here, so both sides must be careful. (Memory Aid: 4♣ is never 5 controls.) AK of clubs gets a "No." Teller's highest permissible call is 7♣, so the jack of spades cannot be shown.

11. ♠ KJ85 ♥ J74 ♦ AQ4 ♣ 932

WEST	EAST
1 ♣	2 ♦ ¹
2 ♥	2 ♠ ²
2NT	3 ♣ ³
3 ♦	3NT ⁴
4 ♣	4 ♦ ⁵
4 ♥	4NT ⁶
5 ♣	5 ♥ ⁷
5 ♠	5NT ⁸
6 ♣	6 ♥ ⁹
6 ♠	7 ♣ ¹⁰

1. 9–11 or 15+ balanced
2. Two suits same color or 4-3-3-3 with a 4-card major
3. 4-3-3-3 with a 4-card major
4. 4–3 in majors, so exactly 4=3=3=3, 9–11 HCP, 3+ controls
5. 3 controls
6. “Yes” in spades, “No” in hearts
7. “Yes” in diamonds, “No” in spades [no queen]
8. “No” in hearts [no queen]
9. “Yes” in diamonds [queen], “No” in clubs [no queen]
10. “Yes” in spades [jack]

3 ♠ is EOL (4=3=3=3, 0–2 controls), so 3NT shows 4=3=3=3 with 3+ controls. 4 ♦ shows 3 controls, since that is the minimum. Since Teller may not bid past 7 ♣, the jack of hearts cannot be shown.

12. ♠ 972 ♥ 54 ♦ KQJ5 ♣ AKJ2

WEST	EAST
1 ♣	2NT ¹
3 ♣	3♥ ²
3 ♠	4♦ ³
4♥	4NT ⁴
5 ♣	5♥ ⁵
5 ♠	5NT ⁶
6 ♣	6♦ ⁷
6♥	7♣ ⁸

1. 12–14, two suits same rank
2. Doubleton heart, so exactly 3=2=4=4
3. 4 controls
4. “Yes” in diamonds, “No” in clubs
5. “Yes” in diamonds [queen], “No” in clubs [no queen]
6. “No” in spades [no queen]
7. “No” in hearts [no queen]
8. “Yes” in diamonds [jack], “Yes” in clubs [jack]

AK of clubs is a “No.” Since the 4 controls have been shown, don’t scan any more for controls. At the end, nothing is said about the jack of spades, since 7♣ is highest permissible call.

13. ♠ AQ74 ♥ AKQ3 ♦ A8 ♣ QJ7

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3 ♥
?	

1 ♥ shows spades. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly 5=2=2=4 (or the Swan). 3 ♥ shows 0–2 controls (and not the Swan).

Slam will be good if partner has two black kings, but not otherwise. Will DCB get the information quickly enough, keeping in mind that 4 ♥ is the Death Response? Let's examine the possible responses to a 3 ♠ DCB call.

- 3NT: {1 control}. When Teller has shown 0–2 controls, the first reply to DCB shows 1 control. You'll bid 4 ♦, relay to 4 ♥ (Piss-Off available since 4 ♣ would be continued DCB), and then sign off in 4 ♠. An immediate 4 ♠ call would be a slam try.
- 4 ♣: {"Yes" 2 controls, "No" in spades}. You'll bid 4 ♠, sign-off. 4 ♦ would be continued DCB.
- 4 ♦: {"Yes" 2 controls, "Yes" in spades, "No" in clubs}. You'll sign off in 4 ♠. 4 ♥ would be continued DCB.
- 4 ♥: {"Yes" 2 controls, "Yes" in spades, "Yes" in clubs, "No" in spades [no queen]}. That is the Death Response, but it is exactly what you wanted to hear. You'll bid 6 ♠.

Answer: 3 ♠, DCB

14. ♠ AK ♥ K87 ♦ QJ75 ♣ AK42

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	3NT
?	

1NT shows clubs. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=2=3=5. 3NT shows 3 controls.

Partner must have the king of diamonds and one of the red aces. You don't care which red ace he has. If he has the ace of hearts, you have only one loser in the red suits. If he has the ace of diamonds, you can discard a heart on the fourth round of diamonds. You've bid clubs first, so your king of hearts will be protected if you play 6 ♣. The only thing you need from partner is the queen of clubs.

Will DCB get to the queen of clubs in time? Suppose you bid 4 ♣, DCB. He will bid 4 ♦ saying {"No" in clubs}. You'll continue with 4 ♥, DCB. He will bid 4 ♠ {"No" in spades}. Again, you'll go on with DCB, 4NT. His response will first have to be a scan of diamonds, and if he doesn't have the queen of clubs you will not find out in time to stop in 5 ♣.

A better bet is to make a natural slam try in clubs if you can. A keycard ask in clubs is only available when 4 ♣ isn't needed for anything. And 4 ♣ is DCB, so 4 ♦ would still be *Piss-Off*. That would make an immediate jump to 5 ♣ a natural slam try. Partner won't be worried about his flat 5-3-3-2 shape, or about only holding an ace and a king, since he knows that you know about all of this and are still making a slam try. His eyes are going to go straight to the club suit, looking for the queen of clubs. He can work out what would have happened if you had bid DCB, and that the reason you made the natural slam try was that you needed the queen of clubs and would be unable to find it in time.

NOTE: Teller doesn't actually need to work this out most of the time when Asker makes a natural slam try—he pretty much just looks for the trump queen and will probably accept when he

has it and decline when he doesn't. But there are definitely times when knowing and considering Asker's DCB problems will lead Teller to the right action, so it's good to get in the habit of doing it.

Answer: 5♣, natural slam try

15. ♠ K975 ♥ KQ964 ♦ AQ3 ♣ A

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥
3 ♠	4 ♣
?	

2♦ shows balanced 9–11 or 15+. 2♠ shows 4-4-3-2 two suits same color or 4-3-3-3 with a 4-card major. 3♥ shows a doubleton heart, so exactly 4=2=3=4. 4♣ shows 3 controls.

Can there be a spade slam? Possibly. Give partner

♠ AQxx ♥ xx ♦ Kxx ♣ xxx

and slam will make if spades are 3–2 and you can bring in the heart suit, which can be done if the ace is onside, hearts are 3–3, or possibly if RHO has four hearts. If partner has any jack but the jack of clubs your chances go up considerably. Can you find his hand via DCB? Suppose you bid 4♦. He bids 4♠ {“Yes” in spades, “No” in clubs}. You bid 4NT. He bids 5♥ {“Yes” in diamonds, “Yes” in spades [queen], “No” in clubs [no queen]}. The 5♥ Death Response is exactly what you were looking for, so you will be able to stop in 5♠ when he doesn't have the queen of spades since he would have bid 5♦.

But there are problems with this approach. When Teller doesn't have the queen of spades, 5♠ is in some jeopardy. More serious problems are lurking if you consider some of his other responses to the 4♦ DCB call. When Teller has the ace of spades and the king of clubs, he will be bidding 4NT or higher, and you

will be in serious jeopardy in 5♠. When he doesn't have the ace of spades, he will be bidding 4♥ {"No" in spades}. This is the Death Response, so you won't be able to stop safely in 4♠.

The bottom line is that it isn't worth risking a dangerous 5-level contract to shoot for the magic hand, particularly since, even if he has the magic hand, slam isn't laydown. Since 4♦ is the DCB call, there is no *Piss-Off* relay for sign-off. Simply bid 4♠ and end it there.

Answer: 4♠, sign-off

16. ♠ J74 ♥ K854 ♦ AKQ84 ♣ A

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3NT
?	

1♥ shows spades. 2♣ shows clubs. 3♣ shows equal-short, presumably generic 5-4-2-2, so exactly 5=2=2=4 (or the Swan). 3NT shows 4 controls (and not the Swan).

Partner's controls must be either both major suit aces or one of the aces and both black kings. 6♠ is possible but will depend a lot on partner holding the queen of spades. If he has that card slam will be either good or great. If he doesn't have it, slam probably won't be percentage and may be hopeless. Will DCB let you stop in 5♠ if partner doesn't have the queen? Suppose partner has AK of spades and king of clubs, so his first call will be a "No," which is the worst-case scenario as far as space goes. The bidding would be:

WEST	EAST
4 ♣	4 ♦
4 ♥	?

Since he has the king of clubs that will be a “Yes,” Teller will be bidding 4NT when he doesn’t have the queen of spades, and 5♣ or higher with the queen of spades. Either way you will be able to stop in 5♠ when he doesn’t have the queen, as you aren’t running into the Death Response of 5♥.

But things are not quite that simple. There is a danger that 5♠ may be too high when he doesn’t have the spade queen. A better approach is to bid 4♠, natural slam try (and it’s available because there is room for 4♦ Piss-Off). Since partner has already shown his shape and controls, he will first be looking for the queen of trumps. If he has it, he will certainly accept. If he doesn’t have it, he might accept if he has something like KQJx of clubs, but if he does so he will respond to RKC and you will be able to stop in 5♠ when he doesn’t have the trump queen.

Answer: 4♠, natural slam try

17. ♠9 ♥A106 ♦KJ109 ♣AQ872

WEST	EAST
1♣	1NT
2♣	2♠
2NT	3♦
3♥	4♣
?	

1NT shows clubs. 2♠ shows one-suiter, high-short or equal-short with the high doubleton. 3♦ shows generic 5-3-3-2, so exactly 2=3=3=5. 4♣ shows 4 controls.

Slam in clubs is possible. Picture partner with:

♠xx ♥Kxx ♦AQx ♣Kxxxx

and 6♣ is cold. Even without the queen of diamonds, 6♣ is on a diamond finesse. So, if you can locate the ace of diamonds, king of clubs, and king of hearts in partner’s hand, you would like to be in 6♣.

The question is can you get there safely? Suppose you try 4♦, DCB. You have to be concerned about the Death Response of 4NT. That would be {“Yes”, “Yes,” “No”}, thus {“Yes” in clubs, “Yes” in hearts, “No” in diamonds}}. It would mean that Teller’s barebones hand is:

♠ Ax ♥ Kxx ♦ xxx ♣ Kxxxx

Add in the queen of diamonds, and slam would be cold. Even without the queen of diamonds, slam is on a diamond finesse. Thus, you don’t have to worry about the Death Response, so DCB is fine.

Answer: 4♦, DCB

18. ♠ J4 ♥ 8 ♦ AQJ1097 ♣ AKJ2

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♥
3 ♠	4 ♦
?	

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. 3♥ shows low-short, generic 6-4-2-1, so exactly 2=6=4=1. 4♦ shows 4 controls.

Partner could have two aces, or he could have an ace and two kings. If he has two aces 6♦ is cold, as the spade loser gets discarded on the king of clubs and you lose at most one diamond. If he has one ace and two kings you could be off the AK of spades, or you could be off the king of diamonds and an ace.

Will DCB get the information needed? First of all, remember that partner has shown a 6-card heart suit, so 4♥ is not DCB, it is to play. 4♠ is the DCB call. Since you are planning to play in diamonds, 5♣ is the Death Response.

Suppose you bid 4♠ and get 4NT {“No” in hearts}. That is almost certainly the AK of hearts, which means you are off

the ace of spades and either the king of spades or the king of diamonds. Slam is at best on a finesse. You can sign off in 5♦.

Suppose you get the 5♣ Death Response. That will be {“Yes” in hearts, “No” in diamonds}. He will have only one heart honor. If he has the ace of hearts, he will have the ace of spades, and since the second spade gets discarded on the club slam will be cold. If he has the king of hearts, he will have AK doubleton of spades, and slam will be on a diamond finesse which isn’t the end of the world. Most likely he will have the ace of hearts, since AK doubleton is a relatively unlikely holding compared to the other possibilities. Thus, you are willing to get to slam opposite the Death Response.

Suppose you get a 5♦ or higher response. That is {“Yes” in hearts, “Yes” in diamonds}. Partner must have one of the aces. If he has the ace of spades, you lose only a heart trick. If he has the ace of hearts, he will also have the diamond king, plus the king of spades for his fourth control; and, since he is declarer, the king is protected from the opening lead. So, once again, slam will be cold.

Note that there’s an unusual situation here that is peculiar to relay. Teller could have nothing in hearts and the AK doubleton of spades along with the king of diamonds, in which case he will bid 4NT and you won’t know the difference between ♠ AK ♥ QJxxxx ♦ Kxxx ♣ x and ♠ Kx ♥ AKJxxx ♦ xxxx ♣ Q; so you will miss a cold slam. It could happen. But, with partner having six hearts and two spades, the odds are overwhelmingly likely that his AK is in hearts rather than in spades. KK Relay won’t always get to the right contract, but the odds will be in your favor.

Answer: 4♠, DCB

19. ♠ KJ1075 ♥ AQ643 ♦ Q7 ♣ A

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3 ♥	3NT
?	

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=4=1=5. 3NT shows 3 controls.

Partner must have an ace and a king, since he's shown a singleton diamond and a singleton king is not counted as a control. If partner has the king of hearts slam will be at worst on a spade finesse, and cold if partner has the queen of spades, regardless of which ace partner has. However, if partner doesn't have the king of hearts you definitely don't want to be in slam, and 5 ♥ might be too high. Will you be able to find out in time?

Suppose you bid 4 ♣, DCB. 4 ♦ is the Death Response. There are two possibilities:

- (a) Partner has the king of hearts. His bid will be 4 ♦ {"No" in clubs}. That is perfect, since you now know he has the king of hearts. You can continue with 4 ♥, DCB, and perhaps find out about the queen of spades in time. Even if you can't find this out, bidding the slam is okay.
- (b) Partner has the king of clubs. His bid will be 4 ♥ {"Yes" in clubs, "No" in hearts}}. Perfect! You pass, and you are in the right spot.

There was some luck here. If the trump suit had to be spades, then 4 ♥ would have been the Death Response, and you wouldn't be able to stop in 4 ♠ even though you know it is the right spot.

Answer: 4 ♣, DCB

20. ♠ AQ1094 ♥ AJ4 ♦ KQ7 ♣ A5

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3 ♥	3NT
?	

2 ♦ shows balanced 9–11 or 15+. 2NT shows 4-4-3-2, two suits same rank. 3 ♦ shows doubleton diamond, so exactly 4=4=2=3. 3NT shows 3 controls.

Partner has either an ace and a king or three kings. If he has three kings, 6 ♠ will at worst be on the queen of hearts being onside, and it might be better since partner could have one of the missing queens. However, if partner has the ace of diamonds and one of the kings, you probably don't want to be in slam since there are too many potential holes. It looks like DCB will get you the answer, but you have to look at the Death Response of 4 ♥ to the 4 ♣ DCB call, since you may want to stop in 4 ♠. 4 ♥ would show {“Yes” in spades, “No” in hearts}. That might not be so good. Opposite:

♠ KJxx ♥ xxxx ♦ Ax ♣ Jxx

5 ♠ would be in serious jeopardy. Is it worth taking that risk? Yes, it is, because you aren't committed to playing in spades. If partner has that hand and bids 4 ♥, you can sign off in 4NT and you have 10 top tricks. So, DCB it is.

Answer: 4 ♣, DCB

21. ♠ KQ6 ♥ AQ43 ♦ Q7 ♣ A832

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	4 ♣
?	

1 ♥ shows spades. 1NT shows hearts. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=4=1=3. 4 ♣ shows 4 controls.

Interesting. If partner doesn't have the ace of diamonds, his barebones hand will look like:

♠ Axxxx ♥ Kxxx ♦ x ♣ Kxx

Opposite that, 6 ♥ will make if both major suits split 3–2, since you can take 5 hearts, 5 spades, and 2 clubs. Any major-suit jack in partner's hand improves those odds considerably. However, if partner does have the ace of diamonds, you want to stay low. He could have:

♠ xxxxx ♥ Kxxx ♦ A ♣ Kxx

or even worse:

♠ Axxxx ♥ xxxxx ♦ A ♣ Jxx

Opposite these hands not only will slam be bad but 5 ♥ would be in considerable jeopardy.

Can you safely find out with DCB? Your DCB call is 4 ♦. What are the possibilities?

If partner has the ace of spades and the king of hearts, he will bid 4NT {"Yes" in spades, "Yes" in hearts, "No" in spades [no queen]}. You will know he must have the king of clubs for his other control, since a singleton king of diamonds doesn't count as a control, so you can confidently bid 6 ♥.

If partner doesn't have the ace of spades, he will bid 4♥ {"No" in spades}. His controls must be the ace of diamonds, king of hearts and king of clubs. You can pass, and you will be where you belong.

If partner has the ace of spades but not the king of hearts, he will bid 4♠ {"Yes" in spades, "No" in hearts}. 5♥ would be a terrible contract, but you don't have to go there. You can pass 4♠. It is true that you would probably rather be in 4♥, but at least 4♠ is playable, will make most of the time when 4♥ makes, and might even make when 4♥ goes down.

The conclusion is that you can afford to give DCB a try.

Answer: 4♦, DCB

22. ♠ AQ5 ♥ AQ32 ♦ A10864 ♣ 5

WEST	EAST
1♣	1♥
1♠	2NT
3♣	3♥
3♠	3NT
?	

1♥ shows spades. 2NT shows one-suiter, middle-short. 3♥ shows generic 6-3-3-1, so exactly 6=3=1=3. 3NT shows 0-2 controls.

Clearly spades will be trump. If partner has the perfect hand with both major-suit kings 6♠ will be a very good contract. If partner has anything else, slam won't be very good. Is it safe to find out via DCB? If you bid 4♣, partner's possible responses are:

- 4♦: {1 control}, clarifying his 0-2 response
- 4♥: {"Yes" 2 controls, "No" in spades}
- 4♠: {"Yes" 2 controls, "Yes" in spades, "No" in hearts}
- 4NT: {"Yes" 2 controls, "Yes" in spades, "Yes" in hearts, "No" in spades [no queen]}

Since partner has shown a 6-card spade suit, and you plan to play in spades, there is no Death Response to worry about—4♠

over 4♥ would be a sign-off, not DCB. You are willing to be in slam opposite the 4NT response and can get out in 4♠ opposite anything else. Therefore, DCB is clear.

Answer: 4♣, DCB

23. ♠ AQ7 ♥ K953 ♦ 6 ♣ AKQ107

WEST

1 ♣

1 ♠

2 ♠

3 ♣

4 ♣

?

EAST

1 ♥

2 ♥

2NT

3 ♠

4 ♥

1♥ shows spades. 2♥ shows diamonds, Reverser. 2NT shows high-short. 3♠ shows generic 6-4-3-0, so exactly 4=0=6=3. 4♥ shows 3 controls.

Partner can't have three kings, so he must have an ace and a king. Therefore, he has the ace of diamonds and either the king of spades or the king of diamonds. If it is the king of spades, 6♣ has decent play—ruffing a couple of hearts and maybe scoring 4 spades, 7 clubs, and a diamond or maybe ruffing 3 hearts. However, if it's the diamond king, slam is pretty hopeless—in fact, making 5♣ might prove difficult. Can you find out? Suppose you bid 4♠, DCB. If partner has AK of diamonds, he will be bidding 4NT {"No" in diamonds}. That is the Death Response, so you won't be able to stop in 5♣. You might take your chances in 5♦, but that may be pretty bad if partner doesn't have the queen or the J10 of diamonds. Partner is slightly more likely to have the king of diamonds than the king of spades, since he has 5 unknown diamond cards and 4 unknown spade cards.

If 6♣ were nearly cold when partner has the king of spades it might be worth the gamble, but that is not the case. The percentage action is to settle for 5♣.

Answer: 5♣, sign-off

24. ♠ AJ1095 ♥ Q ♦ AK95 ♣ KQ10

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠
?	

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2 (or the Swan), so exactly $4=5=2=2$. 3 ♠ shows 3 controls (and no Swan).

Slam is in the picture, since KQ of spades and an ace makes slam nearly laydown. However, if partner doesn't have the king of spades slam will be at best on a finesse, and you want to stop as quickly as possible.

Suppose you bid 4 ♣, DCB. What are the possible responses, and how will the follow-up go?

- (a) If partner has the ace of hearts and the king of spades, he starts with {"Yes", "Yes"}. His next scan will be for the queen of hearts, which you know he doesn't have. His bid will be 4 ♠ {"Yes" in hearts, "Yes" in spades, "No" in hearts [no queen]}. You can then continue DCB with 4NT, and his next scan will be for the queen of spades. If he doesn't have it, he will bid 5 ♣ {"No" in spades [no queen]}, and you can stop in 5 ♠. If he does have it, he will bid higher, and you will bid 6 ♠. Perfect.
- (b) If partner has a heart honor but no king of spades, he will bid 4 ♥ {"Yes" in hearts, "No" in spades}. This means that he has the king of hearts and the ace of clubs. You will know there is no slam. Unfortunately, 4 ♥ is the Death Response, so you will have to get to 5 ♠. In the worst-case scenario, he doesn't have the queen of spades either, and both honors are offside so you have to lose two spade tricks and will go down. That is a risk, but it's a risk worth taking if you can otherwise be sure of getting to the right contract.

- (c) If partner has no heart honor, he will bid 4♦ {“No” in hearts}. He would then have the king of spades and the ace of clubs, and you could scan for the queen of spades to see if you want to be in slam. However, there is a problem here. He will make the same 4♦ call if he has AK of hearts, in which case you want to stop in 4♠. It’s rare for this to be an issue, since Asker will almost always know which hand Teller has, but it can happen, as we see here. Is there a way around this ambiguity, or do you just have to guess which he has? If you will be unable to tell, you may just have to quit and sign off in 4♠.

Let’s examine the two possible cases (either no heart honor, or both). He’s said “No” in hearts with his 4♦ call. If you continue with 4♥ DCB over 4♦:

- i. If partner’s 3 controls are the king of spades and the ace of clubs. He will be bidding 4NT over 4♥ {“Yes” in spades, “No” in diamonds}. When you continue DCB with 5♣ he won’t scan clubs for controls (the fourth suit is never scanned), so his next scan will be for the queen of hearts. Since you have it, you know he will be bidding 5♦ {“No” in hearts [no queen]}. You now make a final DCB of 5♥. He will scan for the queen of spades. If he doesn’t have it, he will bid 5♠ {“No” in spades [no queen]}, and you can pass. If he has the spade queen, he will bid higher, and you can bid 6♠.
- ii. If partner’s 3 controls are the AK of hearts. From his point of view, he will have already shown his controls, so he will move on to Queensland. His first scan will be for the queen of hearts. You know he doesn’t have it, so his bid will be 4♠ {“No” in hearts [no queen]}. You will know immediately what has happened simply because he said “No” instead of “Yes” over 4♥. If he had nothing in hearts for his previous 4♦ call {“No” in hearts}, then he would have to have the king of spades which would be his next scan, and that would have been a “Yes.” Consequently, you can pass 4♠ and be

sure of being in the right contract, knowing that Teller has the AK of hearts.

On this hand you were fortunate that your stiff queen of hearts enabled you to unscramble the potential ambiguity, so DCB would succeed. If you had not had this card, it could be better to take a different approach.

Answer: 4♣, DCB

25. ♠ AK632 ♥ K87 ♦ K83 ♣ K5

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3 ♥	4 ♣
4 ♦	5 ♣
?	

1♠ shows hearts. 2♣ shows clubs. 2♥ shows a Reverser. 3♦ shows low-short, generic 5-4-3-1, so exactly 3=4=1=5. 4♣ shows 4 controls. 5♣ is {“Yes” in clubs, “Yes” in hearts, “Yes” in clubs [queen], “No” in hearts [no queen]}. Partner’s barebones hand looks like:

♠ xxx ♥ Axxx ♦ x ♣ AQxxx

If partner has the queen of spades, 6♠ will almost certainly be on a 3–2 spade split. With a trump lead, you win the queen, lead a diamond to king and ace, win the trump return, ruff a diamond, back to the king of clubs, draw the last trump, and establish the long club if the clubs are 4–2. A heart lead is a little more annoying, but there are still a lot of chances.

Unfortunately, you cannot safely ask for the queen of spades with more DCB. If you bid 5♦ and partner doesn’t have the queen

of spades he bids 5♥ {“No” in spades [no queen]}. This is the Death Response, and you can’t get out in 5♠.

So, you have to just play the percentages. Partner has three spades and the opponents have five spades. Partner would have bid the same way up to this point whether or not he has the queen of spades. Therefore, the odds are five to three against his having the queen. Add in the possibility of a 4–1 spade split even if he has the queen and the percentage action is clearly to sign off in 5♠.

This hand illustrates the strange sort of luck that can occur with KK Relay. If the trump suit were hearts you would think that would be worse, since there would be one fewer step worth of maneuvering room. However, you could safely continue DCB with 5♦. If partner didn’t have the queen of hearts, he would bid 5♥, and you could pass. If he did have it, he would bid something higher, and you would be able to get to 6♥.

Answer: 5♠, sign off

26. ♠ AK4 ♥ Q ♦ AQ52 ♣ KQ974

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦
3 ♥	4 ♣
4 ♦	4 ♥
4 ♠	4NT
?	

1♥ shows spades. 3♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 5=3=3=2. 4♣ shows 4 controls. 4♥ is {“No” in spades}. 4NT is {“No” in hearts}. Partner must have AK of hearts, since if has nothing in hearts he couldn’t have 4 controls. Therefore, partner must have the king of diamonds for his fourth control. His barebones hand looks like:

♠ xxxxx ♥ AKx ♦ Kxx ♣ xx

If partner has the queen of spades, you want to be in slam. If he doesn't have it, you don't want to be in slam. Can you safely find out?

Partner is known to have the king of diamonds. If you bid 5♣, DCB, his Death Response is 5♥, which would be {"Yes" in diamonds, "No" in spades [no queen]}. That is not what you want to hear. However, you have an out. Assuming partner doesn't have the queen of spades and spades are 3-2, you have 4 spade tricks, 3 heart tricks, 3 diamond tricks, and 1 club trick. Thus, over 5♥ you can sign off in 5NT.

If instead partner bids 5♠ {"Yes" in diamonds, "Yes" in spades [queen], "No" in hearts [no queen]} you can bid slam. In fact, you should bid 6NT, not 6♠. If spades split 3-2 you will have 5 spade tricks, 3 heart tricks, 3 diamond tricks, and 1 club trick. However, there will be some chance to come up with 12 tricks in notrump when spades are 4-1, while 6♠ is always down if you have a trump loser.

Answer: 5♣, DCB

27. ♠ AQJ54 ♥ K83 ♦ AQJ ♣ KJ

WEST	EAST
1 ♣	1NT
2 ♣	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
4 ♥	4NT
?	

1NT shows clubs. 3♣ shows one-suiter, equal-short, either 7-2-2-2 or 6-3-2-2 not high doubleton. 3♥ shows generic 7-2-2-2, so exactly 2=2=2=7. 4♦ shows 4 controls. 4NT is {"Yes" in clubs, "No" in spades}. Since partner doesn't have the king of spades, he must have the ace of hearts and no king of diamonds for his 4 controls. His barebones hand looks like:

♠ xx ♥ Ax ♦ xx ♣ Axxxxxx

Even if you have a club loser, a winning diamond finesse will get you 12 tricks (6 clubs, 3 diamonds, 2 hearts, 1 spade), so you are always going to bid a small slam in clubs at least. It cannot hurt to DCB, but you need a plan.

First of all, remember to bid 5♦, not 5♣, for DCB, since 5♣ would be a sign-off (Teller has shown 7 clubs). You know that partner will be saying “Yes” in hearts. If he bids 5♠ {“Yes” in hearts, “No” in clubs [no queen]}, you will just sign off in 6♣ (not 6NT, since if the clubs don’t split you will be short an entry to take two finesses). However, if he bids 5NT {“Yes” in hearts, “Yes” in clubs [queen], “No” in spades [no queen]} there might be more. 6NT will be cold, so you can afford to go past 6♣.

Suppose you again bid DCB, which, again, would be 6♦ because 6♣ is a sign-off. If Teller bids 6♥ {“No” in hearts [no queen]}, you settle for 6NT. But what if he bids 6♠ {“Yes” in hearts [queen], “No” in diamonds [no queen]}. His hand will be:

♠ xx ♥ AQ ♦ xx ♣ AQxxxxx

You still have only 12 top tricks, but maybe there is more than a finesse for 7♣. How will the play go? Suppose you get a trump lead (best for defense). You win in your hand, unblock the AQ of hearts, cross to the ace of spades, discard a spade on the king of hearts, ruff a spade, club to your hand, ruff a spade high. You will make if spades are 3–3 or the king of spades is doubleton. If neither of these come home, you have the diamond finesse in reserve. 7♣ is clearly a percentage contract.

Answer: 5♦, DCB

28. ♠ AJ5 ♥ K3 ♦ AQJ74 ♣ A32

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	5 ♦
?	

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows a three-suiter, short minor. 3 ♦ shows low-short, generic 4-4-4-1 with a small singleton, so exactly 4=4=4=1. 3NT shows 3 controls. 4 ♦ is {“No” in spades}. 5 ♦ is {“Yes” in hearts, “Yes” in spades [queen], “Yes” in hearts [queen], “No” in diamonds [no queen]}. Partner’s barebones hand is:

♠ Qxxx ♥ AQxx ♦ Kxxx ♣ x

6 ♦ is cold, and 7 ♦ is at worst on a spade finesse, but you don’t want to take that risk, particularly since the small slam might not be bid at the other table. You need to find the jack of hearts in order to be confident about bidding the grand.

The hand must be played in diamonds, so you must make sure you don’t go beyond 6 ♦ if partner doesn’t have the jack of hearts, and you must beware of the 6 ♣ Death Response. How will DCB work? You bid 5 ♥. He will bid 5 ♠ {“No” in spades [no jack]}. You bid 5NT. His next scan is in hearts, and if he doesn’t have the jack of hearts, he will bid 6 ♣ {“No” in hearts [no jack]}. That is the Death Response, and since the hand must be played in diamonds you don’t have an out. Partner has only two small hearts and the opponents have seven small hearts, so the odds are seven to two against partner having the jack.

All things considered, it looks best to give up on the grand and settle for 6 ♦.

Answer: 6 ♦, sign-off

29. ♠ A107 ♥ A643 ♦ A32 ♣ AQ2

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2NT
3 ♣	3 ♦
3 ♥	3NT
4 ♣	4NT
?	

1 ♥ shows spades. 2 ♣ shows clubs. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=1=3=4. 3NT shows 3 controls. 4NT is {"Yes" in spades, "Yes" in clubs, "Yes" in spades [queen], "No" in clubs [no queen]}. It is worth noting that the 4 ♣ DCB was safe. The Death Response of 4 ♥ was impossible as partner has to have the three missing kings, so his replies will start with two yesses (he won't scan diamonds since he has a singleton). If partner didn't have the queen of spades, he would have bid 4 ♠ {"Yes" in spades, "Yes" in clubs, "No" in spades [no queen]}, which you could (and probably should) pass.

Back to the problem at hand. At this point, partner's bare-bones hand is:

♠ KQxxx ♥ x ♦ Kxx ♣ Kxxx

If you continue with DCB, you have to watch out for the Death Response of 5 ♥, since you may want to play in 5 ♠. Over 5 ♣, partner's 5 ♥ call would be {"Yes" in diamonds [queen], "No" in spades [no jack]}. You are happy to be in at least a small slam if partner has the queen of diamonds, so it's safe to bid 5 ♣, DCB.

What if partner doesn't have the queen of diamonds? He will bid 5 ♦ {"No" in diamonds [no queen]}. You still might have a slam, but you would need to deal with a potential fourth-round club loser as well as a likely diamond loser. In addition, if partner doesn't have the jack of spades you might lose a trump trick. You can probe for the jack of spades with 5 ♥, DCB. If partner doesn't have it, he will bid 5 ♠ and you can pass. However, do you want

to be in slam if he has the jack of spades? This would make his hand:

♠ KQJxx ♥ x ♦ Kxx ♣ Kxxx

At first it seems like you will need to get 4 club tricks, or perhaps 3 diamond tricks if partner happens to have the jack of diamonds. But wait! What about a dummy reversal? If you can ruff 3 hearts in the long hand, you can take 6 spade tricks, 1 heart trick, 2 diamond tricks, and 3 club tricks. Say you get a trump lead. Win the king, ace of hearts, ruff a heart. Now trump to the ace. If the trumps are 4–1 you will have to draw the trumps and hope to get 4 club tricks. However, if you find out the trumps split you ruff a heart, cross to one of the minor-suit aces, ruff another heart, cross to the other ace, and draw the last trump to take 12 sure tricks. Therefore, you will want to be in at least a small slam unless partner has neither the queen of diamonds nor the jack of spades, so DCB will work fine.

Answer: 5♣, DCB

30. ♠ KJ10 ♥ KJ ♦ K852 ♣ AQ64

WEST	EAST
1♣	1♥
1♠	2♥
2♠	3♦
3♥	4♣
4♦	4♠
?	

1♥ shows spades. 2♥ shows diamonds, Reverser. 3♦ shows low-short, generic 5-4-3-1, so exactly 4=3=5=1. 4♣ shows 4 controls. 4♠ is {“Yes” in diamonds, “No” in spades}. You know partner has to have the ace of hearts to get up to 4 controls, so his barebones hand is:

♠ xxxx ♥ Axx ♦ Axxxx ♣ x

If he has both the queen of spades and the queen of diamonds, 6♦ is almost cold. If he has just one of the queens, 6♦ will be on a spade finesse (if he has the queen of diamonds) or picking up queen-fourth of trumps (if he has the queen of spades). If he has neither queen, 6♦ will be poor. It looks like you can DCB with 4NT, but you must watch out for the Death Response.

Partner will not scan hearts for controls since it is his third-longest suit and he has a singleton—so you are assumed to know what he has in hearts (which you do). His next scan will be for the queen of diamonds. If he doesn't have it, he will bid 5♣, the Death Response. You can't afford that, since you will be propelled into a slam that is either on picking up queen-fourth of trumps or is a lot worse. Partner doesn't need either queen for his positive response. The odds are well against his having both queens, so your prudent action is to give up on the perfect hand and sign off in 5♦.⁴

Answer: 5♦, sign-off

31. ♠ KJ82 ♥ A ♦ AQJ95 ♣ A74

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	4 ♦
4 ♥	5 ♦
5 ♥	5NT
?	

2♦ shows 9–11 or 15+ balanced. 2NT shows two suits same rank. 4♦ shows 15+, 5 controls, doubleton club, so exactly 4=4=3=2. 5♦ is {"Yes" in spades, "Yes" in hearts, "Yes" in diamonds, "No" in spades [no queen]}. 5NT is {"Yes" in hearts [queen], "No" in diamonds [no queen]}. Partner's barebones hand is:

⁴There may be a way out of this dilemma. We'll be looking at a potential solution, Weak Relay, in a later chapter.

♠ Axxx ♥ KQxx ♦ Kxx ♣ Kx

You can count 12 top tricks (5 diamonds, 3 hearts, 2 spades, 2 clubs), so if you play a small slam you definitely prefer notrump to spades. How about a grand slam? If you play in diamonds, you can ruff a club in the short hand, coming to 6 diamonds, 3 hearts, 1 spades, 2 clubs, so 7♦ is better than 6NT. What about 7NT? If partner has the queen of clubs or the jack of hearts, you can count 13 top tricks. Can you get to that?

Suppose you bid 6♣, DCB. If he has the queen of clubs, he will bid higher than 6♦, and you can bid 7NT. If he doesn't have the queen of clubs, he will bid 6♦ {"No" in clubs [no queen]}. If you bid 6♥, DCB, he will bid 6♠ {"No" in spades [no jack]}. Unfortunately, you will be out of room and cannot find out about the jack of hearts, so if he doesn't have the queen of clubs, you'll have to settle for 7♦.

Answer: 6♣, DCB

32. ♠ AKJ972 ♥ AQ3 ♦ K ♣ A54

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♦	4 ♠
?	

2♣ shows diamonds. 2♠ shows one-suiter, high-short or equal-short with the high doubleton. 3♥ shows generic 6-3-3-1, so exactly 1=3=6=3. 4♣ shows 3 controls. 4♠ is {"Yes" in diamonds, "No" in hearts}. Partner must have the ace of diamonds and the king of clubs for his 3 controls, so his barebones hand is:

♠ x ♥ xxx ♦ Axxxxx ♣ Kxx

Slam is possible if partner has the fillers in diamonds. You can continue DCB to find out if he has the queen of diamonds and stop in 5♦ or 5♠ if he doesn't have that card. The problem is that no 5-level contract is very safe. Also, even if partner has the queen of diamonds, he will need the jack in addition to make slam really attractive, and you can't find out about that below the slam level. If partner has the queen of diamonds he will have four unknown diamonds and the opponents will have six, so the odds will be against him holding the jack. While it is possible that you'll miss a good slam, the percentage action appears to be to pass and settle for the pretty safe 4♠ contract.⁵

Answer: Pass

33. ♠ A10 ♥ AJ103 ♦ J109 ♣ AQJ8

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♥
3 ♠	4 ♣
4 ♦	5 ♣
?	

1♥ shows spades. 3♥ shows one-suiter, low-short, generic 6-3-3-1, so exactly 6=3=3=1. 4♣ shows 3 controls. 5♣ is {"Yes" in spades, "Yes" in hearts, "Yes" in spades [queen], "No" in hearts [no queen]}. Teller's barebones hand is:

♠ KQxxxx ♥ Kxx ♦ Kxx ♣ x

It is worth looking at the 4♦ DCB call. If partner has the ace of diamonds and a king he would have either bid 4♠ {"Yes" in spades, "No" in hearts}, or 4♥ {"No" in spades}, and since he has shown a 6-card spade suit there is no Death Response and you can stop safely in 4♠. If he has the three kings you want, but

⁵An option for Asker might be to avoid the unilateral decision and make a slam try with 4♠, immediately over 3♠. But that approach has problems as well.

no queen of spades he would bid 4NT {“Yes” in spades, “Yes” in hearts, no spades [no queen]} and you can pass that, which would be a pretty secure contract. Thus, the 4♦ DCB call was reasonably safe.

But you still need more. You know you are off the ace of diamonds, so partner definitely needs the queen of diamonds. Add that to his barebones hand, and how good is slam? Not quite good enough. If the spades split 3–2, you still need to get a twelfth trick, which can come from a favorable lead, ruffing out the king of clubs, or guessing the queen of hearts. If the spades are 4–1, you are dead. However, if partner has the queen of diamonds and the jack of spades, you will want to be in slam. DCB will barely get you that.

You bid 5♦. If he bids 5♥ {“No” in diamonds [no queen]}, you sign off in 5♠, which you can do since he has shown a 6-card spade suit—there is no Death Response. If he bids 5♣ {“Yes” in diamonds [queen], “No” in spades [no jack]}, you can pass. If he bids 5NT {“Yes” in diamonds [queen], “Yes” in spades [jack], “No” in hearts [no jack]}, you can bid the slam and it will be percentage.

Answer: 5♦, DCB

34. ♠ AK ♥ — ♦ A98752 ♣ AJ864

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	4 ♣
4 ♦	4 ♠
?	

1♥ shows spades. 1NT shows hearts. 2♥ shows a Reverser. 3♣ shows equal-short, presumably generic 5-4-2-2, so exactly 4=5=2=2 (or the Swan). 4♣ is a special bid which must be

remembered—a Bell-Ringer. It does not show 5 controls. It shows the unexpected generic 7-4-1-1, so exactly $4=7=1=1$. 4♠ shows 3 controls. Partner must have AK of hearts for his 3 controls, so his barebones hand is:

♠ x x x x ♥ A K x x x x x ♦ x ♣ x

You are committed to the 5-level. If partner doesn't have the queen of hearts, slam is probably anti-percentage. If he does have the queen of hearts, you will be willing to take your chances in a small slam as there are various good things that could happen. What about a grand? You really would like partner to have both major-suit queens and the jack of hearts to be in a grand.⁶ If he doesn't have the jack of spades it's close, but there will be plenty of chances to set up a long minor, or perhaps a squeeze if the defense knocks out a key spade entry early.

If you DCB with 4NT, you know that the response will be 5♣ {"No" in hearts}. If you then continue with 5♦ DCB partner will go immediately to Queensland, since he knows that you know what he has. In fact, even if he had a spade control he would go directly to queens, because, since he has the minor-suit singletons, he will assume you know what he has in spades and not scan his second longest suit. So, if he rebids 5♥ over 5♦ {"No" in hearts [no queen]}, you will quit in 5♥. If he has the queen of hearts, he will then scan for queen of spades, jack of hearts, jack of spades in that order.

You will need a 6♣ response {"Yes" in hearts [queen], "Yes" in spades [queen], "Yes" in hearts [jack], "No" in spades [no jack]} to justify bidding the grand. Of course, you prefer a 6♦ response, which would also show the jack of spades, but you will take your chances without it.

Answer: 4NT, DCB

⁶In Chapter 5 (Balanced Hands) we mentioned that 1♣–2♥ is undefined in the basic KK Relay structure and can optionally be used for a special hand-type. 2♥ may be used to show a solid suit, eliminating the need for this sort of high-level decision, since Teller cannot have a solid suit when he starts with 1♣–1♠. That structure is described in Chapter 16 (Specialty Hands).

35. ♠ Q32 ♥ AKJ ♦ KJ74 ♣ AKJ

WEST	EAST
1 ♣	3 ♥
3 ♠	4 ♣
4 ♦	4NT
?	

3 ♥ shows balanced 12–14, two suits same shape, doubleton heart, so exactly $4=2=4=3$. 4 ♣ shows 3 controls. 4NT is {“Yes” in spades, “Yes” in diamonds, “No” in spades [no queen]}. Partner’s barebones hand is:

♠ Kxxx ♥ xx ♦ Axxx ♣ xxx

He has at least 12 HCP, so he must have at least two of the missing queens, and if he doesn’t have all three queens he must have the jack of spades. If he has the queen of diamonds and the jack of spades you can count 12 tricks in notrump, but if he is missing the jack of spades or the queen of diamonds you don’t want to be in slam as it will be at best on a finesse. Will DCB do the job?

Suppose you bid 5 ♣ DCB.

If he bids 5 ♦ {“No” in diamonds [no queen]}, you sign off at 5NT. If he bids 5 ♥ {“Yes” in diamonds [queen], “No” in clubs [no queen]}, you can bid 6 ♦ knowing he has the jack of spades and the queen of hearts so you can count 5 diamonds (with a club pitch on the heart and a ruff in his hand), 2 spades, 2 hearts, and 3 clubs. If he bids 5 ♠ {“Yes” in diamonds [queen]}, “Yes” in clubs [queen], “No” in hearts [no queen]}, again you can bid 6 ♦. If he bids 5NT {“Yes” in diamonds [queen], “Yes” in clubs [queen], “Yes” in hearts [queen], “No” in spades [no jack]}, you know your percentage action is to pass. And if he bids 6 ♣ {“Yes” in diamonds [queen], “Yes” in clubs [queen], “Yes” in hearts [queen], “Yes” in spades [jack], “No” in diamonds [no jack]} that is the Death Response for 6 ♦, but you can now count 12 sure tricks in notrump.

Answer: 5 ♣, DCB

36. ♠ K7 ♥ AKJ10 ♦ A542 ♣ 983

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	3 ♦
3 ♥	3NT
4 ♣	4NT
?	

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 5=3=4=1. 3NT shows 3 controls. 4NT is {"Yes" in spades, "Yes" in diamonds, "Yes" in spades [queen], "No" in diamonds [no queen]}. Partner's barebones hand is:

♠ AQxxx ♥ xxx ♦ Kxxx ♣ x

You can play 5 ♦ if need be. However, if partner has the queen of hearts you have great potential to make 6 ♥. This is particularly true if he has the jack of spades in addition, as then you can expect to take 5 heart tricks (including a club ruff in dummy), 5 spade tricks, and 2 diamond tricks. If partner doesn't have the jack of spades, you probably don't want to be in slam.

Suppose you bid 5 ♣, DCB. If partner bids 5 ♦ {"No" in hearts [no queen]} you can pass and hopefully set up the spades to discard two hearts. If partner bids 5 ♥ {"Yes" in hearts [queen], "No" in spades [no jack]}, you can pass and that contract figures to come home. However, if partner bids 5 ♠ or higher {"Yes" in hearts [queen], "Yes" in spades [jack]}, you can confidently bid 6 ♥.

Answer: 5 ♣, DCB

ASKER'S OTHER OPTIONS

The material in the previous chapters is sufficient to handle almost all KK Relay auctions accurately. However, there are some occasional situations where the auction can be improved with Asker taking a route other than his normal KK Relay. These options are certainly not essential for playing KK Relay, but pairs who want to maximize their bidding efficiency will probably want to take advantage of some or all of them.

Early Train to Queensland

Suppose you open 1 ♣ with:

♠ J7543 ♥ AK8 ♦ AKJ ♣ J7

and the bidding goes:

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	3 ♦
3 ♥	4 ♥
?	

1 ♠ shows hearts. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=5=2=3. 4 ♥ shows 6 controls. Partner's barebones hand is:

♠ AKx ♥ xxxxx ♦ xx ♣ AKx

You have all the aces and kings, but you need to find out about Teller's queens and perhaps the jack of hearts in order to determine the optimal

contract. But, to do that, you will have to waste a lot of steps to get to these queens and jacks, with partner giving you useless information because you already know about his aces and kings. The auction would go:

WEST	EAST
4♠	4NT ¹
5♣	5♦ ²
5♥	5♠ ³

1. "No" in hearts
2. "No" in spades
3. "No" in clubs

You will have wasted the entire 5-level without getting any new information, and you will be committed to what might be a hopeless small slam. This isn't very efficient.

Wouldn't it be nice if there were some way to say to partner: "Don't bother with your aces and kings. Start showing your queens immediately." There is!

Since Asker might want to sign off in any suit after a control response, there is no suit-bid available that could be used for this purpose. However, when Teller has shown 4 or more controls, 4NT might very well be available to say, "Show me your queens, please." The necessary conditions are:

- Asker has specifically made a Control Ask
- Teller has just shown 4 or more controls.
- Teller's 4-control response was at the 4-level
- 4NT would not be defined as DCB
- Teller doesn't have the balanced hand type

Under these conditions, it's illogical for Asker to want to sign off in 4NT. If that were Asker's intention, he would have signed off at 3NT rather than asking for controls, knowing that Teller would take another call with a Super-Positive (4 controls and extras, or 5 controls). So, since 4NT cannot logically be a sign-off in these circumstances, it's used for a quick entry into Queensland, aka Early Train to Queensland (or ETQ).

NOTE 1: Teller's having shown 4 controls is not by itself sufficient for the Early Train to Queensland to kick in. He must also have been specifically asked to show controls. There are a few rare occasions when he will have shown 4 controls when he wasn't asked. In such cases, Asker's 4NT will be natural, not ETQ.

NOTE 2: It may not be immediately obvious why we can't use the Early Train to Queensland when Teller has the balanced hand type. You will probably recall that the balanced hand expansion is somewhat different than all the others. When he's balanced, Teller's high-card points are known within a very narrow range on the first round of the auction—usually 9–11, occasionally 12–14. He doesn't have a Super-Positive to show unless he's in the rare 15+ category (when he will always bid on over a sign-off, so we don't need to consider that hand now). Thus, it's possible that Asker could find himself in a situation where he wants to look for 5 controls facing a balanced hand of fewer than 15 HCP, but still be able to sign off in 4NT facing only 4 controls. Unlike the “normal” expansion sequences, when Teller has the balanced hand type he won't be overriding a 3NT signoff with a Super-Positive of 13–14 HCP. He will have already shown 12–14 with his first-round response and will respect Asker's decision. In the balanced hand sequences, Teller needs that 15+ hand for an override.

Here's an example:

♠ KQ2 ♥ KQJ10 ♦ AQ64 ♣ KQ

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♥
?	

2♦ shows balanced 9–11 or 15+. 3♥ shows two suits same shape, doubleton heart, so exactly 4=2=4=3. Slam is possible, but Teller needs 5 controls—which he could have. However, if Teller has only 4 controls, he will be bidding 4♦ in response to the 3♠ Control Ask, and it will be vital for Asker to be able to sign off at 4NT. Hence, the EQT precondition that Teller does not have the balanced hand type.

NOTE 3: It's rare that Teller will show 4 controls below the 4-level, but it can happen.

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3NT
4NT	

1 ♥ shows spades. 2 ♣ shows clubs. 3 ♣ shows equal-short, presumably generic 5-4-2-2, so exactly $5=2=2=4$. 3NT shows 4 controls. Now, Asker's 4NT is certainly natural and invitational, not Early Train to Queensland. Hence the requirement that the control response must have been at the 4-level for 4NT ETQ to apply.

Let's take another look at the first example hand at the beginning of this chapter (♠ J7543 ♥ AK8 ♦ AKJ ♣ J7). The bidding has been:

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	3 ♦
3 ♥	4 ♥

1 ♠ shows hearts. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly $3=5=2=3$.

After Teller's 4 ♥ reply to the Control Ask (showing 6 controls), Asker is happy to go straight to 4NT, DCB for queens. With all 12 controls accounted for, he certainly doesn't need to ask where Teller's controls are. So, he takes the Early Train to Queensland. Then:

- If Teller bids 5 ♣ {"No" in hearts [no queen]}, Asker continues DCB with 5 ♦. If Teller bids 5 ♥ {"No" in spades [no queen]}, Asker drops it there. Otherwise, Asker bids 6NT.
- If Teller bids 5 ♦ {"Yes" in hearts [queen], "No" in spades [no queen]}, Asker will continue to DCB for the minor-suit queens. If Teller has both of them, there are 13 tricks on a 3-2 heart split. Otherwise, Asker will settle for 6NT.

- If Teller bids 5♥ or higher, showing both major-suit queens, Asker can confidently bid 7NT, knowing that he is facing ♠ AKQ ♥ Qxxxx ♦ xx ♣ AKx.

When is ETQ Used?

We've already outlined the necessary conditions above for Early Train to Queensland to apply. But when should Asker take the ETQ route?

It is not necessary for Asker to be looking at all the controls to make use of this Early Train to Queensland. All that matters is that Asker doesn't care where the controls are. For example:

♠ KQ ♥ KQ7 ♦ AK854 ♣ J83

WEST	EAST
1 ♣	1NT
2 ♣	3 ♦
3 ♥	4 ♦
?	

1NT shows clubs. 3♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=2=5. 4♦ shows 5 controls. Asker knows that Teller has two aces and the king of clubs, but he doesn't care which 2 aces Teller has. All he cares about is the queen of clubs. The conditions for Early Train to Queensland are all present. Asker can proceed with 4NT, asking for queens, and stop safely in 5♣ if Teller doesn't have the queen of clubs; Teller will bid 5♣ {"No" in clubs [no queen]}, and Asker will simply pass.

If Teller does have the queen of clubs, he will bid 5♦ {"Yes" in clubs [queen], "No" in spades [no queen]}. Asker continues DCB with 5♥, getting 5♠ {"No" in hearts [no queen]}. Now 5NT, DCB will get to the queen of diamonds. If Teller doesn't have it, he will bid 6♣ {"No" in diamonds [no queen]}, and Asker will pass and play in 6♣. He knows that a spade ruff in the short hand may be needed to make slam. However, if Teller *does* have the queen of diamonds, he will bid 6♦ {"Yes" in diamonds [queen], "No" in clubs [no jack]}, and Asker

can confidently bid 6NT as he can count 12 winners (assuming the clubs are 3-2).

Weak Relay

As dealer, you pick up:

♠ AJ3 ♥ K2 ♦ AKJ85 ♣ J105

and the auction begins:

WEST	EAST
1 ♣	1NT
2 ♣	3 ♦
?	

1NT shows clubs. 3♦ shows low-short, generic 5-3-3-2, so exactly 3=3=2=5. Now what? You almost certainly need 4 controls from partner to want to be in slam, and 4 controls might be sufficient. The problem is that partner's 4-control hand might look like:

♠ xxx ♥ Axx ♦ xx ♣ Axxxx

in which case you don't want to be higher than 3NT. However, if you ask for controls partner will bid 4♣, and you will be in jeopardy as well as not having time to find out whether or not he has the needed fillers. You'd really like to be able to find out about his controls without going past 3NT when he has those two bare aces. And you can!

The solution is a special tool known as the Weak Relay. When Teller's final ESS call is 3♦ or lower (which will always be the case when Teller has the more balanced 5-3-3-2, 5-4-2-2, 5-4-3-1 or 4-4-4-1 shapes), the next step by Asker is the normal Control Ask, but he may skip over the Control Ask to the Weak Relay, which asks a simple question, "Do you have a Super-Positive?"

Suppose the final ESS call is 3♦. Asker can skip over the 3♥ relay step to 3♠ (defined as Weak Relay), asking Teller, "Do you have a Super-Positive [4 controls and 13+, or 5 controls]?" When the answer

is “No,” Teller bids the next step (in this case 3NT). If Teller has the Super-Positive, the answer is “Yes,” so he will show his controls starting with the next step (4♣ in this case, showing exactly 4 controls). Now, Asker can safely proceed with DCB knowing that Teller will produce an important queen or two, since he needs them to get up to 13+.

Note that Weak Relay occurs only when there is an extra step available at the 3-level. Therefore, it can only be employed when the ESS is 3♦ or lower. When shape-showing ends at 3♥, there is only one step available, 3♠, and that's defined as our normal Control Ask. Hence, no room for Weak Relay.

Note also that Weak Relay does not use any extra space. In the example above, if Asker makes the normal Control Ask of 3♥, instead of using the 3♠ Weak Relay, Teller would be bidding 4♣ with 4 controls, 4♦ with 5 controls, etc. These are exactly the same calls Teller will make if Asker bids 3♠ Weak Relay and Teller has a Super-Positive.

What is Weak Relay Anyway?

The mechanics of Weak Relay are quite simple.

- Asker will picture the hand(s) Teller needs to make slam a good proposition (just as we do in standard bidding).
- He notes whether or not he needs to find a Super-Positive.
- He then determines what Teller will do with that necessary hand after a sign-off, after Weak Relay, and after regular relay.
- He chooses his course of action accordingly.

Despite its simplicity, Weak Relay can be a difficult concept to grasp, and KK Relayers usually start off without using it at all. It's something you can certainly put off until later. But when you're ready to jump into the water, the easiest way to think of it is as a sort of non-serious slam try. Not the worst, but not a lot of interest.

Weak Relay is, quite simply, a tool that allows for more judgment, and hence better accuracy in slam bidding, as well as choice-of-games occasionally. This is simply because, when Weak Relay is available, Asker can choose from three courses of action. In auctions where there

is no room for Weak Relay, he has only two choices, relay or sign off in game. But when WR is available, Asker can:

- Use the normal KK Relay (next step Control Ask)
- Use Weak Relay (skipping a step) to ask for a Super-Positive
- Sign off in game (via 3NT or 4♦, Woolberry)

Signing off in game is the absolute worst. The message Asker sends is, “No slam interest here at all.” Teller needs to be pretty close to a slam drive to move over Asker’s sign-off when Weak Relay was available.

Using Weak Relay suggests a slightly better hand—not the worst, but not a lot of extras. Asker has just enough that he can visualize a slam facing a Super-Positive response, but not less.

If he uses the normal relay (next step Control Ask) Asker is indicating that that there may be a slam even when Teller has less than a Super-Positive response.

Why Do We Need Weak Relay?

The primary purpose of Weak Relay is to stay low when Teller has bare controls but no fillers. It’s particularly useful when Teller has 4 controls, since the 4-control response will nearly always be above 3NT.

An example will be useful here:

♠ K75 ♥ AKQ ♦ KJ54 ♣ KQ3

WEST	EAST
1 ♣	2 ♣
2 ♦	3 ♦
?	

2♣ shows diamonds. 3♦ shows a one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=5=2. There can be a slam opposite 4 controls. For example: ♠ AQ6 ♥ 732 ♦ AQ976 ♣ J2. However, without those queens (♠ A62 ♥ 732 ♦ A9762 ♣ J2), you don’t want to be any higher than 3NT.

The solution is 3♠, Weak Relay, instead of 3♥. If Teller replies 3NT (no Super-Positive), you’re done.

Another major benefit that derives from Weak Relay is that we can often avoid a disastrous override of Asker's sign-off when Asker does not use Weak Relay.

Note that the Weak Relay comes up only on the more balanced hands (5-3-3-2, 5-4-2-2, 5-4-3-1, and 4-4-4-1). (There isn't room for Weak Relay when Teller bids past 3♦ to complete his shape.) Not so coincidentally, these are exactly the hand types where it is most important to be able to stop in 3NT with those aces and spaces hands—4 or 5 controls but no tricks. It all flows together.

Overriding a Sign-off in Weak Relay Sequences

When there is no Weak Relay available, Teller will override a sign-off when he has a Super-Positive. He needs to—Asker is expecting him to do so and will base his decisions upon that expectation.

But in auctions where Weak Relay is available, if Asker signs off Teller needs at least an extra queen to move. A Super-Positive is not enough—if it were enough for slam, Asker would have employed Weak Relay. So, in these circumstances, Teller needs a Super-Duper Positive to override—a hand that is nearly a slam drive facing a 1♣ opening. He should pass the sign-off unless he is at least a queen better than a Super-Positive, i.e.,

- 4 controls and 15+ HCP, or
- 5 controls and 13+ HCP, or
- 6+ controls

With a bare 5 controls, Teller doesn't override a sign-off when Weak Relay was passed over.

♠ KQ ♥ KQJ5 ♦ J52 ♣ AQ74

WEST	EAST
1♣	1♠
1NT	2♣
2♦	2NT
3♣	3♦
?	

1♠ shows hearts. 2♣ shows clubs. 2NT shows high-short. 3♦ shows a generic 5-4-3-1, so exactly 1=5=3=4. Asker knows that the fit is terrible. He has a Weak Relay available, but instead signs off with 4♦. Now, Teller knows that Asker has the worst hand possible, not even enough for a feeble Weak Relay. Teller will not override the sign-off unless he has a Super-Duper Positive. So, with ♠ 7 ♥ A10864 ♦ A93 ♣ K652, a Super-Positive which would normally be an override, Teller will just bid 4♥ and a dangerous 5♥ contract is avoided.

Further Inferences and Information Available

We've seen that Teller knows quite a lot when Asker uses the Weak Relay. First and foremost, he knows that he needs a very good hand to bid a slam (at least a Super-Positive).

But there's often quite a bit more that Teller can infer from Asker's choice of actions in Weak Relay sequences. For example, he knows that a sign-off without using Weak Relay (when Weak Relay was available) says that Asker holds the worst possible hand. Teller knows that a minimal Super-Positive isn't enough, since if it were, Asker would have used the Weak Relay instead of signing off. Thus, Teller shouldn't override with a minimal Super-Positive.

Take the following example from the USBF Senior Team Trials in June 2019. Kit Woolsey was East, Bart Bramley was West.

♠ K4	♠ A10852
♥ AK74	♥ 1083
♦ KQ74	♦ A6
♣ J52	♣ K64

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♦
3NT	Pass

1 ♥ shows spades. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 5=3=2=3. With a dead minimum and no 8-card fit Bart wasn't even worth a Weak Relay, so he hit the brakes with 3NT. Even though Kit had a normal override, on this auction he must pass. Even if a bit stronger he wouldn't override. He'd need at least a queen better than a Super-Positive to consider moving on. When Asker fails to use Weak Relay, he has the worst. As you can see, 3NT is far from cold, and anything higher would have been really bad news.

On the other hand, if Asker does use Weak Relay and signs off when Teller says, "no Super-Positive," it is an absolute sign-off. Teller doesn't have enough controls. He doesn't override, period. That said, Teller is expected to use common sense. For example, he wouldn't respect Asker's sign-off in game when he has 19 HCP, even though he has only 3 controls.

It's unlikely, but possible, for Asker to use Weak Relay, receive a "no Super-Positive" reply, and still continue to probe for slam. Obviously, this is a rare occurrence, since Asker normally uses Weak Relay only when he needs a Super-Positive for slam. But the Weak-Relay-then-slam-try approach could conceivably be the best route with a hand where Asker has determined that nothing else will work.

Asker might try this approach with a control-rich hand with good trumps, needing fillers from partner, but not in the trump suit; and needing 4 controls, but not a Super-Positive. With that sort of hand, it's likely that, if you take a normal Control Ask approach, you won't be able to follow with a slam try. For example, when Teller has 4 controls (the number you often need for slam), he will bid 4 ♣ and your slam try

is gone. (4♦ is now DCB, and four-of-a-major is just to play.) But, if you make an immediate slam try without making a Control Ask, partner may mis-evaluate because of poor trumps.

For example, you hold:

♠ KJ5 ♥ KQJ103 ♦ AKJ ♣ KQ

and you find partner with mirror distribution. To make a slam you need a perfecto. Obviously, you'll need to find 4 controls, but you'd also like to have a couple of queens to gin a slam and, if Teller doesn't have them, anything above 4♥ might be in jeopardy. Control Ask then DCB won't work—you'll get too high when he has the two bare aces. If you make an immediate slam try with 4♥, Teller will look at his xxxxx in hearts and say, "Ugh." But, if you start with Weak Relay and then make a slam try over 3NT, when Teller has that magic hand (♠ AQx ♥ Axxxx ♦ Qxx ♣ xx) he will jump up in his chair and say, "Eureka!," since in the context of what he has shown (no Super-Positive), his hand is the absolute best he can hold.

♠ ♥ ♦ ♣

♠ ♥ ♦ ♣

Weak Relay can also be helpful in choice-of-games sequences. Asker may acquire some extra information. Or, we may get to 3NT through the back door when Teller says, "No, I don't have a Super-Positive."

For example:

♠ KQ7 ♥ A75 ♦ QJ32 ♣ AQ4

WEST

EAST

1 ♣

1 ♥

1 ♠

2NT

3 ♣

3 ♦

3 ♠

3NT

Pass

1♥ shows spades. 2NT shows a one-suiter, middle-short. 3♦ shows generic 5-3-3-2, so exactly 5=3=2=3. Opposite 5 controls there could easily be a slam, but opposite 4 controls there won't be a slam and 3NT

is probably safer than 4♠. Asker uses 3♠ Weak Relay and Teller says, "no Super-Positive." Now Asker can pass knowing that Teller could hold something like:

♠ AJ654 ♥ J32 ♦ A5 ♣ 1073

where 4♠ is in jeopardy.

It's quite important for Asker to employ Weak Relay, instead of the normal Control Ask, when he knows there is no slam unless Teller has a Super-Positive. Not only does it give Teller important information, Weak Relay will give Asker more information when Teller does have 4 controls: he'll know about the extra HCP.

More importantly, when Asker makes the normal Control Ask instead of using Weak Relay, Teller can now draw the inference that Asker has some slam interest when Teller does not have a Super-Positive. If he didn't have interest, he would have used Weak Relay. This knowledge may permit Teller to bid over Asker's sign-off even after Teller has shown his controls. For example:

♠ K10952 ♥ AQ64 ♦ K73 ♣ 5

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	3 ♦
3 ♥	4 ♣
4 ♥	?

1♥ shows spades. 1NT shows hearts. 3♦ shows low-short, generic 5-4-3-1, so exactly 5=4=3=1. 4♣ shows 4 controls. Since Asker needs 4♦ for DCB, his 4♥ call is a sign-off. Normally, it would be an absolute command, since Asker knows how many controls Teller has. Here, however, Teller has the inference that Asker didn't make the Weak Relay call of 3♠ over 3♦. If his 4 controls and a working queen aren't sufficient for slam to be a possibility, Asker would have used Weak Relay instead of the normal Control Ask. In not using the Weak Relay, Asker is sending the message that less than a Super-Positive will be required for slam.

Therefore, Teller should override the sign-off.

When overriding a sign-off after having shown controls, Teller shows keycards, just in case we don't have enough. We're now out of relay and the auction can continue in a normal keycard sequence as appropriate. On this hand Teller should bid 4NT over the 4♥ sign-off showing 1 or 4 keycards.

Note that this situation differs from Teller's override of a sign-off when controls are not already known. In that case, if Teller overrides the sign-off he shows controls, starting with 4, and we are still in a relay sequence if the auction continues.

Weak Relay After 3 Clubs ESS

We'll discuss an optional treatment here, which you may or may not choose to adopt. (If you're using natural relay breaks, or your own coded relay breaks, you will probably find this particular treatment cumbersome or less useful, and can just skip this section.)

The short two-suiter with equal-short is a special case for the Weak Relay. Here, the final ESS call is 3♣ (presumed to show 5-4-2-2), so there is an extra step to play with. In addition to the normal Control Ask (3♦), Asker can bid either 3♥ or 3♠; so, it's possible to make use of the extra space to avoid getting past 3NT when Asker is nearly, but not quite, dead minimum.

The Weak Relay call after 3♣ ESS is 3♥. (3♦ would be the normal relay call asking for controls.) Teller's bids over the 3♥ Weak Relay are as follows:

- 3♠: No. Less than a Super-Positive
- 3NT: Yes. Super-Positive. 4 controls, 13+ HCP
- 4♣: 7-4-1-1, any number of controls
- 4♦: 5 controls
- 4♥: 6 controls
- And so on

Note that there is always the possibility of the Swan, the 7-4-1-1 hand, when the short two-suiter's last ESS call is 3♣ showing equal-short.

When Teller holds the Swan, his next call is 4♣, regardless of what Asker bids over 3♣.

Because of the extra space available after 3♣, Asker can also skip over the Weak Relay step (3♥) and bid 3♠. We can use this optional step to allow Asker to say that he's not at all serious. When 3♥ is Weak Relay, 3♠ would be a Very Weak Relay, i.e., a hand where there is no slam unless Teller has even better than a Super-Positive. He needs a Super-Duper Positive to bid higher than 3NT. This would require 15+ HCP and 5+ controls. In response to 3♠ Super-Weak Relay, Teller's bids are:

- 3NT: Less than a Super-Duper Positive
- 4♣: 7-4-1-1, any strength
- 4♦: 5 controls, at least one queen better than a Super-Positive
- 4♥: 6 controls
- And so on

In essence, the Very Weak Relay (when the ESS is 3♣) is like the 3NT signoff when the ESS is 3♦. With two Weak Relays available (i.e., when the ESS is 3♣), if Asker signs off in 3NT that is the absolutely worst hand possible. Teller should pass unless he has the 7-4-1-1 Swan hand or a virtual slam drive opposite a minimum 1♣ Asker. If Teller acts over the 3NT sign-off his bids are:

- 4♣: The Swan. 7-4-1-1, any strength
- 4♦: 5 controls, slam drive
- 4♥: 6 controls, slam drive
- And so on

Even when he is very weak, Asker should avoid making an immediate 4♦ Woolberry call over Teller's 3♣ ESS bid. Although he almost surely wants to sign off in four of a major with his dead minimum, Asker should employ the Very Weak Relay (3♠) and then bid 4♦ Woolberry over Teller's expected 3NT call. If Teller has a Super-Duper Positive, five of the major is probably safe, so Asker can live with the Death Response to 3♠.

When Weak Relay is Not Available

When Weak Relay is not available Teller is expected to override Asker's signoff whenever he holds a Super-Positive: 13+ HCP and 4+ controls, or any hand with 5 controls. Asker will be counting on the systemic Super-Positive override when he signs off, so Teller should not be looking for excuses to go low.

When Does Asker Choose Weak Relay?

Summarizing what we've seen in examining the Weak Relay, Asker will use the Weak Relay only when he knows that Teller needs to have a Super-Positive hand to produce a slam.

Following that basic principle will get you through most Weak Relay choices. But this can be a delicate decision. It may not be quite as simple as that sometimes. Asker might not want to use Weak Relay when his hand is too good. Or he may choose to forego Weak Relay when the information gleaned won't help him.

Take the following deal from a recent Australian championship. Karen McCallum was East and Axel Johannsson was West.

♠ A8652	♠ Q74
♥ AJ4	♥ 63
♦ AQ64	♦ J52
♣ 3	♣ AKJ86
WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♦
?	

1NT shows clubs. 2NT shows middle short. 3 ♦ show generic 5-3-3-2, so exactly 3=2=3=5. Axel knows that Weak Relay is a possibility, since if Karen doesn't have a Super-Positive we're done. He also knows that he needs at least 3 controls or there's no slam. If she has 4 or more controls and extras she will bid 4 ♣, and he is better off than with regular relay, in that he's found out that she has extras. But what can he do with

that information? He can't bid a slam over 4♣. It could be hopeless, particularly if partner has a lot of values in clubs. But he can't sign off—it's an absolute after Weak Relay, and there may yet be a slam.

Suppose Teller has the perfecto, ♠ KQx ♥ xx ♦ Kxx ♣ Axxxx. Slam still needs 3–2 spades and 3–3 diamonds. So, it might appear that he should use Weak Relay. But it won't really help with the final decision, as we saw above. And there's a true perfecto that isn't even a Super-Positive:

♠ KQx ♥ Kx ♦ KJx ♣ xxxxx

He won't find it with Weak Relay.

In this case, it's best to just relay with 3♥ (normal relay) and, even if you get 4 controls, sign off in 4♠. Teller knows that's not the worst hand—you would have signed off without asking for controls with the worst. So, Teller can still move with a Super-Positive and the spade queen. Or even with a bit less, like that perfect ♠ KQx ♥ Kx ♦ KJx ♣ xxxxx. That's part of the beauty of Weak Relay—when you don't use it you send the message that there may be a slam with less than a Super-Positive. And a sign-off is not an absolute after normal relay. Teller is still in the game.

♠ ♥ ♦ ♣

♠ ♥ ♦ ♣

In general, if there is any doubt in your mind about which way to go, Weak Relay or normal relay, or sign-off, ask yourself:

- “What do I need for slam?” and then, assuming that Teller holds that hand,
 - “What will he do after a Weak Relay?”
 - “What will he do after a sign-off?”
 - “What will he do after normal relay?”

The answers to these questions will lead you to the right path.

Relay Breaks

Asker is not required to relay after a positive response, but he will nearly always do so. Why not? Nearly every auction will benefit from one player knowing exactly what partner holds.

However, there are occasional times when Asker may not want to relay. The most frequent of these will be when Asker has a singleton or void in partner's first-shown suit and a strong suit of his own and doesn't want that irrelevant long suit to get in the way when he gets to DCB. (DCB sequences start with Teller's longest suit and progress to his shortest, so Asker always has this in mind when he's choosing a course of action.)

Asker always has the option to simply break the relay by bidding something other than the next step.

The relay break can be either natural or artificial. There are a variety of options available and different partnerships will make different choices.

We'll begin with the most frequent relay break.

Skip-a-Step

There are a number of times when Asker might wish to skip a relay step, usually because he doesn't need the information Teller will give him, but he still wants to continue relaying to gather other information. Most often, what he is looking for is a cheaper way to ask about Teller's controls. We've already seen an example of this above with the Weak Relay, which is a variation of Skip-a-Step.

Skip-a-Step is exactly that: Asker skips a step. It's used when Asker isn't interested in having Teller complete his shape-showing. And it can only exist when Teller's last call is 3♦ or lower. When 3♥ is Teller's last call there is no way for Asker to skip a step, since all calls from 3NT upwards are already defined.

Consider 3♣ showing 4-3-3-3 with a minor. Asker often doesn't care which minor Teller holds. He'd prefer to go straight to controls. So instead of bidding the next step to continue the relay (3♦), Asker may choose to skip over it and move on to one step above the normal relay step (in this case 3♥). Asker is merely skipping the final shape-showing

relay and moving on to the next item in the relay order, which would be controls. So, the skip to 3♥ is an immediate Control Ask.

For example:

♠ QJ5 ♥ K4 ♦ AQJ3 ♣ AKQ7

WEST	EAST
1♣	1♠
1NT	2♠
2NT	3♣
?	

1♠ shows hearts. 2♠ shows a one-suiter, either high-short or equal-short with high doubleton. 3♣ shows equal-short with high doubleton. Teller's shape is either 2=6=3=2 or 2=6=2=3. If Asker relays with 3♦, Teller's next call will clarify the exact shape. But Asker doesn't care which way Teller is 3-2 in the minors. He only wants to know about controls. Asker does best to skip a step and make an immediate Control Ask with 3♥.

This early Control Ask may save a step or two later on for DCB. Say, for example, that Teller is 2=6=2=3 with 4 controls. Without Skip-a-Step the auction would proceed:

WEST	EAST
1♣	1♠
1NT	2♠
2NT	3♣
3♦	3♥
3♠	4♦

3♥ shows 2=6=2=3. 4♦ shows 4 controls.

But, using Skip-a-Step the auction will be:

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♥	4 ♣

3 ♣ shows either 2=6=2=3 or 2=6=3=2. 3 ♥ (skipping the final ESS sequence) asks for controls. 4 ♣ shows 4 controls. It's only one step saved, but that one little step can make quite a difference when Asker is searching for jacks for a grand slam.

Ties Go High

For DCB purposes, the order in which Teller scans his suits for controls is determined by the lengths which Teller has shown—longest suit first with ties going to the higher-ranking suit. But using Skip-a-Step Teller's exact lengths are not fully known, as in the above example, where spades are known to be a doubleton, while either minor might be a tripleton. In this case, Teller is assumed to be 3–3 in the minors for DCB purposes. Thus, Teller's distribution is assumed to be 2=6=3=3 for DCB, and he scans, in order, hearts, diamonds, clubs, and finally spades (Ties Go High).

Early Skip-a-Step

Skip-a-Step for an early Control Ask is usually employed on hands where Teller is known to be balanced, generic shape is known, and the final bit of shape clarification is unneeded, such as in the example above. But Skip-a-Step can occasionally occur earlier, before Teller's generic shape is fully known. For example:

♠ AKJ52 ♥ KQ4 ♦ J84 ♣ QJ

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2NT
?	

1NT shows 5+ clubs. 2♦ shows 4+ diamonds. 2NT shows high-short with exactly four diamonds. Asker probably doesn't care about the rest of Teller's shape. He's going to play in notrump. He needs 6 controls for slam to be better than a finesse, and even that might not be enough. The danger with continuing to relay is that Teller's next call may get things uncomfortably high. For example, suppose Teller's shape is 0=3=4=6. If Asker relays with 3♣ Teller will bid 3♠, and Asker will be stuck. He can't afford to ask for controls with 4♣, since we may already be too high. Unless there are 6 controls there's no slam, so he'll have to give up in 3NT (and risk Teller bidding on with a Super-Positive with fewer than 6 controls). A dreadful mess!

It's far better for Asker to employ Skip-a-Step and break into an early Control Ask now with 3♦. The response won't be higher than 3NT unless Teller has 5 or more controls. If Teller has 5 controls, he will bid 4♣, and Asker can sign off at 4NT (not to be confused with Early Train to Queensland, because Teller hasn't completed his shape-showing). If Teller has 6 or more controls, he will show them with 4♦, and Asker can do whatever additional probing seems appropriate.

When 3♥ is defined as the Skip-a-Step break to the early Control Ask, as it is on balanced hands where Teller has a 4-3-3-3 hand and on one-suiters where Teller has equal-short, then 3♠ would be defined as the Weak Relay.

The lowest Skip-a-Step is, in theory, 1NT after a 1♥ positive response (showing spades). Opener could rebid 1NT with a balanced minimum and a doubleton spade to say, "You're on your own." In practice we would probably not do this; relaying is generally better, even when the 1♣ opener has the worst dead minimum.

In practice, we have decided to not use the Skip-a-Step break below 2♠. It doesn't really make much sense, and it would get in the way of the more important coded and/or natural relay breaks, which we'll be looking at shortly.

Skip-a-Step or Weak Relay?

The reader may be concerned that there could be some confusion as to whether Asker's skip is defined as Skip-a-Step or Weak Relay. It's actually fairly easy to distinguish them from one another.

Weak Relay occurs only when shape has been completed, and only when the final ESS call was 3♣ or 3♦ (i.e., only when there is an extra step available at the 3-level.)

Skip-a-Step occurs when shape has not been completed—Asker may skip over the normal relay step and move on to asking for controls without completing the shape-showing phase of the auction.

Natural Relay Breaks

Natural relay breaks are pretty straightforward. Asker can simply skip over the relay step and bid his own long suit. Any call by Asker other than the next-step relay is defined as natural.

Asker may break out of relay for any one of a number of reasons, the most frequent being shortness, usually in Teller's known suit. Less common is the hand where Asker wants to avoid wrong-siding the final contract with an inconvenient response from Teller. Natural auctions can fare better in these, and other, circumstances, particularly when Asker is headed to 3NT and wants Teller's opinion.

That said, the natural relay break is probably most beneficial when Asker wants an opinion before launching into RKC, or Exclusion, something he can't achieve with any certainty if he continues to relay.

Teller responds to the relay break with:

- Next step: Slam negative. Maximum of 2 controls.
- All else: Slam positive, natural. Either 3+ controls or a good fit and shape. Jumps are splinters in support of Asker's suit.

A partnership will want to agree on the follow-ups when Asker breaks the relay. Possibilities are:

- We're out of relay and into a natural auction. Normal partnership slam-bidding principles apply
- Exclusion follow-ups by Asker
- Return to Control Asks, Woolberry and DCB after Asker hears Teller's opinion on slam suitability

If you use natural relay breaks you will want to agree on when, and if, you use Weak Relay and Skip-a-Step. An agreement which has proven to be effective is:

- Weak Relay can only be 3♠, when shape is known and 3♥ would be the control ask.
- Skip-a-Step applies only when Teller is one step away from completing his shape and his last call was 3♣. The Skip-A-Step call is then always 3♥.
- All other relay breaks occur before shape is known and are natural.

Examples

♠ AK10643 ♥ A93 ♦ K7 ♣ Q6

WEST	EAST
1♣	1♠
1NT	2♦
2♥	3♣

1♠ is hearts. 2♦ is diamonds, not a Reverser. 3♣ is a generic 5422, so exactly 2=5=4=2. At this point, Asker doesn't know if we want to play in spades or hearts and doesn't have a way to find out. He'll have to make his best guess.

If Teller holds something like:

♠ Q7 ♥ K9542 ♦ QJ106 ♣ J3

It's important to play in 4♠. But if Teller's hand is

♠ 72 ♥ KQ953 ♦ QJ106 ♣ J3

you must play in 4♥.

Asker could just go with the 5–2 odds that Teller holds the heart queen, not the spade queen, and play in 4♥ (and if he holds both it doesn't matter).

But guessing isn't what we want to be doing in KK Relay, unless we have to. The solution is for Asker to break the relay and get an opinion from partner. Asker could break to 3♠ and then follow with 4♥, suggesting a minimum with this shape, allowing responder to make the final decision. (Remember that Very Weak Relay does not apply if you are using natural relay breaks.) In fact, Asker might have decided to break to 2♠ over 2♦ for exactly this reason. It probably doesn't matter which way he chooses to go, so long as he doesn't continue relaying, leaving himself with an impossible guess.

♠ AQ87 ♥ AKQJ1093 ♦ K6 ♣ —

WEST

EAST

1♣

2♣

?

After the positive response (showing 5+ diamonds), grand slam prospects are excellent. Opener doesn't want to risk losing his Exclusion Blackwood call, nor does he want to wrong-side 6♥ if the ♦A is missing. If he carries on with the normal relay, he risks a 3♥ or higher response from Teller, which would get in the way of his plans. By breaking the relay with 2♥ immediately (natural) he can follow with a jump-shift in clubs, which is defined as Exclusion Blackwood (showing a void and asking for keycards excluding the ace of the void suit).

WEST

EAST

1♣

2♣

2♥

2NT

4♣

A WORD OF CAUTION

We've found that natural relay breaks don't work out well much of the time. Be sure you know exactly why you're breaking the relay and exactly how you expect the auction to develop. Know your goal and

don't lose sight of the big picture. You may find that you want to relay after all.

Karen McCallum and Axel Johannsson faced the following problem in a BBO vugraph match in August 2019:

♠ AK97542 ♥ 10 ♦ Q ♣ AK109

Karen opened 1♣ and heard 2♦ (balanced game-force, usually 9–11). It was easy to see that an eventual Control Ask could get nowhere: she needed to know about aces, not kings, as well as the black queens. There wasn't likely to be enough room. It was tempting to bid 2♠ now and get into a natural auction. But the West hand is not a good candidate for a relay break, with a suit where you need either a fit or shortness. You could be making 6♣ facing xx in spades and four clubs. Or 6♠ facing four spades and xx in clubs. You need to know responder's shape.

Karen anticipated problems with relay, of course. Very shapely hands, where you need aces, not kings, are often difficult, unless you know the trump suit at a low level. But she chose to continue the relay just to see where it would take her. She got good news, but all was not a bed of roses yet.

WEST	EAST
1♣	2♦
2♥	2♠
2NT	3♥
?	

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♥ shows doubleton heart, so exactly 4=2=3=4. Nice. But how do you get to the club queen? If you relay with 3♠ to find controls, you'll start your DCB sequence at 4♣ or higher. You know that Teller will say "No" in both spades and clubs, which will take you to 5♣ or higher and you won't have room to probe for both black queens and still stop in 5♠.

Making a slam try with 5♣ appealed. Partner would probably go with an ace and the club queen? Most of the time. But it lacks certainty. In this case, Axel understandably rejected with an unattractive minimum and a cold slam was missed facing:

♠ 10863 ♥ J5 ♦ AJ8 ♣ QJ53

The solution, found in the post-mortem, is to bid 4♣ over 3♥. Woolberry, forcing 4♦ for RKC somewhere. Then follow with 4♠, RKC in clubs(!), Teller's second-longest suit. In this case Axel would show 1 or 4 keycards, then the queen-ask follow-up gets a "Yes" and Karen knows that 6♠ is cold on 3–2 clubs. Good enough to bid it.

Sometimes it's easy to lose yourself in the relay and forget to use your noodle. If you simply transfer standard bidding principles to the relay sequences you can solve most problems one way or another. In this case, you've found a good spade fit, so you just need to use Blackwood for the club queen and an ace. As you would want to do if you had opened 1♠ and partner had shown a 4-card raise of any strength. Using KK Relay, you can simply bid RKC in clubs, without the maneuvering you might need to use in your Standard methods. But you're in more or less the same position as those who started with 1♠–2NT. Except you have an easy way to ask for keycards in clubs.

Don't lose sight of the forest for the trees.

Splinter Breaks

A useful relay break that has been adopted by a number of KK Relayers is the Splinter Break, which allows Asker to show his short suit and turn over captaincy to Teller. The Splinter Break is most often used to initiate a choice-of-games sequence; thus, Asker is expected to be fairly minimum.

Splinter Breaks will occur in the following sorts of auctions:

- Immediately after 1♣–2♦ (showing a balanced hand in the 9–11 range), any new suit by opener, other than the relay step, shows shortness, without extras, and probably no 4-card major. Opener is asking responder to take over, because responder is better placed to know if we should be playing in 3NT.
- Similarly, immediately after 1♣–2♠+ (showing a balanced hand in the 12–14 range), opener's break to a suit shows shortness,

and is presumed to be initiating a choice-of-games auction with shortness, minimal values, and probably no 4-card major.

- Immediately after Teller introduces a new suit, Asker's jump-shift shows shortness with good support and asks Teller to take over and judge our level based upon his holding in the short suit.

For consistency, Asker uses the normal high-to-low coding to show his shortness. For example:

♠ AK2 ♥ 3 ♦ KQJ32 ♣ QJ83

WEST	EAST
1 ♣	2 ♦
?	

Responder shows 9–11 balanced. With no major, 3NT is looming large on opener's horizon and responder's exact shape probably isn't very important; what opener really wants to ask is, "How good are your hearts?" He can best do that, below 3NT, by showing his heart singleton and allowing responder to make the choice-of-games decision. Opener skips over the relay step, 2♥, and bids 2NT, showing heart shortness. (Shortness is coded high-to-low: spades, hearts, diamonds, clubs.) At this point, responder will have quite a good picture and will know what to do.

Another way to break relay, better but more complex, is to define Asker's steps quite specifically, as follows:

Splinter Control Ask

Suppose you pick up:

♠ — ♥ 8752 ♦ AKQ4 ♣ AKJ43

And the auction starts:

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
?	

1♥ shows spades. 1♠ shows hearts. Trouble looms. If you continue with normal relay, it might go something like:

WEST	EAST
2♣	3♦
3♥	3NT
4♣	4♦
?	

3♦ shows low-short, generic 5-4-3-1, so exactly $5=4=3=1$. 3NT shows 3 controls. 4♦ is {“No” in spades}. Now what? You could be cold for a grand in hearts if partner has AKQ of hearts. On the other hand, if partner’s “No” in spades consists of the AK of spades, 4♥ may be your last plus score. To make matters worse, there is no possible way, if you continue relaying, to find out which he has, not to mention that 4♦ is the Death Response for playing in 4♥. What a nightmare.

The solution to this dilemma is for Asker to break out of relay, using bids other than the next step (relay) to show a singleton or void, so that he can target the information he needs. This relay break (a variety of Skip-a-Step) is known as the Splinter Control Ask, because it asks Teller for specific control information outside Asker’s short suit.

Note that after he breaks the relay, Asker will not be able to find out anything more about Teller’s shape, so the Splinter Control Ask should be utilized only when the rest of Teller’s shape doesn’t matter.

When Teller’s last call is 2♥ or lower, Asker’s bids have the following meanings:

- Step 1: Normal relay
- Step 2: Initiates unspecified Void Control Ask
- Step 3: Initiates unspecified Singleton Control Ask
- Step 4 and higher: Natural relay breaks (as described above), structured in any way a partnership sees fit.

After Asker breaks relay to show an unspecified shortness, Teller must bid the next step to allow Asker to clarify which is the short suit. Asker then shows his shortness using high to low coding. Thus:

- Step 1: Spade shortness
- Step 2: Heart shortness
- Step 3: Diamond shortness
- Step 4: Club shortness

Teller now continues by showing his number of controls. There are a couple of small and necessary deviations from the normal control response structure:

- When Asker has shown a void, Teller does not count anything in the void suit. Since all of Teller's strength might be in that suit, it is quite possible for Teller to have no controls outside of the suit. Consequently, Teller does not show controls in the normal manner. His responses are slightly modified, as follows:
 - Step 1: 0 controls
 - Step 2: 1 control
 - Step 3: 2 controls
 - Step 4: 3 controls
 - And so on
- When Asker has shown a singleton, Teller does not count the king in the singleton suit. The ace still counts as 2 controls. The responses are the same as normal control responses:
 - Step 1: 0–2 controls
 - Step 2: 3 controls
 - Step 3: 4 controls
 - And so on
- In either case (Void Control Ask or Singleton Control Ask), if Teller has a singleton king in a side suit, he counts the king as 1 control. This modification is necessary, since Asker doesn't know about Teller's singleton.

Examples

♠ 82 ♥ K54 ♦ 63 ♣ AQ9865

WEST	EAST
1 ♣	1NT
2 ♦	2 ♥
3 ♦	?

1NT show clubs. Asker's 2♦ call shows an unspecified void. Teller must relay with 2♥ to pinpoint the void. 3♦ is the fourth step, so asker is showing a club void and asking for the number of controls outside of clubs. Teller has 1 control outside of clubs, so his bid is 3♠.

- If Asker had bid 2♠ ("Step 1," spade void), Teller would show 3 controls by bidding 3♥.
- If Asker had bid 2NT ("Step 2," heart void), Teller would show 2 controls by bidding 3♥.
- If Asker had bid 3♣ ("Step 3," diamond void), Teller would show 3 controls by bidding 3NT.

♠ A854 ♥ 732 ♦ KQ653 ♣ K

WEST	EAST
1 ♣	1 ♥
2 ♣	2 ♦
2NT	?

1♥ shows spades. Asker's 2♣ call shows an unspecified singleton ("Step 3"). Teller must bid 2♦ now, to identify the singleton. 2NT is the third step, so Asker is showing a diamond singleton and asking for Teller's number of controls, not counting the king of diamonds. Teller has 3 controls without counting the king of diamonds. (Remember that a singleton king in any other suit counts as a control in a Singleton Control Ask auction.) So, Teller's bid is 3♦ showing 3 controls (3♣

would show 0–2 controls). If Asker had bid 2♥, showing a singleton spade, Teller would bid 3♣ showing 4 controls, since the ace of the singleton-suit still counts as 2 controls.

When Teller's last bid is 2♠ or higher, there is insufficient room for the Splinter Control Ask. The structure is modified as follows:

- When Teller's shape has not been completed:
 - Step 1: Normal relay
 - Step 2: Skip-a-Step Control Ask
 - Higher calls: Natural relay breaks, as described above
- When Teller's last bid completes his shape, then:
 - Step 1: Normal Control Ask
 - Step 2/3 (if below 3NT): Weak Relay (or Very Weak Relay)
 - No natural relay breaks

Let's look back at our first example above:

♠ — ♥ 8752 ♦ AKQ4 ♣ AKJ43

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
?	

As we've seen, normal relay is likely to leave Asker with an insoluble DCB problem: are Teller's controls in spades or hearts? After a 3-control response, a "No" in spades could be the AK in spades (his first-shown suit), or nothing in spades (therefore, AK in hearts). And there's no way to find out which.

But, using the Splinter Control Ask, it's not a problem at all:

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♦	2 ♥
2 ♠	?

1 ♥ shows spades, 1NT shows hearts. Asker knows that there is a slam in hearts, possibly even a grand, if Teller holds control cards in hearts, but no slam if they're in spades, so he skips a step to the first Splinter Control Ask step, 2 ♦, showing a void somewhere. Teller is forced to rebid 2 ♥ so that Asker can clarify. 2 ♠ shows a spade void and Teller must say how many controls he has outside the spade suit (starting with zero).

If Teller now rebids 2NT (the first step) showing no controls outside the spade suit, Asker can comfortably sign off in 4 ♥, knowing there's no slam, by bidding 4 ♦ Piss Off and passing the forced 4 ♥. But, if Teller rebids 3 ♣, showing 1 control outside spades, it must be the heart king and opener will continue to explore slam possibilities.

Similarly, if Teller shows 2 or 3 controls outside spades (with 3 ♦ or 3 ♥), Asker knows that they must be in hearts, and he will carry on with his investigation.

Simple Control Ask

Occasionally, a 1 ♣ opener would prefer to forget all about relaying and just ask for controls immediately. KK Relay doesn't have a Control Ask per se. We don't need it! Asker can simply utilize the Splinter Control Ask to get the information he wants.

When he wants to get to controls quickly, Asker can pick a suit where he knows Teller has no controls and ask for controls outside that suit. In effect, he can fake shortness. The Splinter Control Ask is the perfect tool. Note that this could be done either in a suit where you have AK (use the Void Control Ask) or a suit where you just have the king (use the Singleton Control Ask).

After a Splinter Control Ask

When the Splinter Control Ask sequence has been completed, the bidding carries on in the same manner as in any other relay auction, with the proviso that Teller may not have completed his shape, so the rest of his suit lengths will remain unknown.

We've completed the Control Ask, so the next stage is DCB. If Teller has not completed his shape, he will treat any known suits as his longest suit(s), and any suit(s) that are unknown as equal-length shorter suits with ties going high, as usual.

However, we treat Asker's known short suit a bit differently when we get to DCB. That suit is now considered Teller's shortest suit for DCB purposes (even if Teller has previously shown length in that suit); i.e., that suit is treated as if Teller had a singleton or void in the suit. So, Teller does not include Asker's short suit in his scans.

For example, if the bidding has been:

WEST	EAST
1 ♣	1 ♠
2 ♣	2 ♦
2NT	?

1 ♠ shows hearts. 2 ♣ is "Step 2," a Void Control Ask. 2NT is "Step 3," diamond void, so Teller's controls will be shown outside of diamonds. When we finish that process and carry on to DCB, Teller will be assumed to be 3=4=0=3 for DCB purposes. This is because all he has shown of his shape is 4+ hearts. So, hearts are his longest suit and diamonds are his shortest suit since Asker is void in diamonds. His other two suits, spades and clubs, are presumed to be of equal length and shorter than hearts. Thus, the order of his suits for DCB has been determined by the rules: hearts, spades, clubs, with diamonds not being shown.

Note also that, since the diamond suit is assumed to be a void, Teller doesn't show control cards in clubs; when we have a known short suit we scan only two suits.

Examples

WEST	EAST
1 ♣	1 ♠
2 ♣	2 ♦
2 ♠	3 ♣
3 ♦	?

1 ♠ shows hearts. 2 ♣ is “Step 2” and initiates the Void Control Ask. 2 ♠ is a heart void. 3 ♣ is 1 control outside of hearts. 3 ♦ is DCB. Teller scans in order spades, diamonds, clubs, with hearts not scanned at all, and clubs not scanned for aces and kings.

WEST	EAST
1 ♣	1 ♠
2 ♣	2 ♦
2NT	3 ♦
3 ♥	?

1 ♠ shows hearts. 2 ♣ initiates the Void Control Ask. 2NT is a diamond void. 3 ♦ is 1 control outside of diamonds. 3 ♥ is DCB. Teller scans in order hearts, spades, clubs, with diamonds not scanned at all, and clubs not scanned for aces and kings.

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2NT	3 ♣
3 ♥	3NT
4 ♣	?

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 2NT initiates Void Control Ask. 3 ♥ is heart void. 3NT is 1 control outside of hearts. 4 ♣ is DCB. Teller scans in order diamonds, spades, clubs, with hearts not scanned at all and clubs not scanned for aces and kings.

ASKER'S OTHER OPTIONS

WEST	EAST
1 ♣	1NT
2 ♥	2 ♠
3 ♥	3NT
4 ♣	?

1NT shows clubs. 2♥ initiates Singleton Control Ask (the 3rd step). 3♥ is singleton club (the 4th step). 3NT is 3 controls, not counting the king of clubs. 4♣ is DCB. Teller scans in order spades, hearts, diamonds, with clubs not scanned and diamonds not scanned for aces and kings.

♠ ♥ ♦ ♣ ♠ ♥ ♦ ♣

Let's see how the auction might go with the first hand we looked at above:

♠ — ♥ 8752 ♦ AKQ4 ♣ AKJ43

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♦	2 ♥
2 ♠	

1♥ shows spades. 1NT shows hearts. Asker's 2♦ is "Step 2," an unspecified void. 2♥ is forced. 2♠ is "Step 1," so Asker has shown a spade void and is asking for Teller's number of controls outside the spade suit, starting at zero.

Since Teller can't have any relevant controls other than in hearts:

- If Teller has neither ace nor king of hearts he will bid 2NT (zero controls outside spades). Asker bids 4♦, forcing 4♥, and that's that.
- If Teller has one working control (it must be the heart king, of course), he bids 3♣. Asker can now DCB with 3♦. For DCB purposes Teller is assumed to be 0=4=3=3 and will be scanning, in order, hearts, diamonds, clubs, skipping the spade suit (Asker's

known void). And, of course, Teller won't scan the third suit for aces and kings when there is a short suit (in this case the short suit is opener's spade void). So, Teller will scan only hearts and diamonds until we get to Queensland.

In response to 3♦, DCB: Teller has the king of hearts, so that's the first "Yes." He will then scan for the queen of hearts (since he's known to have no other controls he goes straight to Queensland). If he doesn't have the heart queen, he bids 3♠ {"Yes" in hearts, "No" in hearts [no queen]}, and Asker bids 4♦ relay to 4♥ for sign-off.

However, if Teller does have the queen of hearts, he will bid 3NT {"Yes" in hearts, Yes in hearts [queen], "No" in diamonds [no queen]}. Asker then bids 4♣ DCB, and Teller scans for the queen of clubs. Note that even if Teller happens to have a singleton club queen he shows it, since Asker doesn't know whether or not it's a singleton (Teller has three clubs for DCB purposes).

The next scan will be for the jack of hearts, and if Asker finds it, he will be in slam. The whole auction might be:

♠ — ♥ 8752 ♦ AKQ4 ♣ AKJ43

WEST	EAST
1♣	1♥
1♠	1NT
2♦	2♥
2♠	3♣
3♦	3NT
4♣	4♦
4♥	4NT
6♥	Pass

1♥ shows spades. 1NT shows hearts. 2♦ shows an unspecified void. 2♥ asks for the void. 2♠ shows a spade void. 3♣ shows 1 control outside of spades. 3♦ is DCB. 3NT is {"Yes" in hearts, "Yes" in hearts [queen], "No" in diamonds [no queen]}. 4♦ is {"No" in clubs [no queen]}. 4NT is {"Yes" in hearts [jack], "No" in diamonds [no jack]}. Teller holds the ♥ KQJx (or longer) and that's all Asker needs to know to bid 6♥ with confidence.

- If Teller has the heart ace, he bids 3♦ (2 controls outside spades), and if he has AK in hearts he bids 3♥ (3 controls outside spades). Asker can then use DCB, as above, to find out exactly what Teller's heart holding is and decide the final contract.

Why Use a Splinter Control Ask?

As we've seen above, the Splinter Control Ask is most often used to help Asker focus in on the control information he needs, by eliminating a suit altogether or eliminating a useless king from the DCB scans.

The Splinter Control Ask can also be used when a potential ambiguity is visualized, which is judged to be more important than getting Teller's exact shape. For example:

♠ AKQ52 ♥ AQJ84 ♦ 82 ♣ 8

WEST	EAST
1♣	1♠
1NT	2♦
?	

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. Asker has two "empty" suits, which could spell trouble down the road. If Asker takes a normal relay, one might picture the auction going something like:

WEST	EAST
1♣	1♠
1NT	2♦
2♥	2NT
3♣	3♦
3♥	4♣
4♦	4♠
?	

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. 2NT shows high-short. 3♦ shows generic 5-4-3-1, so exactly 1=5=4=3. 4♣ shows 4 controls. 4♠ is {"Yes" in hearts, "No" in diamonds}. Now Asker has a blind guess. Partner has either AK of diamonds or AK of clubs, and

it is impossible to find out which. In practice Asker will gamble out the slam since Teller has more diamonds than clubs and so is more likely to have his AK there, and there is always the possibility of a favorable lead. However, it would be better to be sure.

With Teller having 5+ hearts and 4+ diamonds, the rest of his shape is unlikely to make a difference, so this hand is a good candidate for the Singleton Control Ask. If Teller had the AK of clubs along with his king of hearts, the bidding would go:

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2NT	3 ♣
3NT	4 ♦
4 ♥	4NT
5 ♥	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 2NT initiates Singleton Control Ask. 3 ♣ asks singleton. 3NT is singleton club (not a signoff!) and asks for controls not counting the king of clubs. 4 ♦ shows 3 controls not counting the king of clubs. 4NT is {"Yes" in hearts, "No" in diamonds}. Asker will know that Teller doesn't have AK of diamonds since that would be 4 controls, so he must have the club ace and the heart king, with no control in diamonds. Asker will sign off. However, if Teller had king of hearts and ace of diamonds he would have bid 4NT over 4 ♦ {"Yes" in hearts, "Yes" in diamonds, "No" in hearts [no queen]}, and Asker would be happy to bid the good percentage slam knowing that we're not off 2 top tricks. Of course, if Teller had AK of diamonds and king of hearts he would have bid 4 ♦ over 3 ♠, showing 4 controls not counting the king of clubs, and Asker would have an easy slam bid, since Teller would have to have a minor-suit ace and either the ace or the king of diamonds.

Note that the relay break to the Splinter Control Ask should not be used randomly just because Asker has a singleton or a void. On most hands, Teller's exact distribution is more important and Asker will relay normally. The break to the Splinter Control Ask should be used only when Asker really doesn't care about the rest of Teller's distribution

and there is a serious danger of an ambiguity with the DCB responses if Asker takes the normal path.



Any or all of the suggested relay breaks can be used in conjunction as a partnership chooses, though some work together better than others. All of the conventional relay breaks discussed can be used together: Splinter Control Ask, Weak Relay, Very Weak Relay, Skip-a-Step, and Fast Train to Queensland. This is what Kit does in his relay partnerships.

Natural relay breaks can be combined with any of these as a partnership desires, but clear rules must be established. Natural relay breaks work very well with Weak Relay, Skip-a-Step, and Early Train to Queensland, provided you have clear rules about when these conventional relay breaks apply. (See earlier section on natural relay breaks.) This is Karen's preference in her partnerships.

You could use both natural relay breaks and Splinter Control Asks by defining the level at which each would apply. For example, your partnership could decide that if Teller's last answer was 2♥ or lower Splinter Control Asks apply, and above 2♠ breaks are natural. (With the exceptions of Weak Relay, Skip-a-Step, and Early Train to Queensland, as noted above.)

ASKER'S OTHER OPTIONS QUIZ

You are Teller. Interpret Asker's last call and determine your response. Assume you are using early entry to Queensland, Weak Relay, Skip-a-Step, and Splinter Control Ask.

1. ♠ KQ85 ♥ 7 ♦ A9642 ♣ K75

WEST

1 ♣

1 ♠

2 ♠

3 ♣

3 ♠

EAST

1 ♥¹

2 ♥²

2NT³

3 ♦⁴

?

1. Spades

2. Diamonds, Reverser

3. High-short

4. Generic 5-4-3-1, so exactly 4=1=5=3

2. ♠ K ♥ AQ9542 ♦ A73 ♣ 854

WEST

1 ♣

2 ♣

2NT

EAST

1 ♠¹

2 ♦²

?

1. Hearts

2. Asks void

3. ♠ A75 ♥ — ♦ KQ8762 ♣ Q864

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2 ♥ ²
2 ♠	3 ♠ ³
4 ♣	4 ♥ ⁴
4NT	?

1. Diamonds
2. Clubs
3. Low-short, generic 6-4-3-0, so exactly 3=0=6=4
4. 3 controls

4. ♠ A854 ♥ K93 ♦ J85 ♣ KQ2

WEST	EAST
1 ♣	2 ♠ ¹
2NT	3 ♣ ²
3 ♠	?

1. 12–14 balanced, 2 suits same color or 4-3-3-3 with a 4-card major
2. 4-3-3-3 with a 4-card major

5. ♠ K32 ♥ A ♦ Q43 ♣ KQ8752

WEST	EAST
1 ♣	1NT ¹
2 ♥	2 ♠ ²
2NT	3 ♦ ³
3 ♥	?

1. Clubs
2. Asks singleton
3. 3 controls not counting the king of spades

6. ♠ A2 ♥ K5 ♦ AQ8754 ♣ 982

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2 ♠ ²
2NT	3 ♣ ³
3 ♦	3 ♥ ⁴
3 ♠	4 ♥ ⁵
4NT	?

1. Diamonds
2. One-suiter, high-short or 6-3-2-2 with high doubleton
3. 6-3-2-2 with high doubleton
4. 2-3 in rank order of other suits, so exactly 2=2=6=3
5. 5 controls

7. ♠ KQ9832 ♥ A5 ♦ 74 ♣ Q63

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♠ ²
2NT	3 ♣ ³
3 ♥	?

1. Spades
2. One-suiter, high-short or 6-3-2-2 with high doubleton
3. 6-3-2-2 with high doubleton

8. ♠ A543 ♥ 98 ♦ AJ854 ♣ K3

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♥ ²
3 ♣	3 ♦ ³
4 ♣	?

1. Spades
2. Diamonds, Reverser
3. Asks singleton

Now you are Asker. Determine what you know about Teller's hand so far and decide on your next action and follow-up as much as possible.

9. ♠ KQ32 ♥ K2 ♦ KJ107 ♣ AQJ

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
?	

10. ♠ Q7532 ♥ AK5 ♦ A32 ♣ KQ

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
?	

11. ♠ — ♥ AQ975 ♦ KJ85 ♣ AQ72

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
?	

12. ♠ A2 ♥ KJ85 ♦ KJ3 ♣ AQ42

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♣
?	

13. ♠ 8 ♥ AKQJ96 ♦ Q75 ♣ AKJ

WEST	EAST
1 ♣	2 ♦
?	

14. ♠ A32 ♥ K852 ♦ K7 ♣ AKQ2

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	3 ♦
?	

15. ♠ K2 ♥ KQ10 ♦ AJ76 ♣ KJ93

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣
?	

16. ♠ — ♥ KQ3 ♦ AQJ10975 ♣ AQ2

WEST	EAST
1 ♣	1 ♥
?	

ANSWERS

1. ♠ KQ85 ♥ 7 ♦ A9642 ♣ K75

WEST

1 ♣

1 ♠

2 ♠

3 ♣

3 ♠

EAST

1 ♥¹

2 ♥²

2NT³

3 ♦⁴

?

1. Spades

2. Diamonds, Reverser

3. High-short

4. Generic 5-4-3-1, so exactly 4=1=5=3

3♠ is Weak Relay, since 3♥ would be the Control Ask. You have 4 controls, but only 12 HCP, and no reason to upgrade. Therefore, you must bid 3NT.

2. ♠ K ♥ AQ9542 ♦ A73 ♣ 854

WEST

1 ♣

2 ♣

2NT

EAST

1 ♠¹

2 ♦²

?

1. Hearts

2. Asks void

2♣ initiates Void Control Ask, unspecified void, and 2NT shows a diamond void. You show controls, starting at zero, not counting anything in diamonds. The king of spades is counted as a control even though it is a singleton, since partner doesn't know that it is a singleton. This means you have three working controls, so your bid is 3♠. If partner continues with DCB, your order of scanned suits is hearts, spades, clubs. In addition, 4♥, 5♥ and 6♥ bids by partner are eligible for DCB even though you have 6 hearts, since partner doesn't know you have 6 hearts.

3. ♠ A75 ♥ — ♦ KQ8762 ♣ Q864

WEST	EAST
1 ♣	2 ♣ ¹
2 ♦	2 ♥ ²
2 ♠	3 ♠ ³
4 ♣	4 ♥ ⁴
4NT	?

1. Diamonds
2. Clubs
3. Low-short, generic 6-4-3-0, so exactly 3=0=6=4
4. 3 controls

You have shown only 3 controls, so 4NT is not an early entry into Queensland. It is a sign-off, and you must respect this and pass.

4. ♠ A854 ♥ K93 ♦ J85 ♣ KQ2

WEST	EAST
1 ♣	2 ♠ ¹
2NT	3 ♣ ²
3 ♠	?

1. 12-14 balanced, 2 suits same color or 4-3-3-3 with a 4-card major
2. 4-3-3-3 with a 4-card major

3 ♥ would have been Skip-a-Step Control Ask. This makes 3 ♠ Weak Relay. You have 4 controls and 13 HCP, so your bid is 4 ♣.

5. ♠ K32 ♥ A ♦ Q43 ♣ KQ8752

WEST	EAST
1 ♣	1NT ¹
2 ♥	2♠ ²
2NT	3♦ ³
3 ♥	?

1. Clubs
2. Asks singleton
3. 3 controls not counting king of spades

2♥ initiates Singleton Control Ask and 2NT shows a singleton spade. You respond as to a normal Control Ask, but do not count the king of spades. 3♥ is DCB. Your scan order is clubs, hearts, diamonds, since all partner knows about your hand is that you have clubs. In addition you do not scan spades, treating it as a singleton since partner has a singleton. Which means you don't scan clubs, your third-longest suit, for aces and kings. You have {"Yes" in clubs, "Yes" in hearts, "Yes" in clubs [queen], "No" in hearts [no queen]}, so your bid is 4♦.

6. ♠ A2 ♥ K5 ♦ AQ8754 ♣ 982

WEST	EAST
1 ♣	2♣ ¹
2 ♦	2♠ ²
2NT	3♣ ³
3 ♦	3♥ ⁴
3 ♠	4♥ ⁵
4NT	?

1. Diamonds
2. One-suiter, high-short or 6-3-2-2 with high doubleton
3. 6-3-2-2 with high doubleton
4. 2-3 in rank order of other suits, so exactly 2=2=6=3
5. 5 controls

All the conditions for Early Train to Queensland are satisfied, so 4NT is not a sign-off: it asks you to start scanning for queens. You have {“Yes” in diamonds [queen], “No” in clubs [no queen]}, so your bid is 5♦.

7. ♠ KQ9832 ♥ A5 ♦ 74 ♣ Q63

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♠ ²
2NT	3 ♣ ³
3 ♥	?

1. Spades
2. One-suiter, high-short or 6-3-2-2 with high doubleton
3. 6-3-2-2 with high doubleton

3♥ is Skip-a-Step—an early Control Ask, since partner has skipped a step before getting your final shape. You have 3 controls, so your bid is 3NT. Since you are known to be short in hearts, your DCB scan order will be spades, diamonds, clubs, hearts.

8. ♠ A543 ♥ 98 ♦ AJ854 ♣ K3

WEST	EAST
1 ♣	1 ♥ ¹
1 ♠	2 ♥ ²
3 ♣	3 ♦ ³
4 ♣	?

1. Spades
2. Diamonds, Reverser
3. Asks singleton

3♣ initiates Singleton Control Ask. 4♣ shows a singleton club and asks for controls not counting the king of clubs. You have 4 working controls, so your bid is 4♠.

9. ♠ KQ32 ♥ K2 ♦ KJ107 ♣ AQJ

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
?	

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. You don't care which way partner is 3-2 in the minors, so you should go right to the Control Ask. You need at least 4 controls for slam. Even if partner has something like ♠ xx ♥ AQJxxx ♦ Axx ♣ xx slam will still basically be on a finesse, and that is as perfect a hand as he could have and not have 13 HCP. Thus, a Weak Relay handles this hand fine, and since 3 ♥ is Skip-a-step, 3 ♠ is Weak Relay. You plan on passing if he bids 3NT, but if he bids 4 ♣ or higher you will DCB and look for slam.

10. ♠ Q7532 ♥ AK5 ♦ AJ2 ♣ KQ

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
?	

1NT shows clubs. 2 ♦ shows diamonds. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 3 ♥ shows generic 5-5-2-1, so exactly 1=2=5=5. 4 ♦ shows 4 controls. You know his 4 controls are the missing aces, since he wouldn't count a singleton king of spades. It is tempting to bid 4NT Early Train to Queensland, since all the conditions for this are satisfied. The problem is that if partner

doesn't have the queen of diamonds he will bid 5♣, and that is the Death Response for playing in 5♦. That doesn't work.

How will normal DCB work? You bid 4♥. You know he will bid 4♠ {"No" in diamonds}. Now you bid 4NT. He has the ace of clubs, and since he has a singleton spade his scanning for controls will stop there. If he doesn't have the queen of diamonds he will bid 5♦ {"Yes" in clubs, "No" in diamonds [no queen]}, and you can pass. If he does have the queen of diamonds he will bid 5♥ {"Yes" in clubs, "Yes" in diamonds [queen], "No" in clubs [no queen]}, and you can bid 6♦. That works.

So, DCB is the right route. It is worth noting that if clubs were the trump suit, then 4NT Early Train to Queensland would work better.

11. ♠ — ♥ AQ975 ♦ KJ85 ♣ AQ72

WEST	EAST
1♣	1♥
1♠	1NT
?	

1♥ shows spades. 1NT shows hearts. While there could be later problems with DCB due to the spade void, this is not a good hand for the Void Control Ask. There are potential losers in the minor suits, and it could be important to find partner's shortness. In addition, finding out whether he has four or five hearts might make a difference. Since you have a control in both minors, later ambiguity probably won't be too difficult to unscramble. If you were lacking a control in one of the minors, it might be more important to use the Void Control Ask. For this hand, normal relay with 2♣ is best.

12. ♠ A2 ♥ KJ85 ♦ KJ3 ♣ AQ42

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♣
?	

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=4=2. Partner needs 4 controls for you to want to be in slam, and that won't be enough unless he has some fillers. This is a good hand for a Weak Relay of 3 ♥. If partner has fewer than 4 controls or 4 controls and less than 13 HCP he will bid 3 ♠, and you can bid 4 ♦ to sign off in 4 ♥. If partner has 4 controls and 13+ HCP he will bid 3NT, and you can safely probe with 4 ♣ DCB. If he has 5 controls he will bid 4 ♦ (not 4 ♣, as that would show the 1=7=4=1 hand), and again you can continue with DCB.

13. ♠ 8 ♥ AKQJ96 ♦ Q75 ♣ AKJ

WEST	EAST
1 ♣	2 ♦
?	

2 ♦ shows balanced 9–11 or 15+. You know partner doesn't have a singleton. There are potential problems with normal Control Ask and DCB. What if partner has 3 controls, and DCB gives "No" in spades or diamonds. He will have AK of one of these suits, but you won't know which one. This is a good hand for the Singleton Control Ask. You probably don't care much about his shape, but you do want to know how many controls he has not counting the king of spades. Your bid is 2NT, initiating Singleton Control Ask, and over 3 ♣ you will follow with 3 ♦, singleton spade Control Ask. Now if partner shows 3 controls they are working controls, and you can look for slam. If he shows fewer than 3 controls there is no slam.

14. ♠ A32 ♥ K852 ♦ K7 ♣ AKQ2

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	3 ♦
?	

1 ♥ shows spades. 1NT shows hearts. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 5=4=3=1. Slam could be there opposite 3 controls if partner has both major-suit queens, so you can't afford to make a Weak Relay. You must make a normal Control Ask of 3 ♥. If partner has 3 controls he will have the king of spades and a red ace. His bid will be 3NT. You can now bid 4 ♣, DCB. He won't be bidding 4 ♦, since he must have the king of spades. If he bids 4 ♥ {"Yes" in spades, "No" in hearts} he has the wrong red ace, and you can pass. If he bids 4 ♠ {"Yes" in spades, "Yes" in hearts, "No" in spades [no queen]} he doesn't have the queen of spades, and you can pass that. If he bids 4NT {"Yes" in spades, "Yes" in hearts, "Yes" in spades [queen], "No" in hearts [no queen]}, you can sign off in 5 ♠. If he bids higher he has both major-suit queens, and you can bid slam, playing in the suit where he has the jack, which you can find via further DCB.

What if partner has 4 controls? That means he has both red aces, but no king of spades. His bid will be 4 ♣. DCB won't help, since the 5-level will be too high if he has neither major-suit queen. However, you can simply bid 4 ♥. He will know from your failure to use the Weak Relay that both major-suit queens have to be enough, and the queen of hearts might be sufficient, so he will move with an appropriate hand.

15. ♠ K2 ♥ KQ10 ♦ AJ76 ♣ KJ93

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣
?	

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 4=2=2=5. It will take a lot to make slam, and if there is no slam you would rather play 3NT than 5 ♣. Four controls aren't enough, and if partner has 5 controls he will still need the queen of clubs for slam to be good. Since his last bid was 3 ♣, you have both a Weak Relay and a Very Weak Relay available. The very Weak Relay of 3 ♠ hits the spot. Partner won't be moving with 5 controls and nothing else.

16. ♠ — ♥ KQ3 ♦ AQJ10975 ♣ AQ2

WEST	EAST
1 ♣	1 ♥
?	

1 ♥ shows spades. This looks like the right sort of hand for the Void Control Ask, since if you don't do this DCB could easily lead to some ambiguities. One nice feature about the Void Control Ask is that partner will be counting a singleton king of diamonds as a control, which is what you want him to do. Your bid is 1NT, initiating Void Control Ask. You will follow with 2 ♦ over partner's 2 ♣, showing a spade void and asking for controls outside of spades (starting at zero). If partner has 0 or 1 control outside of spades you can settle for 3NT. If he has more you will have plenty of room to find out exactly what his controls are, and you will be able to bid the appropriate number of diamonds.

SPECIALTY HANDS

There are two sequences that have intentionally been left undefined because they are unnecessary for the relay neophyte and they don't fit neatly into the KK Relay pattern. These two sequences can be used optionally for special hand types that may otherwise be difficult to handle via normal relay. They are definitely not necessary to make good use of KK Relay and should be learned only after basic relay is mastered.

For these specialty hands, we are just giving the outline of a structure. An enterprising partnership that chooses to use these will construct a full structure that fits their taste.

Solid Suit

With a balanced 9–11 or 15+, responder bids 2♦. With 12–14 balanced, responder bids 2♠ or higher. This leaves an initial response of 2♥ free. It can be used to show a solid suit as follows:

WEST	EAST
1♣	2♥

Teller shows at least a 6-card suit headed by AKQJ or a 7+ card suit headed by at least AKQ10. In other words, a suit playable opposite a void for no losers.

After 2♥:

- **2♠ asks shortness.** Show in six steps: VD-HMEL (Void, Double-Short, Hi, Mid, Equal, Lo). Double means two singletons, equal is no shortness. Then length ask instead of shape ask (678. . .). Next is outside controls (starting with zero), then DCB and Woolberry, but ignore the solid suit. (*We never show cards in a known solid suit in asking bid sequence.*)

- After 2NT showing a void, next step asks HML.
- After 3♣ showing Double Shortness, 3♦ asks which. Show in three steps, CRASH.
- 2NT asks extra length (6 is 1st step), then controls outside, then DCB.
- 3♣ asks Teller to show his suit via transfer.
- 3♦ is an immediate ask for controls outside the solid suit.
- 3NT is dead minimum, to play.

Here is a hand bid during a BBO practice session:

♠ 6	♠ AKQJ102
♥ AJ75	♥ Q642
♦ A843	♦ 7
♣ AKQJ	♣ 96
WEST	EAST
1♣	2♥
2NT	3♣
3♦	3♥
6NT	Pass

2♥ shows a solid suit. 2NT asks for extra length; 3♣ shows a 6-card suit. 3♦ asks controls. 3♥ shows zero controls outside spades. Now, Asker knows that there are 12 top tricks and no more.

A number of pairs bidding these hands got bogged down in fourth-suit sequences and strong 2NT rebid structures and landed in the 4–4 heart fit. A few pairs were down in a grand. KK relay made short work of claiming 12 top tricks in notrump.

San Francisco Fall Nationals, 2019

♠ KJ102	♠ 85
♥ 7	♥ AKQJ1085
♦ KQJ109	♦ 65
♣ KQ10	♣ 76

WEST	EAST
1 ♣	2 ♥
3NT	Pass

3NT shows a dead minimum, to play. And West has an easy pass.

Karen was playing with Victor King in a pair game. As the reader might guess, very few pairs stopped in 3NT. (Victor, who loved 3NT more than any other contract, was delighted to put the dummy down.) As it happens, a spade lead would have defeated 4♥, but it wasn't always found.

Semi-Solid Suit

Responder is defined to have a semi-solid suit if it is at least 6 cards in length and contains three of the top four honors. (AKQ, AKJ, AQJ, or KQJ). Due to space considerations, we can only show semi-solid major suits. Knowledge of a semi-solid suit can be important to help asker Asker choose the proper strain.

Responder shows a semi-solid major by first pretending he has a three-suiter with a short minor. This starts:

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	?

With the three-suiter, responder's bids at this point are 2NT and higher. 2♠ is an idle step in the three-suited structure. We've usurped it to show

the semi-solid suit, since that's a tough hand to describe via normal relay. Ergo, 2♠ cancels the three-suiter message and signifies a semi-solid major.

After the 2♠ call, opener will relay with 2NT. Responder shows, by priority:

1. His short suit(s). He might have 0, 1, or 2 short suits.
2. If he has one short suit, whether it is singleton or void.
3. Number of controls outside his suit. The usual 0, 1, 2, 3, 4, etc.

Note that we don't define the major suit. It's assumed that Asker knows. If he doesn't, he can ask with 3♣ over 2♠ (just as in the solid-suit structure above). In addition, we exclude the semi-solid suit when showing controls. Asker will know if we have a loser there, so the controls in the suit are not relevant to his decision.

The first response to the 2NT relay shows shortness, using the same VDHMEL approach that is used with solid suits. This is followed by controls. There is no length ask in the semi-solid suit structure due to space constraints—we simply assume a 6-card suit. (A partnership may decide to use a length ask anyway, since we're only one step higher than we are in the solid-suit structure). DCB follows the Control Ask, as always. Once again, when EOL for something is reached Teller immediately Zooms to the next category.

Karen and Axel Johansson faced this difficult bidding problem in an Australian online pairs championship. Only 2 pairs in the field of 66 pairs got it right.

♠ K	♠ AQJ1093
♥ KQJ8	♥ 832
♦ A104	♦ 83
♣ AQ1074	♣ K6

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2 ♠
2NT	3NT
4 ♣	4 ♥
4NT	5 ♣
5 ♦	5 ♥
6 ♠	Pass

2 ♠ shows a semi-solid major. (It's assumed that opener knows which.) 3NT shows equal shortness (i.e., no shortness). 4 ♥ shows 1 control outside spades. Now 4 ♠ would be signoff in Teller's 6-card suit, so 4NT is relay, initiating DCB. 5 ♣ says {"No" in hearts}; 5 ♥ is {"No" in diamonds}. Asker now knows that Teller's 1 control must be the club king, and that slam will be virtually cold if there is no diamond lead. If they do lead a diamond, it's far from hopeless. Teller may produce the club jack or the diamond queen, increasing the chances. And opener's hand will be concealed, further increasing the chances of success.

TIPS AND TRICKS

There are a number of memory aids and tricks available to help you learn KK Relay and to use it easily with less memory strain.

1. USE THE PIVOT POINTS

Making the correct shape-showing call is pretty much accident-proof if you understand Pivot Points. The Pivot Point is the point in the auction where the hand-type is known, shortness is known, and we pivot to refining exact shape. The most common shapes will correspond to the Pivot Points, making it easy to identify the exact shape. They are:

- 5332 for one-suiters
- 5431 for short two-suiters
- 5521 for long two-suiters
- 4441 for three-suiters

Low shortness will also correspond to the Pivot Points, since that's the last shortness shown and completes Teller's shape.

We've mentioned the Pivot Points in earlier chapters. Here they are again for easy reference and review.

- **3♦**: The “universal” Pivot Point for all but the long two-suiters
- **3♥**: The Pivot Point for long two-suiters

Here are some tips for using them:

- **Memorize the Pivot Points.** You can use them to shortcut your responses—there’s no need to count steps.
- **Simply count up and down from the Pivot Point.**
 - For example, if you know that the Pivot Point is 3 ♦ for a short-two suiter, you immediately know when you see a generic 5431 that you must eventually land there, at the Pivot Point—3 ♦.
 - When you pick up a generic 6-4-2-1 you know that you’ll land one-step up from the Pivot Point when you complete your shape-showing sequence (i.e., 3 ♥), since 6-4-2-1 is the second most common shape.
 - If your hand is 5-4-2-2, you know without counting that you’ll eventually land at 3 ♣, since that is one step below the Pivot Point (equal-short is the last step before low-short, which corresponds to the Pivot Point).

2. MEMORIZE THE BELL-RINGERS

When you hear one of these calls from Teller, it should ring a bell: it’s an alert that it’s likely something special is happening.

- 2 ♥: Reverser
- 2 ♠: One-suiter high-short
- 2 ♠: Long two-suiter
- 3 ♣: The “Equal” or “funny” step
- 3 ♣: Singleton honor (occurs only in the 3-suited sequence)
- 4 ♣: The Swan (occurs only when Teller has shown a short-two-suiter, equal-short)
- 4 ♦: PISS-OFF: Asker wants to sign off in game.

3. RELAY IS JUST BLACKWOOD. BLACKWOOD ON STEROIDS.

4. RELAY ORDER: SHCDBR55S

- Some Husbands Can't Dance Before Reaching 55 and Single.
- Spades, Hearts, Clubs, Diamonds, Balanced, Reverser, 5/5, Single-Suited

5. MAFIA

Majors First Always. Show the majors before the minors. Show spades before hearts. Show clubs before diamonds.

6. IF YOU HAVE FIVE CLUBS, SHOW CLUBS BEFORE DIAMONDS.

Even if the diamonds are longer.

7. A REVERSER IS ALWAYS A 4-CARD MAJOR.**8. NO REVERSER WITH BOTH MINORS.****9. CAUTION WITH A 4-CARD MAJOR AND 5+ DIAMONDS!**

This shape is shown by starting with the major then going straight to 2♥, the Reverser Step.

10. SHORTNESS TIPSHigh Shortness

- One-suiter high-short is always 2♠—no exceptions
- Short two-suiter high-short is always 2NT
- Long Two-suiter high-short is always 3♣ (2♠-2NT; 3♣)
- One-suiter High-Short is always followed by a “high-and-equal” step (to show 6322). “High and Equal” occurs only when you are known to have a one-suiter.

Middle Shortness

- Middle-short exists only for one-suiters
- Middle-short is always 2NT (no exceptions)

Equal Shortness

- Equal-short is always one step below the Pivot Point
 - 3♣ is always the equal-short step for one-suiters and short two-suiters
 - 3♦ is always the equal-short step for long two-suiters

- For a one-suiter, equal-short means the two lower doubletons, but may be 7-2-2-2 or 6-3-2-2.
- A short two-suiter equal-short is presumed to be 5-4-2-2, but may be 7-4-1-1.
- 7-4-1-1 is “The Swan.” After showing equal-short, “The Swan” step is 4♣.

Low Shortness

- Low-short corresponds to the Pivot Point
- Low-short is always the last shortness step
- Low-short is always shown at the Pivot Point and beyond
- Bidding the Pivot Point shows low shortness and the most common shape

HMEL

- High, Middle, Equal, Low.
- HMEL exists only for one-suiters.

HELL

- High, Equal, Low, Low
- The “double L” signifies a Run-on or Zoom to the next category (exact shape—with low shortness), since low-short starts at the Pivot Point.
- HELL exists only for two-suiters and three-suiters.

11. CR4SH TIPS

- CR4SH calls start at 2♠ (either immediate or via 2♦—i.e., delayed, or slow)
- Steps are Color, Rank, 4, Shape, hence the acronym, CR4SH
 - The “Color” step includes 4-3-3-3 with a major (2♠ then 3♣, the slow route)
 - The “4” step is always 3♣—either immediate or delayed (via 2♠). It always shows 4-3-3-3 shape.
 - Immediate 3♣ shows 4-3-3-3 with a minor
 - The slow 3♣ step shows 4-3-3-3 with a major (2♠ then 3♣). Think MAFIA: the first step (2♠) shows a major.
 - The “Rank” step is always 2NT (For memory: Like unusual NT, or 2NT opening, 2NT is both minors (or both majors in this case))
 - “Shape” always uses the last four steps to complete the expansion: 3♦/♥/♠/NT to show doubletons.
 - Doubletons are shown naturally
 - A doubleton club is shown with 3NT
 - When expanding 4-3-3-3 with a major, purely by coincidence, you will bid the major you hold. 3♥ shows four hearts, 3♠+ shows four spades.

12. END-OF-LINE CALLS ALWAYS CARRY TWO PIECES OF INFORMATION.

For example,

- An ESS call shows exact shape and the number of controls at the same time.
- A low-short call shows low shortness and exact shape at the same time.

13. THERE IS NO SHAPE ASK ABOVE 3NT.

If Teller’s shape is not complete, it stays that way. We move to the Control Ask at this point.

14. TIES GO HIGH

Except after Woolbery 4♣ puppet for RKC, in which case it's far more efficient to go the other way.

15. A "RAISE" OF THE RELAY SUIT IS 6 CONTROLS

16. A "RAISE" IS FOUR YESSES

17. WHEN TELLER HAS SHOWN A 6-CARD SUIT (OR LONGER), WATCH YOUR STEP.

- Accidents abound.
- It's quite easy to overlook the fact that a game-bid in Teller's 6+ suit is sign-off, particularly when Asker has a different trump suit in mind.

18. 4♣ NEVER SHOWS 5 CONTROLS.

This is helpful for avoiding accidents with The Swan—the 7-4-1-1 hand which must bid 4♣ at its next turn. Knowing that 4♣ is never 5 controls will help you recognize it when it occurs and will help you remember to skip a step when counting Teller's controls.

19. WATCH OUT FOR THE DEATH RESPONSE.

Before you relay, consider what will happen if Teller bids one step below your potential landing place. If you can't handle that response—the Death Response—don't relay!

20. SLAM SEQUENCES

- If Teller is accepting Asker's slam try he shows keycards.
- If Teller is voluntarily overriding Asker's sign-off, he shows controls. (But if controls are already known he goes to RKC responses.)
- Asker has no natural slam try if 4♦ Piss-Off is not available.

21. RELAY CONTINUES THRU 6♠.

22. TELLER'S HIGHEST PERMISSIBLE CALL IS 7♣.

He may not make a higher call. Whatever he may have intended to show comes to a stop at 7♣.

23. ASKER'S PASSABLE CALLS:

- 3NT is always to play.
- A Relay Break to any game or slam is to play.
- A non-break 4M, 5m, 5M, 6m, or 6M when Teller has shown 6+ cards in the suit is to play.
- 6NT or 7 of anything is to play.

24. DON'T ASK A QUESTION IF YOU DON'T KNOW WHAT TO DO WITH THE ANSWER.

Like a good trial lawyer, know where you're going with the information. Don't relay if Teller's reply won't help you with your decision.

25. TELLER HAS NO NATURAL BIDS.

Teller's bids are preordained and require almost no thought once you know the structure. You can almost take a nap for a few rounds of the auction. In the words of one of our fellow relayers, "Teller Has No Brain." This isn't entirely true, of course, but pretty close.

26. "CORRECTING AN ERROR"

Suppose you've made an error describing your shape and discover it later in the auction. Your only recourse is to represent something as close to your real hand as you possibly can.

NOTE: Never lie about a major if you can possibly avoid it—but sometimes even that is unavoidable.

For example, you were so excited by your KJTxxxx in hearts that you forgot to show your four spades to the deuce. You may be able to get out of your mess in this case by showing a 7-3-2-1 instead of the 7-4-1-1 you actually hold.

But suppose you've completely lost the auction—you don't know what your correct reply is. You'll have to be incredibly inventive to get that message across and you'll probably fail. We've seen an impossible jump to 5NT work out well. Asker will know something is wrong, for sure. But short of that sort of bizarre move, your bids all have coded meanings—you're in a trap and you can't get out. Best to just pass as soon as you can and head for the bar. You'll probably do best to make the cheapest bid every time and pass as soon as partner makes a passable bid.

Best advice: know the structure and have a sense of humor when the wheels come off. They will at first, until you get comfortable with KK Relay.

27. WEAK RELAY

- Weak Relay means Asker has a non-serious slam try. Better than a dead minimum, but not much better.
- Weak Relay occurs only when the ESS is 3 ♦ or lower
- When Weak Relay is available, a sign-off is “the worst!”

28. DCB TIPS

- We can never scan all four suits for aces and kings.
- If Teller has no singleton or void, we scan three suits for aces and kings.
- If Teller has a singleton or void we scan only two suits for aces and kings.
- Go straight to Queensland when you’ve shown all of your aces and kings.

29. ZOOMING

When Teller’s systemic shape-showing call is the highest defined step in a category (aka End-of-Line or EOL), he will immediately run on to the next stage of responses in the relay order. In effect, he assumes that Asker will continue to ask and simply skips over the asking bid and responds as if it had actually been made. This saves space, since Asker won’t have to waste a step asking the next question.

A Zoom is also known as a “Run-on.”

There are a few important rules governing Zooming.

- Teller is NOT permitted to Zoom past 3NT to show controls in response to a relay shape ask unless he has a Super Positive (13+ and 4+ controls).
 - E.g., if 3 ♠ is Teller’s ESS step, then 3 ♠ says 0–2 controls, and Zooming to 3NT says, “3 ♠ was my shape-showing call; I have 3+ controls and less than a Super-Positive.”

- If Teller does go past 3NT in response to the last shape-showing inquiry, when his last ESS call should have been 3NT or lower, then he will be known to have a Super-Positive. (13+ and 4+ controls, or 5+ controls).
- If 4♣ is the EOL step, then it IS EOL. Period. Higher calls show the shape for the 3NT step with a Super-Positive hand.
- There is no Zoom to DCB—not ever. Never respond to DCB if you haven’t been asked.

30. ABBREVIATIONS, ACRONYMS and TERMINOLOGY

- CR4SH: Modified CRASH structure for showing balanced hands, which incorporates 4-3-3-3 hands. Color or 4M, Rank, 4m, Shape.
- DCB: Denial cue-bidding.
- DEATH RESPONSE: The step immediately below Asker’s sign-off spot if he gets a discouraging reply. It’s the Death Response because Asker won’t be able to sign off—the next step is relay.
- DN: Double negative.
- EOL: End of the Line or End of Line.
- ESS: Exact shape-showing.
- FTQ: Fast Train to Queensland.
- GRAMMY: KK Relay structure after 1M Opening. (Game-forcing Relay After 1M)
- HELL: High, Equal, Low. The double “L” indicates a Zoom: with low Teller moves on to the next question.
- HIMMELL: High, Middle, Equal, Low. The double “L” denotes a Zoom.
- L2S: Long two-suiter.
- PISS-OFF: Part of the Woolberry structure: 4♦ forces 4♥ so that Asker can sign off at his next turn.
- PT: Positive Track .
- S2S: Short two-suiter.
- SLOW BOAT: The slow route (as opposed to the fast route) when there are two ways to get to a landing place.
- SP: Semi-Positive.

- **SPEED BOAT:** The fast route (as opposed to the slow route) when there are two ways to get to a landing place.
- **SUPER-POSITIVE:** 13+ and 4+ controls, or any hand with 5+ controls
- **SUPER-DUPER POSITIVE:** A queen better than a Super-Positive.
- **TWO-TO-GO:** KK Relay structure after 2♣ Opening.
- **ZOOM:** Running on to the next category when Teller reaches the EOL (End of Line).

KK RELAY VS. THE WORLD

How does KK Relay stack up against other methods?

To test this, we went through several issues of *The Bridge World* magazine, examining the reports of expert competition such as the Vanderbilt, Spingold, Team Trials, and World Championships. We pulled out every hand that qualified for a 1♣ opening and a positive response where there was no competition (at least from one table), bid the hands using KK Relay, and compared our contract to the contracts reached by the experts who were playing in the competition. For each hand, we estimated the expected IMP swing. One could quibble with some of our estimates, but they don't figure to be far off.

For each hand, the month and year of publication and the page number are shown, so the reader who has old Bridge Worlds can check to see what the auctions were in the actual matches. The contract in both rooms is shown (if there was competition at one table, that is listed as N/A), as well as the estimated expected IMP gain or loss from our contract vs. the actual contract. West is the opening bidder on all deals.

10/16, Page 6

♠ AKQ743	♠ —
♥ A52	♥ KJ1084
♦ QJ5	♦ 972
♣ 5	♣ AKQ108

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♥	4 ♣
4 ♥	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. West judged that East's exact shape didn't make much difference, with East being short in spades and having at least two diamonds, so West chose to Skip-a-Step and make an early Control Ask with 3 ♥. 4 ♣ shows 4 controls. There could be a slam if partner has KQxxx of hearts and a diamond honor, but we would definitely be off an ace or the king of hearts and there figure to be handling problems even if partner has the right cards. The percentage action appears to be to settle for 4 ♥, and so it proved.

This hand illustrates the value of using Skip-a-Step to the early Control Ask. If West had relayed with 3 ♦, East would have bid 3 ♠ to show the generic 5-5-3-0 shape. Now 4 ♣ would have been the Control Ask, and the 4-control response of 4 ♠ would have committed to the dangerous 5-level.

Open Room	5 ♥	+5
Closed Room	5 ♥	+5

10/17, Page 12

♠ AKQJ5	♠ 7643
♥ J5	♥ A63
♦ J	♦ A5
♣ KJ873	♣ A652

WEST	EAST
1 ♣	2 ♠
2NT	3 ♦
4 ♦	4 ♥
4 ♠	Pass

2 ♠ shows 12–14 balanced, two suits same color or 4-3-3-3 with a 4-card major. 3 ♦ shows doubleton diamond, so exactly 4=3=2=4. The near mirror distribution made the discard on the side-suit of little value, so it would take completely perfect cards in the East hand to make slam better than 50%. East almost did have perfect cards, with no wastage at all in the red suits, but the missing queen of clubs was enough to make slam a slight underdog.

Open Room	5 ♠	+1
Closed Room	6 ♣	+1

6/17, Page 1

♠ AKQ742	♠ 1085
♥ KJ2	♥ 9
♦ 4	♦ KQJ105
♣ QJ4	♣ A653

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3 ♥	3NT
4 ♦	4 ♥
4 ♠	Pass

2 ♣ shows diamonds. 2 ♥ shows clubs. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=1=5=4. 3NT shows 3 controls. Obviously not enough for slam, and 4 ♠ is clearly best.

Open Room	4 ♠	0
Closed Room	N/A	

2/17, Page 28

♠ AJ3	♠ K10542
♥ A104	♥ 9876
♦ K975	♦ AJ
♣ A107	♣ J3

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	3 ♣
3 ♦	3 ♠
3NT	Pass

1 ♥ shows spades. 1NT shows hearts. 3 ♣ shows (presumably) generic 5-4-2-2, so exactly 5=4=2=2. 3 ♠ shows 3 controls. Definitely not enough for slam. The 5-3 spade fit is known, and clubs could be a weakness if East has a worthless doubleton, but on balance 9 tricks figure to be easier than 10 with this sort of hand. West has quick tricks, which won't need time to develop, and with 3 controls East also has quick tricks. This analysis proved correct, as 3NT clearly has better chances than 4 ♠.

This hand illustrates how well the strong hand is able to make a good choice-of-games decision with the knowledge of partner's exact distribution.

Open Room	4 ♠	+4
Closed Room	4 ♠	+4

2/17, Page 34

♠ A	♠ K92
♥ AQ72	♥ J105
♦ KQ74	♦ A32
♣ 9742	♣ KQJ3

WEST	EAST
1 ♣	3 ♣
3 ♦	3 ♥
4 ♦	4 ♥
5 ♣	Pass

3 ♣ shows balanced 12–14 HCP 4-3-3-3 with a 4-card minor. 3 ♥ shows four clubs, so exactly 3=3=3=4. There isn't enough power for slam even if East doesn't have much spade wastage. Between 3NT and 5 ♣ it looks like a guess, but with no spade losers and possibly a single spade stopper West judged 5 ♣ to be percentage. Both contracts are pretty good. If East's king of spades had been the king of hearts, 5 ♣ would have been much better than 3NT.

Open Room	5 ♣	0
Closed Room	N/A	

2/17, Page 42

♠ A763	♠ KQ108
♥ A85	♥ K1076
♦ A62	♦ 9
♣ A65	♣ J1074

WEST	EAST
—	Pass
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with a small singleton, so exactly 4=4=1=4. With East being a passed hand there can't be a slam, and with Axx opposite a singleton in diamonds 4 ♠ is the obvious contract.

Open Room	4 ♠	0
Closed Room	4 ♠	0

5/17, Page 8

♠ AQ1073	♠ K43
♥ J5	♥ AQ1042
♦ AJ8	♦ 974
♣ A63	♣ Q9

WEST	EAST
1 ♣	1 ♠
1NT	3 ♦
3 ♥	3NT
4 ♦	4 ♥
4 ♠	Pass

1 ♠ shows hearts. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=5=3=2. 3NT shows 3 controls. Clearly no slam. The choice between 3NT and 4 ♠ is difficult, but with Axx opposite the doubleton West judged that the ruffing value would likely make 4 ♠ better. However, it appears that 3NT is the winner by a tiny margin.

Open Room	4 ♠	0
Closed Room	3NT	-1

5/17, Page 12

♠ AKQ109

♥ A8

♦ K3

♣ A932

♠ 5

♥ J764

♦ AJ2

♣ KJ1074

WEST

1 ♣

1NT

2 ♦

2 ♠

3 ♣

3 ♥

4 ♣

4 ♠

6 ♣

EAST

1 ♠

2 ♣

2 ♥

2NT

3 ♦

3NT

4 ♥

4NT

Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=4=3=5. 3NT shows 3 controls. 4 ♥ is {“Yes” in clubs, “No” in hearts}. East’s barebones hand is:

♠ x ♥ x x x x ♦ A x x ♣ K x x x x

6 ♣ is clearly a good contract, so West doesn’t have to worry about a Death Response. If East has the queen of clubs the grand will be pretty good, with decent splits taking 6 club tricks, 4 spade tricks, 2 diamond tricks, and 1 heart trick. 4NT is {“No” in clubs [no queen]}. West must settle for 6 ♣.

Open Room	6 ♣	0
Closed Room	6 ♣	0

5/17, Page 16

♠ Q8765	♠ A
♥ AKQ4	♥ 1082
♦ 7	♦ 864
♣ A53	♣ KQJ864

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♦	4 ♠
4NT	5 ♦
6 ♣	Pass

1NT shows clubs. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♥ shows generic 6-3-3-1, so exactly 1=3=3=6. 4 ♣ shows 3 controls. 4 ♠ is {"Yes" in clubs, "No" in hearts}. East could have had either the ace of diamonds or the ace of spades (ace of diamonds more likely since East has three diamonds and one spade), but it doesn't make much difference. East's likely barebones hand is:

♠ x ♥ xxx ♦ Axx ♣ Kxxxxx

Slam rates to be good if East has the queen of clubs, since declarer can probably ruff two diamonds in the short hand, but you don't want to be in slam if the queen of clubs is missing. 5 ♦ is {"Yes" in clubs [queen], "No" in hearts [no queen]}. If East hadn't had the queen of clubs he would have bid 5 ♣ instead of 5 ♦, and we could stop there.

This illustrates the importance of not having to scan the third suit when responder has a singleton. Without that, the queen of clubs could not have been located in time.

Open Room	6 ♣	0
Closed Room	2 ♥	+8

4/17, Page 4

♠ A8	♠ Q97
♥ A76	♥ KQJ85
♦ KJ	♦ 98532
♣ AKQ987	♣ —

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2 ♠
2NT	3 ♠
4 ♥	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows a long two-suiter. 3 ♠ shows low-short, generic 5-5-3-0, so exactly 3=5=5=0. This one was difficult. The problem is that if West bids 4 ♣ Control Ask and East bids 4 ♦, 0–2 controls, that is the Death Response and E-W can't stop in 4 ♥. West can't afford that. The best bet appeared to bid 4 ♥, slam try. Hopefully if East has good trumps and an ace or king on the side he will make a move. East might visualize why West was unwilling to make the Control Ask. East did have good trumps, but his hand was otherwise completely minimal with only 1 control, so passing looked right.

This hand illustrates how valuable it is for responder's final shape-showing call to be 3 ♥ or lower, so the Control Ask doesn't get the partnership into the stratosphere.

Open Room	6 ♥ (W)	+5
Closed Room	6 ♥ (E)	+6

4/17, Page 11

♠ A32	♠ K86
♥ A987	♥ QJ1064
♦ 5	♦ K94
♣ AQJ54	♣ 73

WEST	EAST
1 ♣	1 ♠
1NT	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
Pass	

1 ♠ shows hearts. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=5=3=2. 3 ♠ shows 0-2 controls. 4 ♥ is the obvious contract.

Open Room	4 ♥	0
Closed Room	4 ♥	0

4/17, Page 28

♠ 8	♠ 7543
♥ 2	♥ AK9543
♦ AKQ98532	♦ 64
♣ AQ3	♣ 2

WEST	EAST
1 ♣	1 ♥
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
6 ♦	Pass

1 ♥ shows spades. West's 2 ♣ call triggers a Singleton Control Ask, and the 2 ♥ response to East's relay shows a singleton spade. Normal relay wouldn't work since the control situation couldn't be worked out in time. The plan was to get to 3NT if East didn't have the necessary controls but had a heart control. 2NT showed 3 controls, not counting the king of spades. 3 ♣ was DCB, and 3 ♦ was {"No" in hearts}. East's order of suits scanned is hearts, diamonds, clubs, since West showed a singleton spade. Thus, East has either AK of hearts or ace of spades and king of clubs, since he is not counting the king of spades. If ace of spades and king of clubs, slam is cold. If AK of hearts slam is at worst on a finesse, and there are extra chances. That makes bidding the slam percentage. The singleton club was one of those extra chances.

Open Room	6 ♦	0
Closed Room	4 ♥	+11

4/17, Page 33

♠ AK9	♠ J1032
♥ J94	♥ KQ2
♦ AKQ1084	♦ 975
♣ J	♣ AQ9

WEST	EAST
1 ♣	2 ♠
2NT	3 ♣
3 ♥	3NT
4 ♣	4 ♦
4 ♥	4NT
5 ♣	5 ♦
Pass	

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. West decided which major probably wouldn't be important, so he used Skip-a-Step to the Control Ask to save steps. 3NT shows 3 controls. East's distribution is assumed to be 3=3=3=3, so he scans in order spades, hearts, diamonds, clubs. 4 ♦ is {"No" in spades}. 4NT is {"Yes" in hearts, "No" in diamonds}. East has the king of hearts and ace of clubs or the ace of hearts and the king of clubs. If he has both major-suit queens, slam will be good. If he doesn't have the queen of spades slam won't be better than a finesse, and he will bid 5 ♦ {"No" in spades [no queen]} over the 5 ♣ DCB call, which West can pass. What if East has the queen of spades but not the queen of hearts? East will be bidding 5 ♥. This goes beyond 5 ♦, but West can still bail out in 5NT. Will that be safe? East has 12–14 HCP. Queen of spades, king of hearts, and ace of clubs (or ace of hearts and king of clubs) account for only 9 of them, so East would have to have both the queen of clubs and at least one of the missing jacks. That AQx or KQx of clubs makes 5NT just as good as 5 ♦, so no harm in trying.

Open Room	6NT	-2
Closed Room	6 ♦	-2

4/17, Page 34

♠ AQ5	♠ K64
♥ 52	♥ K108743
♦ AK1064	♦ Q9
♣ AKQ	♣ 63

WEST	EAST
1 ♣	1 ♠
1NT	3 ♣
3 ♦	3 ♠
4 ♥	Pass

1 ♠ shows hearts. 3 ♣ shows one-suiter, either 6-3-2-2 with two low doubletons or 7-2-2-2. 3 ♠ shows generic 6-3-2-2, so exactly 3=6=2=2, and also shows 0–2 controls, since 3 ♠ is EOL. For slam to be there East would have to have ♥ KQJxxx along with the king of spades, which is quite possible considering that West has 22 HCP and East made a positive response. (Remember, showing a semi-solid suit is an optional add-on and not part of the basic KK Relays structure.) DCB wouldn't find out in time, so West bid 4 ♥, natural slam try. If East has two kings and the queen of hearts, he would move. East has the two kings but weak hearts, so he wisely quit.

Open Room	N/A	
Closed Room	4 ♥	0

3/16, Page 6

♠ Q643

♥ KJ84

♦ AQ

♣ A105

♠ K10

♥ 1063

♦ K842

♣ K732

WEST

1 ♣

2 ♥

3 ♣

3NT

EAST

2 ♦

2NT

3 ♠

Pass

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3 ♠ shows a doubleton spade, so exactly 2=3=4=4. 3NT is obviously best. If East has 15+, he will move.

Open Room

3NT

0

Closed Room

3NT

0

3/16, Page 10

♠ K8	♠ J10743
♥ AJ63	♥ 108
♦ AQJ	♦ K10543
♣ J732	♣ A

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♠	Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 5=2=5=1. 4 ♣ shows 3 controls. Assuming game only, West has to choose between 3NT, 4 ♠, and 5 ♦. The quality of East's spade suit and whether or not East's club singleton is an honor cannot be determined. West chose reasonably to guess at 4 ♠. Having made that decision West could safely ask for controls, as West could handle the 4 ♥ Death Response (5 controls) since at least 5 ♦ would be okay opposite that.

Open Room	3NT	+2
Closed Room	3NT	+2

1/13, Page 16

♠ Q1092	♠ AJ53
♥ A9	♥ K743
♦ AJ652	♦ 4
♣ AJ	♣ K1092

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3 ♠	3NT
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with a small singleton, so exactly 4=4=1=4. For there to be a slam East will need at least 4 controls, and if he has 4 controls, he will still need some fillers to get to 12 winners.

This is a good hand for the Weak Relay. East does have the 4 controls but nothing else so East rejects, and West stops in 4 ♠.

Open Room	4 ♠	0
Closed Room	4 ♠	0

1/13, Page 17

♠ 92	♠ AKQ4
♥ AQ9	♥ 753
♦ AK1074	♦ 932
♣ K32	♣ 1096

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. West judged that even if the major is hearts 3NT figured to be better than 4 ♥ or 5 ♦, so there is no need for a final relay.

Open Room	3NT	0
Closed Room	N/A	

1/13, Page 21

♠ J9	♠ K4
♥ AQ987	♥ 532
♦ AJ9	♦ 10876
♣ KQ6	♣ AJ107

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠
4 ♦	4 ♥
Pass	

2 ♦ shows balanced 9–11 or 15+ (slight upgrade due to the tens in the long suits). 2NT shows two suits same rank. 3 ♠ shows doubleton spade, so exactly 2=3=4=4. 4 ♥ is the obvious contract.

Open Room	4 ♥	0
Closed Room	N/A	

1/13, Page 23

♠ AJ	♠ KQ10
♥ QJ3	♥ AK5
♦ AK9	♦ Q543
♣ J7653	♣ A94

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3NT	4 ♥
4NT	5NT
6NT	Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♣ shows 4-3-3-3 with a 4-card minor. West doesn't care which minor and assumes 9–11, so he signs off at 3NT. East must override with 15+, and 4 ♥ shows 6 controls. West has a dead minimum so tries to sign off again, but East's hand is too strong. East drives to slam with a 5NT pick-a-slam call. West can see no advantage to playing in clubs. The poor slam is pretty difficult to avoid.

Open Room	6NT	0
Closed Room	6NT	0

5/13, Page 5

♠ 4	♠ AK82
♥ AK54	♥ Q10972
♦ Q87	♦ KJ93
♣ AQ954	♣ —

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	3 ♠
4 ♥	4NT
5 ♦	5NT
6 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 3 ♠ shows low-short, generic 4-5-4-0, so exactly 4=5=4=0. West could see that if he took the Control Ask/DCB route he probably wouldn't get to the queen of hearts in time to stop if East didn't have it; so West chose to make a natural slam try instead. Holding the queen of hearts and 4 controls, East had an easy acceptance. 4NT shows 1 or 4 keycards. 5 ♦ asks for the queen of hearts. 5NT shows the queen of hearts.

Open Room	4 ♥	+9
Closed Room	6 ♥	0

5/13, Page 6

♠ A10986

♥ AKQJ7

♦ 10

♣ 72

♠ Q432

♥ 9

♦ AJ832

♣ KQJ

WEST

1 ♣

1 ♠

2 ♠

3 ♦

4 ♦

4 ♠

EAST

1 ♥

2 ♥

2NT

3 ♠

4 ♥

Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 2NT shows high-short. West could see no value in getting the exact shape with East having heart shortness, so he skipped a step to the early Control Ask. 3 ♠ shows 3 controls. There could be a slam if East has the perfect KQ of spades and ace of clubs, but there are problems. If West bids 4 ♣ DCB and East bids 4 ♦ {“No” in diamonds}, West won’t know if East has nothing in diamonds or AK, and if East has AK of diamonds West had better stop in 4 ♠. Also, if East bids 4 ♥ {“Yes” in diamonds, “No” in spades}, that is the Death Response and West won’t be able to stop in 4 ♠. Signing off looks prudent.

Open Room	6 ♠	+10
Closed Room	5 ♠	+2

5/13, Page 10

♠ KQ4	♠ A3
♥ A54	♥ KJ106
♦ AQ3	♦ KJ109654
♣ J1085	♣ —

WEST	EAST
1 ♣	1 ♠
1NT	2 ♥
2 ♠	4 ♣
4 ♦	4NT
5 ♣	5 ♦
6 ♦	Pass

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 4 ♣ shows low-short, generic 7-4-2-0, so exactly 2=4=7=0. It also shows 4 controls, following EOL rules. (East chose to upgrade to a Super-Positive due to the internal strength in his suits.) 4NT is {“Yes” in diamonds, “Yes” in hearts, “No” in diamonds [no queen]}. 5 ♦ is {“No” in hearts [no queen]}. With the queen of hearts missing the grand is at best on a finesse.

Open Room	7 ♦	+2
Closed Room	6 ♦	0

10/12, Page 4

♠ KJ	♠ 6542
♥ AQ964	♥ K7
♦ K10	♦ AJ7543
♣ AJ85	♣ 7

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	3 ♥
3NT	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 3 ♥ shows low-short, generic 6-4-2-1, so exactly 4=2=6=1. 3NT figures to be better than 5 ♦. If East has the necessary extras he will override.

Open Room	3NT	0
Closed Room	5 ♦	+2

10/12, Page 23

♠ A102	♠ QJ876
♥ AQ74	♥ 3
♦ 10	♦ AK973
♣ KQ1083	♣ 65

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♣
4 ♠	Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows long two-suiter. 3 ♣ shows high-short. 3 ♥ shows generic 5-5-2-1, so exactly 5=1=5=2. 4 ♣ shows 3 controls. If East has KQ of spades and ace of diamonds slam might be okay. However, if West tries DCB with 4 ♦ and East has AK of diamonds he will bid 4 ♥ {"No" in spades}, the Death Response, and 5 ♠ will not be safe. Even if East has the perfect hand, slam won't be laydown. Stopping in 4 ♠ looks best.

Open Room	4 ♠	0
Closed Room	5 ♠	+2

12/10, Page 10

♠ AQ	♠ K10953
♥ AQ854	♥ 963
♦ A9	♦ KJ
♣ 9876	♣ QJ3

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
Pass	

1 ♥ shows spades. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 5=3=2=3. 3 ♠ shows 0-2 controls. 4 ♥ looks best from West's point of view with the matching doubletons in diamonds. However, it turns out that 3NT is better.

Open Room	3NT	-3
Closed Room	3NT	-3

6/13, Page 4

♠ A1052	♠ KQ973
♥ AK1092	♥ 83
♦ A84	♦ KJ73
♣ 3	♣ 74

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
3 ♠	4 ♠
6 ♠	Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows (presumably) generic 5-4-2-2, so exactly 5=2=4=2. 3 ♥ shows 0–2 controls. 4 ♠ shows {2 controls, “Yes” in spades, “Yes” in diamonds, “Yes” in spades [queen], “No” in diamonds [no queen]}. Even if East has nothing extra in the red suits slam will depend upon getting 4 tricks with AK109x opposite xx, which isn’t bad, and if East has the queen of hearts or any red jack slam becomes better, so it looks percentage to bid it.

Open Room	6 ♠	0
Closed Room	4 ♠	+6

6/13, Page 4

♠ AQJ96	♠ 1083
♥ AKJ73	♥ Q106
♦ K5	♦ Q10
♣ K	♣ AQJ52

WEST	EAST
1 ♣	1NT
2 ♣	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
4 ♠	Pass

1NT shows clubs. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=2=5. 3 ♠ shows 0-2 controls. Slam can't be better than a finesse. Opposite xxx in both majors, 4 ♠ is probably a bit better than 4 ♥.

Open Room	5 ♠	+1
Closed Room	6 ♠	-2

6/13, Page 6

♠ 432	♠ AK8
♥ A	♥ J8752
♦ AJ9754	♦ Q1086
♣ AQ2	♣ 9

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	4 ♠
6 ♦	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=5=4=1. 3NT shows 3 controls. 4 ♦ is {"No" in diamonds}. 4 ♠ is {"No" in hearts}. East is now marked with AK of spades. Even if there is a diamond loser, a 4-3 heart split will allow declarer to establish a long heart, coming to 7 diamond tricks, 1 club trick, 2 spade tricks, and 2 heart tricks.

Open Room	6 ♦	0
Closed Room	5 ♦	+7

6/13, Page 9

♠ KQJ6	♠ 32
♥ AK	♥ QJ1084
♦ AKQJ84	♦ 2
♣ 4	♣ AK1062

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♦	4 ♥
4 ♠	4NT
5 ♣	5 ♥
6 ♦	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 2=5=1=5. 4 ♣ shows 3 controls. 4 ♥ is {"No" in hearts}. 4NT is {"No" in clubs}. 5 ♥ is {"Yes" in hearts [queen], "No" in clubs [no queen]}. West quickly knew that 6 ♦ was cold, but was looking for 6NT. When East was known to have AK of clubs but no queen, West could see that a club lead might defeat 6NT, so he opted for the safer 6 ♦.

Open Room	7 ♥	+13
Closed Room	6 ♦	0

7/13, Page 12

♠ QJ10	♠ A
♥ KQ2	♥ A864
♦ KJ106	♦ 87
♣ AK8	♣ QJ10975

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♥
4 ♣	4 ♦
4 ♥	5 ♦
6 ♣	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 1=4=2=6. West is going to play in clubs, and all that matters is aces and the queen of clubs. This is a perfect hand for 4 ♣ Woolberry for RKC (relay to 4 ♦). The 4 ♥ follow-up is RKC for East's longest suit. 5 ♦ shows two with the queen, which is what West needs. If East had less his response would have been lower than 5 ♦, and West could stop in 5 ♣.

Open Room	6 ♣	0
Closed Room	6 ♣	0

11/12, Page 6

♠ —	♠ AK5
♥ AKQ1075	♥ J93
♦ AQ865	♦ 107
♣ 96	♣ AK1042

WEST	EAST
1 ♣	1NT
2 ♣	3 ♦
3 ♥	4 ♥
4 ♠	4NT
5 ♣	5 ♦
5 ♥	5 ♠
5NT	6 ♣
6 ♥	Pass

1NT shows clubs. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=2=5. 4 ♥ shows 6 controls. 4NT is {“No” in clubs}. 5 ♦ is {“No” in spades}. 5 ♠ is {“No” in clubs [no queen]}. 6 ♣ is {“No” in spades [no queen]}. The king of diamonds is missing. With East having neither black queen, the grand will almost certainly need the diamond finesse and even that might not be enough if East doesn’t have the jack of hearts. It looks percentage to settle for the small slam.

Open Room	6 ♥	0
Closed Room	N/A	

1/14, Page 14

♠ K2	♠ AJ8754
♥ AKQ62	♥ 8
♦ K82	♦ J109
♣ A32	♣ QJ10

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♥
3 ♠	3NT
Pass	

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♥ shows generic 6-3-3-1, so exactly 6=1=3=3. 3NT shows 0–2 controls. With 3–3 in both minors, West judged that 3NT would have a better chance than 4 ♠.

Open Room	4 ♠	+1
Closed Room	5 ♠	+5

3/06, Page 34

♠ AQJ1032

♥ 72

♦ AK8

♣ J10

♠ —

♥ K105

♦ J10654

♣ AK542

WEST

1 ♣

2 ♣

2 ♥

2NT

3 ♦

4 ♦

4 ♠

EAST

1NT

2 ♦

2 ♠

3 ♣

3 ♠

4 ♥

Pass

1NT shows clubs. 2♦ shows diamonds. 2♠ shows long two-suiter. 3♣ shows high-short. 3♠ shows generic 5-5-3-0, so exactly 0=3=5=5. With spades not running immediately and potential softness in hearts, 4♠ looks better than 3NT and 5♦ looks worse still. If East is strong enough to override the sign-off, West can re-consider the strain.

Open Room

3NT

+3

Closed Room

3NT

+3

3/06, Page 35

♠ AK62	♠ J3
♥ 85	♥ AJ72
♦ Q6	♦ KJ52
♣ AK652	♣ 843

WEST	EAST
—	Pass
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♠
3NT	Pass

2 ♦ shows 8–10 balanced (since Teller is a passed hand). (Strength ranges for a passed hand will be adjusted logically based on the partnership's opening agreements. For example, if your opening 1NT shows 10–12, this passed-hand 2 ♦ would show 8–9.) 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♠ shows doubleton spade, so exactly 2=4=4=3. 3NT is the obvious choice.

Open Room	3NT	0
Closed Room	3NT	0

3/06, Page 38

♠ K62	♠ A8
♥ KQ1043	♥ A
♦ AK	♦ 973
♣ 1076	♣ KJ95432

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♠
3NT	4 ♦
6 ♣	Pass

1NT shows clubs. 2NT shows one-suiter, middle-short. 3 ♠ shows generic 7-2-3-1, so exactly 2=1=3=7. 3NT now looks like the percentage contract. 4 ♦ is an override, showing 5 controls. West knows he is off just one ace, and the king of spades is protected on the lead, so 6 ♣ looks clear.

Open Room	6 ♣	0
Closed Room	3NT	+7

4/06, Page 6

♠ AJ95	♠ Q2
♥ Q94	♥ AK10876
♦ AJ	♦ 985
♣ AJ53	♣ K6

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♦	3NT
4 ♣	4 ♥
Pass	

1 ♠ shows hearts. 2 ♠ shows one-suiter high-short or equal-short with high doubleton. 3 ♣ shows equal-short with high doubleton. 3NT shows generic 6-2-3-2, so exactly 2=6=3=2. It also shows 3 controls or 4 controls and not a Super-Positive, since 3 ♠ (EOL) would have shown the same shape with 0–2 controls. 4 ♥ shows 4 controls, since 4 ♦ would have shown the minimum of 3 controls. West knows East has at most one queen, since with two queens East would not have bid 3NT, so slam is at best a little over 50% and might be a lot worse. It turns out that East has the right cards to make slam a favorite.

Open Room	6 ♥	-3
Closed Room	6 ♥	-3

4/06, Page 10

♠ AKQ96	♠ J543
♥ K	♥ AQ753
♦ AK62	♦ 4
♣ A63	♣ K72

WEST	EAST
—	Pass
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	3NT
4 ♣	4 ♥
4 ♠	5 ♣
5 ♦	5 ♥
5 ♠	5NT
7 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 4=5=1=3. 3NT shows 3 controls. 4 ♥ is {“Yes” in hearts, “No” in spades}. 5 ♣ is {“Yes” in hearts [queen], “No” in spades [no queen]}. 5 ♥ is {“No” in clubs [no queen]}. 5NT is {“No” in hearts [no jack]}. West knows that 7 ♠ is on when East has 3 controls, since West can count 7 spade tricks, 2 heart tricks, 2 diamond tricks, and 2 club tricks. If East has two queens or QJ of hearts, West can count 13 top tricks in notrump if there are 5 heart tricks, so West looks for that. When East doesn’t produce, 7 ♠ it is.

Open Room	N/A	
Closed Room	7 ♠	0

4/06, Page 12

♠ 8	♠ AK1032
♥ AQJ97	♥ K6
♦ J8742	♦ KQ
♣ AK	♣ QJ75

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	4 ♦
4 ♥	4 ♠
5 ♥	5NT
6NT	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 3 ♣ shows (presumably) generic 5-4-2-2, so exactly 5=2=2=4. 4 ♦ shows 5 controls (4 ♣ would show 7=1=1=4 shape). 4 ♠ is {"No" in spades}. West knows the ace of diamonds or both red kings are missing, so slam prospects look dim. West would prefer to sign off in 4NT, but 4 ♠ is the Death Response for that so West tries 5 ♥. East has so much extra that he overrides the signoff, which is permissible since West did DCB so the controls are there. 5NT is logically pick a slam, which also gives West a chance to bail out there if necessary. West knows East has to have two of the missing queens to justify this override, and whichever two queens they are there will be 12 tricks in notrump.

Open Room	5 ♥	+10
Closed Room	6NT	0

4/06, Page 38

♠ A2	♠ KQJ9863
♥ 102	♥ Q96
♦ KQJ2	♦ A53
♣ AK987	♣ —

WEST	EAST
1 ♣	1 ♥
1 ♠	4 ♣
4 ♦	4 ♠
4NT	5 ♦
5 ♠	Pass

1 ♥ shows spades. 4 ♣ shows one-suiter, low-short, generic 7-3-3-0, so exactly 7=3=3=0. 4 ♠ shows 3 controls. 5 ♦ is {“Yes” in spades, “No” in hearts}. Signing off is now easy. If East had the other red ace, slam would have been bid.

Open Room	6 ♠	+8
Closed Room	5 ♠	0
	♠ ♥ ♦ ♣	♠ ♥ ♦ ♣

The final estimated IMP totals were:

+150
-19

This is a very convincing display of the superiority of KK Relay.

PARTNERSHIP TEST

Here is a final test for a partnership. In the following pages, there are two sets of 100 randomly dealt E-W hands. The only parameters used for the dealing are that West has at least 16 HCP and East has at least 9 HCP. The East and West hands are presented separately. We bid the hands, so after you and your partner bid them you may compare your auction to ours. There is plenty of judgment involved, so on many of the hands the auctions will be different. As is often the case in bridge there is no “right” answer.

There is no substitute for practice when learning KK Relay. A pair who bids these 200 hands will be well prepared to use KK Relay at the table.

EAST HANDS SET 1

1. ♠ K94 ♥ 85 ♦ KJ5432 ♣ A8
2. ♠ 98 ♥ A103 ♦ KJ10 ♣ K6542
3. ♠ K8654 ♥ K6 ♦ K1082 ♣ 63
4. ♠ 8 ♥ J1073 ♦ QJ32 ♣ AQ97
5. ♠ KQ10754 ♥ A874 ♦ — ♣ 654
6. ♠ 5 ♥ QJ43 ♦ Q1098 ♣ AK104
7. ♠ AQ762 ♥ 10 ♦ K54 ♣ K852
8. ♠ A765 ♥ KQ9 ♦ KQ1053 ♣ 3
9. ♠ K643 ♥ Q108 ♦ KQ5 ♣ 1042
10. ♠ K106 ♥ J973 ♦ 1097 ♣ KQ7
11. ♠ K82 ♥ AJ874 ♦ QJ8 ♣ 83
12. ♠ J10 ♥ K1083 ♦ Q9 ♣ QJ1092
13. ♠ K43 ♥ K ♦ KJ86 ♣ AQJ107
14. ♠ 3 ♥ AK73 ♦ A1043 ♣ K1032
15. ♠ KQ1095 ♥ AJ1086 ♦ 65 ♣ 10
16. ♠ J2 ♥ AKJ65 ♦ 5 ♣ KJ874
17. ♠ 2 ♥ Q54 ♦ A10632 ♣ QJ107
18. ♠ A84 ♥ AK1042 ♦ J ♣ 9632
19. ♠ 75432 ♥ Q72 ♦ J94 ♣ AQ
20. ♠ Q85 ♥ J73 ♦ A42 ♣ Q854
21. ♠ Q864 ♥ AK74 ♦ 3 ♣ A1098
22. ♠ Q ♥ K932 ♦ Q10 ♣ KQ9752
23. ♠ A963 ♥ QJ53 ♦ KQ2 ♣ Q4
24. ♠ 82 ♥ K106 ♦ 1063 ♣ AKJ102
25. ♠ Q6 ♥ Q10964 ♦ Q9 ♣ A1053
26. ♠ 94 ♥ KQJ1094 ♦ 654 ♣ A6

27. ♠ J43 ♥ 643 ♦ AK10 ♣ QJ63
28. ♠ 8752 ♥ 5 ♦ A1032 ♣ KQ95
29. ♠ 63 ♥ QJ83 ♦ KQ2 ♣ J976
30. ♠ KJ9643 ♥ J65 ♦ A10 ♣ 94
31. ♠ AJ63 ♥ Q ♦ J842 ♣ AJ74
32. ♠ A3 ♥ KQ ♦ 63 ♣ 10987653
33. ♠ J875 ♥ A97632 ♦ 10 ♣ A9
34. ♠ K7642 ♥ KQ10 ♦ AJ ♣ J93
35. ♠ 7542 ♥ Q8 ♦ K10 ♣ AQ764
36. ♠ AKQ1087 ♥ 62 ♦ 842 ♣ 104
37. ♠ 7 ♥ 6 ♦ AKJ975 ♣ A9632
38. ♠ K1092 ♥ 52 ♦ KQJ5 ♣ J83
39. ♠ QJ ♥ K5 ♦ 73 ♣ KJ98542
40. ♠ A1052 ♥ 3 ♦ K10754 ♣ K43
41. ♠ Q963 ♥ KQ104 ♦ J9 ♣ J54
42. ♠ — ♥ KQJ1094 ♦ K1073 ♣ Q106
43. ♠ 92 ♥ AK854 ♦ K32 ♣ K105
44. ♠ 4 ♥ AJ10987 ♦ KQ543 ♣ 10
45. ♠ A974 ♥ AJ10 ♦ K72 ♣ 965
46. ♠ 754 ♥ KQ65 ♦ KQJ3 ♣ J10
47. ♠ 964 ♥ A986 ♦ K53 ♣ K73
48. ♠ A86 ♥ A632 ♦ 8 ♣ J7643
49. ♠ K4 ♥ QJ84 ♦ 76 ♣ KQ942
50. ♠ 92 ♥ AK854 ♦ 104 ♣ Q1098
51. ♠ QJ65 ♥ KJ843 ♦ Q5 ♣ 75
52. ♠ J97 ♥ AJ97 ♦ K762 ♣ K2
53. ♠ K105 ♥ QJ86 ♦ A74 ♣ Q97
54. ♠ QJ93 ♥ KQ52 ♦ 6 ♣ AK82
55. ♠ K732 ♥ KQJ5 ♦ J10 ♣ 963

56. ♠ KQ3 ♥ J32 ♦ 108 ♣ K10762
57. ♠ J1054 ♥ 86 ♦ A1092 ♣ AQJ
58. ♠ 9 ♥ KQJ1072 ♦ J87 ♣ A82
59. ♠ J532 ♥ K10843 ♦ Q ♣ A97
60. ♠ J8 ♥ KJ543 ♦ K10 ♣ J1074
61. ♠ 4 ♥ KQ3 ♦ K107 ♣ QJ9862
62. ♠ AK10 ♥ 10932 ♦ 32 ♣ KJ109
63. ♠ Q9 ♥ Q10 ♦ AK97 ♣ Q10932
64. ♠ K1097 ♥ Q9 ♦ — ♣ AKQ10976
65. ♠ K4 ♥ Q632 ♦ AJ87 ♣ Q107
66. ♠ A6 ♥ Q97 ♦ Q9732 ♣ A76
67. ♠ 104 ♥ 732 ♦ AQ97 ♣ K865
68. ♠ 52 ♥ KQJ76 ♦ KQ94 ♣ 93
69. ♠ J108 ♥ A8 ♦ KQ985 ♣ K84
70. ♠ K1053 ♥ K9 ♦ 10973 ♣ K104
71. ♠ K2 ♥ AK876 ♦ KQJ6 ♣ J2
72. ♠ AJ ♥ K53 ♦ 9875 ♣ J832
73. ♠ Q85 ♥ K10643 ♦ J2 ♣ A32
74. ♠ 2 ♥ 6 ♦ AJ642 ♣ KQJ976
75. ♠ 7 ♥ 1075 ♦ AKJ9 ♣ AKQ54
76. ♠ K3 ♥ J83 ♦ A542 ♣ J985
77. ♠ Q8 ♥ A852 ♦ J87 ♣ K982
78. ♠ A ♥ KQ54 ♦ QJ6 ♣ 87653
79. ♠ AJ10732 ♥ K64 ♦ A10 ♣ A6
80. ♠ QJ1074 ♥ 6 ♦ AQJ75 ♣ K6
81. ♠ AK86 ♥ A6 ♦ 10753 ♣ 1083
82. ♠ AJ73 ♥ K102 ♦ AJ3 ♣ 432
83. ♠ K109 ♥ AJ1086 ♦ K3 ♣ J95
84. ♠ J1083 ♥ Q2 ♦ AKQ104 ♣ J8

85. ♠ Q9865 ♥ 82 ♦ 5 ♣ AKQ84
86. ♠ K1064 ♥ Q53 ♦ 5 ♣ A8432
87. ♠ 10762 ♥ Q32 ♦ AJ2 ♣ KQ3
88. ♠ K7632 ♥ 9 ♦ AQ76 ♣ K73
89. ♠ A9 ♥ J1098 ♦ AJ832 ♣ 94
90. ♠ K10974 ♥ J ♦ 1043 ♣ KQ64
91. ♠ A762 ♥ 10854 ♦ 7 ♣ AK102
92. ♠ Q63 ♥ J106 ♦ K ♣ AQ10863
93. ♠ 65 ♥ KQJ104 ♦ QJ62 ♣ Q2
94. ♠ AJ1054 ♥ 3 ♦ AQ94 ♣ 1085
95. ♠ QJ10972 ♥ KQJ87 ♦ Q ♣ J
96. ♠ KQ10973 ♥ AQ3 ♦ J32 ♣ 9
97. ♠ AJ ♥ J862 ♦ A9765 ♣ 63
98. ♠ KJ76 ♥ AK62 ♦ 9 ♣ J865
99. ♠ KJ654 ♥ — ♦ 1073 ♣ AQ632
100. ♠ KQ107432 ♥ J ♦ KJ3 ♣ J9

WEST HANDS SET 1

1. ♠ AQ62 ♥ KQ7 ♦ AQ98 ♣ KJ
2. ♠ KQJ76 ♥ KQ6 ♦ 5 ♣ AQ109
3. ♠ J9 ♥ A7 ♦ AQ743 ♣ AK104
4. ♠ K93 ♥ AQ65 ♦ AK9 ♣ KJ8
5. ♠ — ♥ KQ953 ♦ AKQ982 ♣ K3
6. ♠ AKJ76 ♥ K105 ♦ AJ53 ♣ 8
7. ♠ K3 ♥ AK97 ♦ A10763 ♣ Q10
8. ♠ K4 ♥ A84 ♦ J96 ♣ AKQ109
9. ♠ A109 ♥ AJ6 ♦ J942 ♣ KQJ
10. ♠ A5 ♥ AKQ2 ♦ AQ2 ♣ 9842
11. ♠ 105 ♥ Q10 ♦ A52 ♣ AKQJ54
12. ♠ AK87 ♥ AQJ95 ♦ A108 ♣ K
13. ♠ A10 ♥ AQ96 ♦ AQ93 ♣ K82
14. ♠ AKQ2 ♥ Q9 ♦ J65 ♣ AQ95
15. ♠ J63 ♥ K ♦ AK83 ♣ AQ973
16. ♠ AQ ♥ Q94 ♦ QJ4 ♣ AQ1096
17. ♠ KJ76 ♥ KJ72 ♦ KJ5 ♣ AK
18. ♠ J97 ♥ 96 ♦ AKQ82 ♣ AK8
19. ♠ AKQ6 ♥ K ♦ K1083 ♣ KJ75
20. ♠ A10632 ♥ AK104 ♦ K108 ♣ K
21. ♠ AKJ9 ♥ QJ ♦ K1072 ♣ Q72
22. ♠ A7 ♥ QJ1064 ♦ AK7 ♣ A106
23. ♠ KQ82 ♥ AK2 ♦ 73 ♣ AK96
24. ♠ AQ654 ♥ AJ42 ♦ AKQ ♣ 8
25. ♠ AKJ10982 ♥ AKJ3 ♦ A10 ♣ —
26. ♠ AKQ108 ♥ 7 ♦ Q10 ♣ KQJ52

27. ♠ AQ765 ♥ AQJ ♦ 532 ♣ K2
28. ♠ AJ6 ♥ AQ ♦ K9876 ♣ A72
29. ♠ Q97 ♥ AK102 ♦ A1063 ♣ K8
30. ♠ AQ75 ♥ K2 ♦ Q9 ♣ KQ1085
31. ♠ Q42 ♥ AJ642 ♦ AK ♣ K62
32. ♠ — ♥ A10986 ♦ AKJ1097 ♣ AJ
33. ♠ AK ♥ J1085 ♦ QJ6 ♣ KQ104
34. ♠ Q5 ♥ A975 ♦ K73 ♣ AK108
35. ♠ AKQJ ♥ A964 ♦ 4 ♣ K1032
36. ♠ 3 ♥ Q4 ♦ AQJ3 ♣ AK9875
37. ♠ AJ1063 ♥ K93 ♦ Q ♣ KQJ5
38. ♠ AQ3 ♥ Q106 ♦ A976 ♣ AQ2
39. ♠ AK732 ♥ AQ32 ♦ A8 ♣ A7
40. ♠ J3 ♥ A96 ♦ AQ3 ♣ AJ1087
41. ♠ — ♥ AJ863 ♦ KQ6 ♣ AQ872
42. ♠ AKJ843 ♥ 3 ♦ A2 ♣ KJ53
43. ♠ AKQ ♥ Q1097 ♦ AQJ7 ♣ A7
44. ♠ AQJ9 ♥ Q65 ♦ — ♣ AK8642
45. ♠ KQ8 ♥ Q3 ♦ A94 ♣ AK1072
46. ♠ AKJ2 ♥ A ♦ A1097 ♣ A762
47. ♠ J ♥ KQJ32 ♦ A842 ♣ AJ5
48. ♠ KQ103 ♥ QJ95 ♦ AKQ ♣ 95
49. ♠ AQ96 ♥ K65 ♦ AKJ108 ♣ 10
50. ♠ AQ104 ♥ J3 ♦ Q83 ♣ AK63
51. ♠ AK9 ♥ A92 ♦ AJ ♣ AK982
52. ♠ Q54 ♥ Q53 ♦ AJ ♣ AQJ84
53. ♠ AQJ982 ♥ A4 ♦ 96 ♣ AJ5
54. ♠ K65 ♥ AJ9 ♦ AKQ4 ♣ 1095
55. ♠ AQ65 ♥ A96 ♦ KQ4 ♣ AJ8

56. ♠ AJ105 ♥ AKQ ♦ 763 ♣ Q83
57. ♠ AK9 ♥ AK102 ♦ Q8 ♣ 10632
58. ♠ AK743 ♥ A ♦ A10532 ♣ K6
59. ♠ 108 ♥ A2 ♦ AKJ4 ♣ KJ1062
60. ♠ AQ1062 ♥ AQ ♦ 962 ♣ KQ9
61. ♠ AKQJ862 ♥ A10 ♦ Q9 ♣ 105
62. ♠ Q6 ♥ AKJ7 ♦ A86 ♣ Q832
63. ♠ AKJ10743 ♥ KJ9 ♦ Q ♣ A4
64. ♠ J83 ♥ AK1065 ♦ AKQ8 ♣ 5
65. ♠ AQ98 ♥ K9 ♦ K63 ♣ A543
66. ♠ K104 ♥ AK65 ♦ KJ5 ♣ KQJ
67. ♠ AQ92 ♥ AQ54 ♦ J65 ♣ A10
68. ♠ KQ10876 ♥ A ♦ A6 ♣ KQ42
69. ♠ AKQ93 ♥ Q32 ♦ AJ7 ♣ 103
70. ♠ Q862 ♥ AQ10 ♦ KQJ2 ♣ A5
71. ♠ AQ1074 ♥ 3 ♦ A107 ♣ AQ108
72. ♠ Q76 ♥ A9 ♦ AQJ3 ♣ AQ75
73. ♠ AK104 ♥ Q52 ♦ KQ ♣ QJ85
74. ♠ AKQ8 ♥ KQJ52 ♦ Q ♣ A102
75. ♠ AKQJ1032 ♥ AK63 ♦ 104 ♣ —
76. ♠ AQJ8 ♥ K105 ♦ K93 ♣ K104
77. ♠ AJ9 ♥ 10 ♦ AK10952 ♣ A105
78. ♠ 94 ♥ AJ62 ♦ A94 ♣ AQJ2
79. ♠ KQ5 ♥ J1087 ♦ KQ63 ♣ KQ
80. ♠ K6 ♥ AJ1083 ♦ K ♣ AQJ98
81. ♠ J94 ♥ K852 ♦ AQJ4 ♣ AJ
82. ♠ Q ♥ AJ93 ♦ Q986 ♣ AK108
83. ♠ A3 ♥ K5 ♦ Q9842 ♣ AK63
84. ♠ AQ765 ♥ AJ3 ♦ J7 ♣ A64

85. ♠ AK7 ♥ AQ63 ♦ Q1096 ♣ J9
86. ♠ QJ92 ♥ J62 ♦ AK6 ♣ KQ9
87. ♠ KQ85 ♥ AK765 ♦ — ♣ AJ65
88. ♠ QJ ♥ KQ3 ♦ KJ ♣ AQ9642
89. ♠ K52 ♥ AQ63 ♦ Q7 ♣ AK82
90. ♠ A ♥ K642 ♦ AKQ9765 ♣ 3
91. ♠ QJ4 ♥ AKQ9 ♦ A10532 ♣ 6
92. ♠ A ♥ A9752 ♦ A932 ♣ KJ2
93. ♠ KJ82 ♥ A72 ♦ A94 ♣ A106
94. ♠ 93 ♥ KQJ ♦ K10865 ♣ AK3
95. ♠ AK4 ♥ 5 ♦ AK73 ♣ KQ1085
96. ♠ 54 ♥ KJ7642 ♦ AKQ ♣ K3
97. ♠ Q765 ♥ AQ43 ♦ J ♣ AK52
98. ♠ A ♥ 87 ♦ AJ87632 ♣ AK9
99. ♠ 97 ♥ AK10 ♦ AKJ98 ♣ J94
100. ♠ J8 ♥ AQ1064 ♦ AQ2 ♣ AK5

SET 1 ANSWERS

1.

♠ AQ62
♥ KQ7
♦ AQ98
♣ KJ

♠ K94
♥ 85
♦ KJ5432
♣ A8

WEST

1 ♣

2 ♦

3 ♦

4 ♣

4 ♠

6NT

EAST

2 ♣

3 ♣

3NT

4 ♥

5 ♦

Pass

2 ♣ shows diamonds. 3 ♣ shows one-suiter, equal-short, either 7-2-2-2 or 6-3-2-2 with two low doubletons. 3NT shows generic 6-3-2-2, so exactly 3=2=6=2. It also shows 3 controls or 4 controls and less than 13 HCP, since 3 ♠ is EOL. 4 ♥ shows 4 controls, since 4 ♦ would show the minimum of 3 controls. 5 ♦ is {“Yes” in diamonds, “Yes” in spades, “No” in hearts}. East’s barebones hand is:

♠ Kxx ♥ xx ♦ Kxxxxx ♣ Ax

There are 12 top tricks in notrump.

2.	♠ KQJ76	♠ 98
	♥ KQ6	♥ A103
	♦ 5	♦ KJ10
	♣ AQ109	♣ K6542

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♦
3 ♥	4 ♣
5 ♣	Pass

1NT shows clubs. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=3=3=5. 4 ♣ shows 4 controls. Slam is at best on a finesse, so West will definitely settle for game. It is possible that 4 ♠ is a better contract than 5 ♣ if East has 2 aces. However, DCB won't work. If East doesn't have the king of clubs he will respond 4 ♥ to 4 ♦ DCB, and that is the Death Response for playing in 4 ♠. Thus West must choose between 4 ♠ and 5 ♣ now, and 5 ♣ looks to be superior on balance.

3.	♠ J9	♠ K8654
	♥ A7	♥ K6
	♦ AQ743	♦ K1082
	♣ AK104	♣ 63

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
3 ♥	3 ♣
3 ♦	3 ♠
4 ♣	4NT
5 ♦	Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 5=2=4=2. 3 ♠ shows 3 controls. West can certainly play in 5 ♦, and if East has 3 kings instead of an ace and a king slam is possible, so 4 ♣ DCB looks right. 5 ♣, the Death Response, would be {"Yes" in spades, "Yes" in diamonds, "Yes" in hearts, "Yes" in spades [queen], "No" in diamonds [no queen]}, which is what West wants to hear. 4NT is {"Yes" in spades, "Yes" in diamonds, "Yes" in hearts, "No" in spades [no queen]}. If East has 3 kings his barebones hand is:

♠ Kxxxx ♥ Kx ♦ Kxxx ♣ xx

That makes slam at best on a spade finesse. It is also possible that East has the ace of spades and the king of diamonds, after which he would scan for the queen of spades and then the queen of diamonds, so his 4NT bid would be {"Yes" in spades, "Yes" in diamonds, "Yes" in spades [queen], "No" in diamonds [no queen]}, for a barebones hand of:

♠ AQxxx ♥ xx ♦ Kxxx ♣ xx

And again slam would be at best on a spade finesse. Thus, it is right for West to settle for game.

4.	♠ K93	♠ 8
	♥ AQ65	♥ J1073
	♦ AK9	♦ QJ32
	♣ KJ8	♣ AQ97

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
Pass	

1NT shows clubs. 2♥ shows three-suiter, short major. 2NT shows high-short. 3♦ shows generic 4-4-4-1 with a small singleton, so exactly 1=4=4=4. West will play in hearts, and the Death Response of 4♦ to a Control Ask would show 5 controls, which West can handle, so the Control Ask is clear. 3♠ shows 0–2 controls. Slam can't be better than a finesse, so West bids 4♦ to sign off in 4♥.

5.	♠ —	♠ KQ10754
	♥ KQ953	♥ A874
	♦ AKQ982	♦ —
	♣ K3	♣ 654

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♦	2 ♥
2 ♠	3 ♦
6 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. At this point West knows about the good heart fit, and the rest of East's shape isn't likely to matter. West chooses to make a Void Control Ask in order to avoid going above 4 ♥ if East has no working aces, as well as tell the opponents less about which minor to lead. 2 ♦ shows some void, 2 ♥ asks which, and 2 ♠ shows a spade void and asks for number of controls outside of spades. 3 ♦ shows 2 controls outside of spades. East must have either the ace of hearts or the ace of clubs, and 6 ♥ is good opposite both hands.

6.	♠ AKJ76	♠ 5
	♥ K105	♥ QJ43
	♦ AJ53	♦ Q1098
	♣ 8	♣ AK104

WEST	EAST
1 ♣	1NT
2 ♣	2♥
2 ♠	2NT
3 ♣	3♦
3♥	3NT
4 ♣	4♦
5♦	Pass

1NT shows clubs. 2♥ shows a three-suiter, short major. 2NT shows high-short. 3♦ shows generic 4-4-4-1 with a small singleton, so exactly 1=4=4=4. 3NT shows 3 controls. While strains other than diamonds could be right, there is no way to find that out, so West decided to play in diamonds. Slam could be there if East's controls were the ace of hearts and the king of diamonds, so it couldn't hurt to DCB. 4♦ is {"No" in hearts}. Slam is still possible if East has KQ of diamonds and queen of hearts (along with the now known ace of clubs), but West has to watch out for the Death Response of 5♣ if he continues to DCB with 4♥. That would be {"Yes" in diamonds, "Yes" in hearts [queen], "No" in diamonds [no queen]} for a barebones hand of:

♠ x ♥ Qxxx ♦ Kxxx ♣ Axxx

West doesn't want to commit to slam opposite that, and even if East has the right cards slam won't be cold, so it looks best to settle for 5♦. Note that East is permitted to move since West has shown some interest opposite 3 controls. If East had ♠ x ♥ QJxx ♦ KQxx ♣ Axxx he should bid 5♥, giving West an out in 5NT if the AK of hearts are missing.

7.

♠ K3
♥ AK97
♦ A10763
♣ Q10

♠ AQ762
♥ 10
♦ K54
♣ K852

WEST

1 ♣

1 ♠

2 ♦

3 ♣

3 ♠

Pass

EAST

1 ♥

2 ♣

2NT

3 ♦

3NT

1 ♥ shows spades. 2 ♣ shows clubs. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=1=3=4. Slam is possible in diamonds (or maybe spades), but East needs at least 4 controls as well as some fillers. If East has less, 3NT is probably best, and West doesn't want to be flying past 3NT opposite 2 bare aces, which would happen if West bids 3 ♥ Control Ask. This is a perfect spot for the Weak Relay. If East has only 4 controls he will need a queen or two to go beyond 3NT, and West can then probe for slam, with 5 ♦ probably safe. If East has 5 controls he will have 2 aces and a king, and now 5 ♦ figures to be safe and slam quite possible. East has only 12 HCP and no spots, so he chose to take the low road and bid 3NT with his 4 controls.

8.	♠ K4	♠ A765
	♥ A84	♥ KQ9
	♦ J96	♦ KQ1053
	♣ AKQ109	♣ 3

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	3 ♦
3 ♠	4 ♣
4 ♦	5 ♣
5 ♦	5 ♠
6 ♦	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 4=3=5=1. West wants to stop in 3NT if there is no slam, but a diamond slam is possible if East has the right stuff. East needs at least 4 controls, as well as some fillers if only 4 controls. Again, this is a good hand for the Weak Relay. 4 ♣ shows 4 controls with 13+ HCP. Now West may be able to probe with 4 ♦ DCB, but first must check out the Death Response of 5 ♣. That would be {“Yes” in diamonds, “Yes” in spades, “Yes” in diamonds [queen], “No” in spades [no queen]}. Depending upon whether East’s diamond honor is the ace or the king, his barebones hand looks like either:

♠ Axxx ♥ Kxx ♦ KQxxx ♣ x

or

♠ Axxx ♥ xxx ♦ AQxxx ♣ x

6 ♦ is fine opposite the first hand. For the second hand East would have to have the queen of hearts for his positive response to the Weak Relay, and 6 ♦ is okay opposite that hand. Thus, DCB is okay. When East produces the 5 ♣ call West can continue to DCB, since 6NT might be better. 5 ♠ is {“Yes” in hearts [queen], “No” in diamonds [jack]}. East’s barebones hand now is:

♠ Axxx ♥ KQx ♦ KQxxx ♣ x

or

♠ Axxx ♥ Qxx ♦ AQxxx ♣ x

If the diamonds produce 4 tricks West can count 2 spades, 3 hearts, 4 diamonds, and 3 clubs in notrump opposite the first hand. However, opposite the second hand West prefers to play in diamonds, since there aren't 12 sure winners and a spade ruff in the short hand or a club ruff to establish a long club might be key. Since West can't tell which hand East has, it looks best to play in 6♦.

9.

♠ A109

♥ AJ6

♦ J942

♣ KQJ

♠ K643

♥ Q108

♦ KQ5

♣ 1042

WEST

1 ♣

2 ♥

2NT

3NT

EAST

2 ♦

2 ♠

3 ♣

Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. While 3NT is probably right regardless, West should continue to relay, since if East has the 15+ hand West will want to know East's shape as there might be a diamond slam. 3♣ shows 4-3-3-3 with a 4-card major. Now West really doesn't care about the exact shape, so 3NT it is.

10.	♠ A5	♠ K106
	♥ AKQ2	♥ J973
	♦ AQ2	♦ 1097
	♣ 9842	♣ KQ7

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
4 ♦	4 ♥
Pass	

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♣ shows 4-3-3-3 with a 4-card major. 3♥ shows 4 hearts, so exactly 3=4=3=3. West has a strong heart holding and spades is a possible soft spot, so West opted for the 4–4 fit over 3NT, bidding 4♦ to force 4♥ for signoff.

11.	♠ 105	♠ K82
	♥ Q10	♥ AJ874
	♦ A52	♦ QJ8
	♣ AKQJ54	♣ 83

WEST	EAST
1 ♣	1 ♠
1NT	3 ♦
3 ♠	3NT
Pass	

1♠ shows hearts. 3♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=5=3=2. Slam could be there opposite 5 controls, or even opposite 4 controls if East has sufficient fillers, but otherwise West wants to stop in 3NT. A good hand for the Weak Relay. East has only 3 controls, so must bid 3NT.

12.

♠ AK87
♥ AQJ95
♦ A108
♣ K

♠ J10
♥ K1083
♦ Q9
♣ QJ1092

WEST

1 ♣
1NT
2 ♦
2 ♠
3 ♦
3 ♠
4 ♣
4 ♥
5 ♦
6 ♥

EAST

1 ♠
2 ♣
2 ♥
3 ♣
3 ♥
3NT
4 ♦
5 ♣
5 ♥
Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=2=5. 3 ♥ shows 0–2 controls. 3NT shows 1 control. Opposite the king of diamonds slam is at best on a finesse, but opposite the king of hearts slam might be cold if East has some key queens and jacks, and East has to have something for the positive response. Is there a Death Response danger if West DCBs with 4 ♣, which will definitely get 4 ♦ {“No” in clubs}? The 5-level is safe opposite either red king, so DCB is okay so far. The next DCB will be 4 ♥. The Death Response would be 5 ♦, which would be {“Yes” in hearts, “Yes” in clubs [queen], “Yes” in hearts [queen], “No” in spades [no queen]}, and East doesn’t have the queen of hearts, so that is impossible. 4 ♦ is {“No” in clubs}. 5 ♣ is {“Yes” in hearts, “Yes” in clubs [queen], “No” in hearts [no queen]}. The next scan is for the queen of spades, and if East has it slam is cold, so 5 ♦ DCB is safe. 5 ♥ is {“No” in spades [no queen]}. East’s barebones hand is:

♠ xx ♥ Kxxx ♦ xx ♣ Qxxxx

Even opposite that slam might make with 7 heart tricks, 2 club tricks, 2 spade tricks, and 1 diamond trick if no diamond lead. East has more than that for the positive response. East must have the queen

of diamonds, and almost certainly the jack of clubs, to come up with a positive response. Unfortunately East will be declarer, but only a diamond lead with the king offside figures to defeat the slam, so 6♥ looks like a good bet.

13.	♠ A10	♠ K43
	♥ AQ96	♥ K
	♦ AQ93	♦ KJ86
	♣ K82	♣ AQJ107

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	3 ♣
3 ♦	4 ♦
4 ♥	5 ♥
5 ♠	5NT
6 ♣	6 ♦
6 ♥	7 ♣
7NT	Pass

1NT shows clubs. 2♦ shows diamonds. With this much strength East decided that the stiff king of hearts was likely to fill in West's hand, so he chose to pretend his distribution was 2=2=4=5 so he could show the 5 controls. 3♣ shows presumably generic 5-4-2-2, so exactly 2=2=4=5. 4♦ shows 5 controls (4♣ would show 1=1=4=7). 5♥ is {"Yes" in clubs, "Yes" in diamonds, "Yes" in spades, "Yes" in clubs [queen], "No" in diamonds [no queen]}. East's barebones hand is:

♠ Kx ♥ Kx ♦ Kxxx ♣ AQxxx

7♦ is good opposite that, but 7NT might be better. 5NT is {"No" in spades [no queen]}. 6♦ is {"No" in hearts [no queen]}. 7♣ is {"Yes" in clubs [jack], "Yes" in diamonds [jack]}. East's barebones hand now is:

♠ Kx ♥ Kx ♦ KJxx ♣ AQJxx

7NT is cold.

14.	♠ AKQ2	♠ 3
	♥ Q9	♥ AK73
	♦ J65	♦ A1043
	♣ AQ95	♣ K1032

WEST	EAST
1 ♣	1NT
2 ♣	2♥
2 ♠	2NT
3 ♣	3♦
3NT	4♥
4 ♠	4NT
5 ♣	5♥
6 ♣	Pass

1NT shows clubs. 2♥ shows three-suiter, short major. 2NT shows high-short. 3♦ shows generic 4-4-4-1 with a small singleton, so exactly 1=4=4=4. West judged that he wasn't even worth a Weak Relay since 4 controls and extras probably wouldn't be enough, but with 6 controls East had an obvious override. 4♥ shows 6 controls. Off only 1 king West is willing to play 6♣, so West doesn't need to fear a 4NT Death Response and can safely DCB. 4NT is {"No" in hearts}. If West continues DCB, the Death Response is 5NT, and since West has the queen of hearts East can't make that call. 5♥ is {"Yes" in diamonds, "No" in hearts [no queen]}. That makes East's barebones hand:

♠ x ♥ AKxx ♦ Axxx ♣ Kxxx

West would like to DCB for the queen of diamonds since that would make 6NT better than 6♣, but he must watch out for the Death Response. If West bids 5♠ DCB, 5NT {"No" in diamonds [no queen]} is the Death Response for playing in 6♣. West can't handle that, so he must simply settle for 6♣.

15.	♠ J63	♠ KQ1095
	♥ K	♥ AJ1086
	♦ AK83	♦ 65
	♣ AQ973	♣ 10

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♥
4 ♠	5 ♥
5 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows a long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 5=5=2=1. It might seem as though West should Control Ask with 3 ♠ here, but there is a problem. What if East has 3 controls, which is reasonably likely. East would bid 4 ♣. What next? Opposite:

♠ KQxxx ♥ AQxxx ♦ xx ♣ x

West wants to be in slam, but opposite:

♠ AKxxx ♥ Jxxxx ♦ Jx ♣ x

anything above 4 ♠ is too high.

If West then bids 4 ♦, DCB, 4 ♥ {“No” in spades} is the Death Response. That doesn’t work.

It looks better to simply make a slam try in spades. East will certainly focus on the queen of spades, which is a critical card. If East does accept he will respond to RKC, so if slam is reached it will at least have some play. East’s hand is relatively minimal, but with the good trump suit including the vital queen, possibly important 10, primes, and the heart suit having body he chose to accept. 5 ♥ shows 2 keycards, queen of trumps, nothing extra. East’s barebones hand now is something like:

♠ KQxxx ♥ Axxxx ♦ xx ♣ x

East doesn't have the queen of hearts, since with that he would have bid 5♠ to show something extra. Similarly, if East has this hand with the ace of spades instead of the king he would probably consider it more than a bare minimum acceptance. Slam doesn't appear to be a favorite opposite East's likely hand, so West stops in 5♠.

16.	♠ AQ ♥ Q94 ♦ QJ4 ♣ AQ1096	♠ J2 ♥ AKJ65 ♦ 5 ♣ KJ874
	WEST	EAST
	1♣	1♠
	1NT	2♣
	2♦	2♠
	2NT	3♥
	3♠	4♦
	4♥	4♠
	4NT	5♦
	6♣	Pass

1♠ shows hearts. 2♣ shows clubs. 2♠ shows a long two-suiter. 3♥ shows low-short, generic 5-5-2-1, so exactly 2=5=1=5. If West bids 3♠ Control Ask, 4♦ (4 controls) is the Death Response for playing in 4♥. West is willing to play in 5♣ opposite that, so Control Ask is okay. 4♦ shows 4 controls. Is 4♥ DCB okay? The Death Response is 4NT {"Yes" in hearts, "No" in clubs}, which would mean both red aces. The odds are well against that with East having 1 diamond and 5 clubs, and even opposite that 6♣ has decent to good play (or West can choose to stop in 5♥), so it is worth DCB. 4♠ is {"No" in hearts}. On a bad day this could be king of clubs, king of spades, and stiff ace of diamonds, but it is far more likely to be AK of hearts with East holding 5 hearts, 2 spades, and 1 diamond. That is a risk worth taking. On that assumption, East's barebones hand is either:

♠ Kx ♥ AKxxx ♦ x ♣ xxxxx

or

♠ xx ♥ AKxxx ♦ x ♣ Kxxxx

Opposite the first hand West wants to stop in 5♣, but opposite the second hand 6♣ is almost cold. 4NT DCB gets the job done. East will bid 5♣ without the king of clubs, higher with the king of clubs. 5♦ is {“Yes” in clubs, “No” in hearts [no queen]}.

17.

♠ KJ76

♥ KJ72

♦ KJ5

♣ AK

♠ 2

♥ Q54

♦ A10632

♣ QJ107

WEST

1♣

2♦

2♠

3♣

3♥

3NT

EAST

2♣

2♥

2NT

3♦

3♠

Pass

2♣ shows diamonds. 2♥ shows clubs. 2NT shows high-short. 3♦ shows generic 5-4-3-1, so exactly 1=3=5=4. 5♦ is okay and slam is possible opposite 4 controls, so a 3♥ Control Ask is fine. 3♠ shows 0–2 controls. 3NT now is the obvious choice.

PARTNERSHIP TEST ---

18.	♠ J97	♠ A84
	♥ 96	♥ AK1042
	♦ AKQ82	♦ J
	♣ AK8	♣ 9632

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♦
3NT	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=5=1=4. West's hand is terrible opposite this shape, not even worth a Weak Relay. 3NT is obvious. Even though East has 5 controls, when West can't even make a Weak Relay East needs something extra to justify an override.

19.	♠ AKQ6	♠ 75432
	♥ K	♥ Q72
	♦ K1083	♦ J94
	♣ KJ75	♣ AQ

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 5=3=3=2. 3 ♠ shows 0-2 controls. 4 ♠ is the obvious final contract.

20.	♠ A10632	♠ Q85
	♥ AK104	♥ J73
	♦ K108	♦ A42
	♣ K	♣ Q854

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♣ shows 4-3-3-3 with a 4-card minor. 3 ♥ shows 4 clubs, so exactly 3=3=3=4. The choice between 3NT and 4 ♠ is close, but with the stiff king of clubs, the spade suit weak in intermediates, and the fast tricks on the side which don't need time to be developed, 3NT looks like the better choice on balance. A key factor is that with clubs East's only known suit the opponents aren't going to be rushing to lead a club.

21.

♠ AKJ9

♥ QJ

♦ K1072

♣ Q72

♠ Q864

♥ AK74

♦ 3

♣ A1098

WEST

1 ♣

1 ♠

2 ♣

2 ♥

3 ♣

3 ♥

4 ♠

EAST

1 ♥

1NT

2 ♦

2NT

3 ♦

4 ♦

Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with a small singleton, so exactly 4=4=1=4. West's hand is a pile of junk, but with spades the trump suit and the Control Ask of 3 ♥ making 4 ♥ (6 controls) the Death Response, West can afford it. 4 ♦ shows 5 controls. Not enough.

22.

♠ A7	♠ Q
♥ QJ1064	♥ K932
♦ AK7	♦ Q10
♣ A106	♣ KQ9752

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♥
3 ♠	3NT
4 ♣	5 ♣
6 ♥	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 1=4=2=6. 3NT shows 0-2 controls. Opposite the Death Response of 4 ♦ (1 control) the 5-level is pretty safe, since East would just about have to have the queen of clubs for the positive response, so West can afford 4 ♣ DCB. 5 ♣ is {2 controls, “Yes” in clubs, “Yes” in hearts, “Yes” in clubs [queen], “No” in hearts [no queen]}. East’s barebones hand is:

♠ x ♥ Kxxx ♦ xx ♣ KQxxxx

6 ♥ is obvious.

23.	♠ KQ82	♠ A963
	♥ AK2	♥ QJ53
	♦ 73	♦ KQ2
	♣ AK96	♣ Q4

WEST	EAST
1 ♣	2NT
3 ♣	3NT
4 ♣	4 ♥
4 ♠	5 ♣
6 ♠	Pass

2NT shows 12–14 balanced, two suits same rank. 3NT shows doubleton club, so exactly 4=4=3=2. 4 ♥ shows 3 controls, Death Response for 4 ♠ but West clearly has safety at the 5-level. 5 ♣ is {“Yes” in spades, “No” in hearts}. West knows East has the ace of spades and king of diamonds. West also knows that if he continues with 5 ♦ DCB, East’s next call will be 5 ♠ {“Yes” in diamonds, “No” in spades [no queen]}, so West can’t learn anything more for stopping in 5 ♠. East’s barebones hand is:

♠ Axxx ♥ xxxx ♦ Kxx ♣ xx

with enough queens and jacks to get up to at least 12 HCP. East is a big favorite to have at least two of the missing queens, and depending on which queens and what jacks East has 6 ♠ will be somewhere between slightly worse than 50% to nearly cold. It looks worth committing to 6 ♠. Might 6NT be better? Suppose West continues DCB with 5NT. 6 ♥ would be the Death Response for 6 ♠. That would be {“Yes” in hearts [queen], “Yes” in diamonds [queen], “No” in clubs [no queen]}, making East’s barebones hand:

♠ Axxx ♥ Qxxx ♦ KQx ♣ xx

Opposite that hand (plus some jack to get to 12 HCP) West needs to play in 6 ♠ rather than 6NT, so West cannot probe for 6NT.

24.	♠ AQ654	♠ 82
	♥ AJ42	♥ K106
	♦ AKQ	♦ 1063
	♣ 8	♣ AKJ102
	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♠
	2NT	3 ♦
	3 ♠	3NT
	Pass	

1NT shows clubs. 2♠ shows one-suiter, high-short or equal-short with high doubleton. 3♦ shows generic 5-3-3-2, so exactly 2=3=3=5. The hands don't fit well, so East needs extra power for slam. 5 controls make slam possible, but if East has 4 controls he needs at least a queen. Perfect for Weak Relay. East has the 4 controls but only 11 HCP, so he stops in 3NT.

25.	♠ AKJ10982	♠ Q6
	♥ AKJ3	♥ Q10964
	♦ A10	♦ Q9
	♣ —	♣ A1053

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♣
3 ♦	3 ♥
3 ♠	4 ♣
4 ♦	4NT
5 ♣	5 ♠
7NT	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly $2=5=2=4$. 3 ♥ shows 0–2 controls. 4 ♣ is {2 controls, “No” in hearts}. West can be sure of at least a small slam in hearts, so he can DCB all the way now. 4NT is {“Yes” in clubs, “Yes” in hearts [queen], “No” in clubs [no queen]}. Initially, East might have the minor-suit kings for his 2 controls, which would be consistent with his “Yes” in clubs. However, if East had that his next scan would be in spades, which would be a no. Since East found a second yes, he must have ace of clubs and queen of hearts. 5 ♠ is {“Yes” in spades [queen], “Yes” in diamonds [queen], “No” in hearts [no jack]}. East’s barebones hand is:

♠ Qx ♥ Qxxxx ♦ Qx ♣ Axxx

7NT is cold.

26.	♠ AKQ108	♠ 94
	♥ 7	♥ KQJ1094
	♦ Q10	♦ 654
	♣ KQJ52	♣ A6

WEST	EAST
1 ♣	1 ♠
1NT	2 ♠
2NT	3 ♣
3 ♦	3NT
4 ♦	4 ♥
4 ♠	Pass

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♣ shows equal-short with high doubleton. 3NT shows generic 6-2-3-2 shape so exactly 2=6=3=2, and 3 controls or 4 controls with fewer than 13 HCP since 3 ♠ is EOL. At this point West has to guess which game is best, and the choice of 4 ♠ looks as reasonable as anything else, so he signs off via 4 ♦.

If West had known the quality of East's heart suit, West would have chosen the superior 4 ♥ contract. This would be a good hand to be playing the specialty bid that shows a semi-solid major.

27.	♠ AQ765	♠ J43
	♥ AQJ	♥ 643
	♦ 532	♦ AK10
	♣ K2	♣ QJ63

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♣ shows 4-3-3-3 with a 4-card minor. 3 ♥ shows 4 clubs, so exactly 3=3=3=4. With the opponents having no 8-card fit, 3NT figures to be better than the 5–3 spade fit.

28.	♠ AJ6	♠ 8752
	♥ AQ	♥ 5
	♦ K9876	♦ A1032
	♣ A72	♣ KQ95

WEST	EAST
1 ♣	1NT
2 ♣	2 ♥
2 ♠	3 ♦
3 ♥	3NT
5 ♦	Pass

1NT shows clubs. 2♥ shows three-suiter, short major. 3♦ shows low-short, generic 4-4-4-1 with a small singleton, so exactly 4=1=4=4. 3NT shows 3 controls. East is marked with the ace of diamonds and one of the black kings. 6♦ could be making, but East needs a couple of queens to make it a percentage contract. DCB doesn't have a chance to get to these queens in time. West judged the best bet was to make a natural slam try with 5♦. East will like the queen of diamonds, and he will also like a black queen, particularly if that is the suit in which he has the king. No guarantee, but East will go right more often than not. East is minimal with no queen of trumps, so has a rejection.

29.	♠ Q97	♠ 63
	♥ AK102	♥ QJ83
	♦ A1063	♦ KQ2
	♣ K8	♣ J976

WEST

1 ♣

2 ♥

4 ♦

Pass

EAST

2 ♦

3 ♠

4 ♥

2♦ shows balanced 9–11 or 15+. 3♠ shows two suits same shape, doubleton spade, so exactly 2=4=3=4. With that information, West judged that 4♥ looked to be a better contract than 3NT on balance and signed off via 4♦.

30.	♠ AQ75	♠ KJ9643
	♥ K2	♥ J65
	♦ Q9	♦ A10
	♣ KQ1085	♣ 94

WEST

1 ♣

1 ♠

3 ♦

4 ♦

4 ♠

EAST

1 ♥

3 ♣

3NT

4 ♥

Pass

1♥ shows spades. 3♣ shows one-suiter, equal-short, 7-2-2-2 or 6-3-2-2 with two low doubletons. 3NT shows generic 6-3-2-2 so exactly 6=3=2=2, 3 controls or 4 controls with less than 13 HCP since 3♠ is EOL. 4♠ is the obvious contract.

31.

♠ Q42

♥ AJ642

♦ AK

♣ K62

♠ AJ63

♥ Q

♦ J842

♣ AJ74

WEST

1 ♣

2 ♣

2 ♠

3 ♦

Pass

EAST

1NT

2 ♥

3 ♣

3NT

1NT shows clubs. 2♥ shows three-suiter, short major. 3♣ shows generic 4-4-4-1, singleton honor. 3NT shows low-short so exactly 4=1=4=4 with a singleton heart honor, and 3 controls or 4 controls with less than 13 HCP since 3♠ is EOL. East's hand is so junky he chose to downgrade to less than a Super-Positive. West has easy pass over that.

32.

♠ —	♠ A3
♥ A10986	♥ KQ
♦ AKJ1097	♦ 63
♣ AJ	♣ 10987653

WEST	EAST
1 ♣	1NT
2 ♣	3 ♣
3 ♦	3 ♥
3 ♠	4 ♣
4 ♦	4 ♥
4 ♠	5 ♦
5 ♥	5 ♠
5NT	6 ♦
Pass	

1NT shows clubs. 3 ♣ shows one-suiter, equal-short, either 7-2-2-2 or 6-3-2-2 with two low doubletons. 3 ♥ shows generic 7-2-2-2, so exactly 2=2=2=7. 4 ♣ shows 3 controls. 4 ♥ is {"No" in clubs}. Opposite AK doubleton of spades West might stop in 5 ♣, but opposite ace of spades and king of hearts slam has to be bid. 5 ♦ is {"Yes" in spades, "Yes" in hearts, "No" in clubs [no queen]}. 5 ♠ is {"No" in spades [no queen]}. East's barebones hand is:

♠ Ax ♥ Kx ♦ xx ♣ xxxxxxxx

The next DCB scan 5NT is for the queen of hearts. If East doesn't have it he will bid 6 ♣, and that will be that. What if East has the queen of hearts? If he doesn't have the queen of diamonds he will bid 6 ♦ {"Yes" in hearts [queen], "No" in diamonds [no queen]}. That will be a better contract than 6 ♣, since it makes if either red suit comes home without a loser. What if East has both red queens? Then he will bid 6 ♥ {"Yes" in hearts [queen], "Yes" in diamonds [queen], "No" in clubs [no jack]}. That is an unexpected contract, but it would need only a 4-2 heart split to make. So 5NT DCB it is. 6 ♦ is {"Yes" in hearts [queen], "No" in diamonds [no queen]}.

33.	♠ AK	♠ J875
	♥ J1085	♥ A97632
	♦ QJ6	♦ 10
	♣ KQ104	♣ A9

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♥
3 ♠	4 ♦
4 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 4=6=1=2. With 6 hearts in East's hand there is no worry about a Death Response, so West can safely Control Ask. 4 ♦ shows 4 controls. Not enough.

34.	♠ Q5	♠ K7642
	♥ A975	♥ KQ10
	♦ K73	♦ AJ
	♣ AK108	♣ J93

WEST	EAST
1 ♣	1 ♥
1 ♠	2NT
3 ♣	3 ♦
3NT	Pass

1 ♥ shows spades. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 5=3=2=3. With no 8-card fit and West being minimal, West isn't even worth a Weak Relay, so he just bids 3NT. East would move over a Weak Relay, but over a direct 3NT call a 14-count with 4 controls isn't worth any move.

35.	♠ AKQJ	♠ 7542
	♥ A964	♥ Q8
	♦ 4	♦ K10
	♣ K1032	♣ AQ764

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠
4 ♣	4 ♥
4 ♠	4NT
5 ♠	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 4=2=2=5. 3 ♠ shows 3 controls. Slam will be good if East has AQ of clubs and the king of hearts. What about the Death Response of 4 ♥ to DCB 4 ♣, which would be {“Yes” in clubs, “No” in spades}? That could be costly, since 5 ♠ might go down if East has the wrong red king. It looks worth the risk, since East might have the queen of clubs or the clubs might split. 4 ♥ is {“Yes” in clubs, “No” in spades}. 4NT is {“No” in hearts}. East’s barebones hand is:

♠ xxxx ♥ xx ♦ Kx ♣ Axxxx.

Slam is at best on a finesse. West can’t bid 5 ♣ to play as that would be DCB, so must sign off in 5 ♠.

36.	♠ 3	♠ AKQ1087
	♥ Q4	♥ 62
	♦ AQJ3	♦ 842
	♣ AK9875	♣ 104

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♣
3 ♦	3NT
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♣ shows equal-short with high doubleton. 3NT shows generic 6-2-3-2 shape, so exactly 6=2=3=2, with 3 controls or 4 controls and less than 13+ HCP, since 3 ♠ is EOL. East needs 4 controls for slam along with at least one black queen, and opposite only one black queen slam would only be so-so. Therefore, West gives up on slam. He must choose between 4 ♠ and 5 ♣. Since the club suit isn't internally solid, it looks like the best bet is to hope East has good spades and play in 4 ♠.

It should be noted that if using the specialty bids, East could have shown a semi-solid suit. After that, West would have been sure that 4 ♠ was the correct choice.

37.	♠ AJ1063	♠ 7
	♥ K93	♥ 6
	♦ Q	♦ AKJ975
	♣ KQJ5	♣ A9632

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♦
3 ♥	4 ♦
6 ♣	Pass

1NT shows clubs. 2 ♦ shows diamonds. 2 ♠ shows long two-suiter. 3 ♦ shows equal-short. 4 ♦ shows generic 6-5-1-1, so exactly 1=1=6=5, with 5 controls (EOL, where 3NT would have shown 1=1=6=5, less than a Super-Positive). East must have the king of diamonds and 2 of the 3 missing aces, so 6 ♣ is clearly the right contract.

38.	♠ AQ3	♠ K1092
	♥ Q106	♥ 52
	♦ A976	♦ KQJ5
	♣ AQ2	♣ J83

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♥
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♥ shows two suits same shape, doubleton heart, so exactly 4=2=4=3. 3NT is the obvious choice.

39.	♠ AK732	♠ QJ
	♥ AQ32	♥ K5
	♦ A8	♦ 73
	♣ A7	♣ KJ98542

WEST	EAST
1 ♣	1NT
2 ♣	3 ♣
3 ♦	3 ♥
3 ♠	3NT
4 ♣	4 ♠
4NT	5 ♦
6 ♣	Pass

1NT shows clubs. 3 ♣ shows one-suiter, equal-short, either 7-2-2-2 or 6-3-2-2 with two low doubletons. 3 ♥ shows generic 7-2-2-2, so exactly 2=2=2=7. 3NT shows 0–2 controls. 4 ♠ is {2 controls, “Yes” in clubs, “No” in spades}. East has a red king, so slam is at worst on a club split; further DCB cannot cost. 5 ♦ is {“Yes” in hearts, “No” in clubs [no queen]}. East’s barebones hand is:

♠ xx ♥ Kx ♦ xx ♣ Kxxxxxx

That makes 6 ♣ clear.

40.	♠ J3	♠ A1052
	♥ A96	♥ 3
	♦ AQ3	♦ K10754
	♣ AJ1087	♣ K43

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	4NT
5 ♣	5 ♦
5 ♥	5 ♠
6 ♣	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 4=1=5=3. 4 ♣ shows 4 controls. Either minor can serve as the trump suit, so West doesn't have to worry much about a Death Response to a 4 ♦ DCB. 4NT is {"Yes" in diamonds, "Yes" in spades, "No" in diamonds [no queen]}. East is marked with the king of clubs. With the king of spades missing it is clear to play in clubs, since the losing spade can be discarded on the long diamond and a heart can be ruffed in the short hand. If East has the queen of clubs, 7 ♣ looks good. 5 ♦ is {"No" in spades [no queen]}. 5NT is the Death Response for 6 ♣ to the 5 ♥ DCB call, but that will be what is wanted— {"Yes" in clubs [queen], no in diamonds [no jack]}—so more DCB is fine. 5 ♠ is {"No" in clubs [no queen]}. East's barebones hand is:

♠ Axxx ♥ x ♦ Kxxxx ♣ Kxx

6 ♣ it is.

41.	♠ —	♠ Q963
	♥ AJ863	♥ KQ104
	♦ KQ6	♦ J9
	♣ AQ872	♣ J54

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
Pass	

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3 ♦ shows doubleton diamond, so exactly 4=4=2=3. 3 ♠ shows 0–2 controls. Slam is still in the picture if East has a perfect hand with KQ of hearts and the king of clubs. The problem is that if East has wasted stuff in spades 5 ♥ would be in jeopardy, and that can't be found out without going above 4 ♥. Stopping in 4 ♥ looks percentage.

42.	♠ AKJ843	♠ —
	♥ 3	♥ KQJ1094
	♦ A2	♦ K1073
	♣ KJ53	♣ Q106

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2NT
3 ♣	3 ♠
3NT	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 2NT shows high-short. 3 ♠ shows generic 6-4-3-0, so exactly 0=6=4=3. West can't know anything about the quality of East's heart suit, so 3NT is the logical choice.

If using the specialty bid showing a semi-solid major, West would have known to choose 4 ♥.

43.

♠ AKQ

♥ Q1097

♦ AQJ7

♣ A7

♠ 92

♥ AK854

♦ K32

♣ K105

WEST

1 ♣

1NT

2NT

3 ♥

7NT

EAST

1 ♠

2 ♠

3 ♦

4 ♦

Pass

1 ♠ shows hearts. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=5=3=3. 4 ♦ shows 5 controls. East's barebones hand is:

♠ xx ♥ AKxxx ♦ Kxx ♣ Kxx

7NT. Claim.

44.	♠ AQJ9	♠ 4
	♥ Q65	♥ AJ10987
	♦ —	♦ KQ543
	♣ AK8642	♣ 10

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♠	2NT
3 ♥	4 ♣
4 ♦	4 ♠
6 ♥	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. West pictured a later ambiguity with DCB, since East would be making the same bids with AK of hearts and nothing in diamonds as with AK of diamonds and nothing in hearts. Since East was known to have at least 5 hearts, West chose to take a Void Control Ask approach. 2 ♠ shows some void, and 3 ♥ shows a diamond void and asks for controls outside of diamonds. 4 ♣ shows 2 controls outside of diamonds. 4 ♠ is {“Yes” in hearts, “No” in hearts [no queen]}. West knows that this is what is shown, since if East had the major-suit kings he would have had two yesses, so East has the ace of hearts. The next scan would be for the queen of spades, so that won’t tell West anything. West simply has to guess on the available information. West will be declarer, so his spade holding is protected from the lead. 6 ♥ looks like a good bet.

45.	♠ KQ8 ♥ Q3 ♦ A94 ♣ AK1072	♠ A974 ♥ AJ10 ♦ K72 ♣ 965

WEST 1 ♣ 2NT 3 ♦ 4NT	EAST 2 ♠ 3 ♣ 3NT Pass

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. 3NT shows 4 spades, so exactly 4=3=3=3. It also shows 3+ controls, since East would bid EOL 3 ♠ with 0–2 controls. This looks like a straight power evaluation and there doesn't appear to be any value to playing in clubs, so West invited in notrump. East has a minimum, so 4NT it is.

46.	♠ AKJ2	♠ 754
	♥ A	♥ KQ65
	♦ A1097	♦ KQJ3
	♣ A762	♣ J10

WEST	EAST
1 ♣	2 ♠
2NT	3NT
4 ♣	4 ♦
4 ♥	5 ♠
6 ♦	Pass

2♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3NT shows doubleton club, so exactly 3=4=4=2. 4♦ shows 0–2 controls. E-W have at least 32 HCP and a 4–4 fit with all the aces, so slam can’t be too bad whatever East has. 5♠ is {2 controls, “Yes” in hearts, “Yes” in diamonds, “Yes” in hearts [queen], “Yes” in diamonds [queen], “No” in spades [no queen]}. East’s barebones hand is:

♠ xxx ♥ KQxx ♦ KQxx ♣ xx

along with enough queens and jacks (but not queen of spades) to get to 12–14 HCP. 6♦ is clearly best.

47.	♠ J	♠ 964
	♥ KQJ32	♥ A986
	♦ A842	♦ K53
	♣ AJ5	♣ K73

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
4 ♦	4 ♥
Pass	

2 ♦ shows balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. 3 ♥ shows 4 hearts, so exactly 3=4=3=3. 4 ♥ is the obvious contract.

48.	♠ KQ103	♠ A86
	♥ QJ95	♥ A632
	♦ AKQ	♦ 8
	♣ 95	♣ J7643

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3NT	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=4=1=5. Clearly there is no slam unless East has a big override. West has diamonds triple stopped, and West's spade holding says there is no value from discarding spades on the diamonds. Thus, 9 tricks look easier than 10 on this hand and West chooses 3NT.

49.	♠ AQ96	♠ K4
	♥ K65	♥ QJ84
	♦ AKJ108	♦ 76
	♣ 10	♣ KQ942

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣
3 ♠	3NT
Pass	

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=2=5. 3NT is obviously the best game, and with no 8-card fit there won't be a slam unless East has considerable extras. This looks like a good hand for the Very Weak Relay of 3 ♠.

50.	♠ AQ104	♠ 92
	♥ J3	♥ AK854
	♦ Q83	♦ 104
	♣ AK63	♣ Q1098

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♣
3 ♦	3 ♠
3NT	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=2=4. 3 ♠ shows 3 controls. 3NT is the logical conclusion.

51.	♠ AK9	♠ QJ65
	♥ A92	♥ KJ843
	♦ AJ	♦ Q5
	♣ AK982	♣ 75

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♦	3 ♥
3 ♠	3NT
4 ♣	4 ♥
4 ♠	5 ♦
5 ♥	6 ♣
6 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 4=5=2=2. 3 ♥ shows 0-2 controls. 3NT shows 1 control. West obviously isn't giving up with this mountain and a playable heart fit. 4 ♥ is {"Yes" in hearts, "No" in hearts [no queen]}. 5 ♦ is {"Yes" in spades [queen], "Yes" in diamonds [queen], "No" in clubs [no queen]}. East's barebones hand is:

♠ Qxxx ♥ Kxxxx ♦ Qx ♣ xx

West is bidding a slam, but 6NT might be better. 6 ♣ is {"Yes" in hearts [jack], "Yes" in spades [jack], "No" in diamonds [no jack]}. East's barebones hand now is:

♠ QJxx ♥ KJxxx ♦ Qx ♣ xx

There are only 11 sure tricks in notrump (assuming 4 heart tricks), and the potential for setting up the club suit or discarding a diamond on the spade and ruffing a diamond in the short hand makes it better to play in the trump suit.

52.	♠ Q54	♠ J97
	♥ Q53	♥ AJ97
	♦ AJ	♦ K762
	♣ AQJ84	♣ K2

WEST	EAST
1 ♣	2 ♠
2NT	3NT
Pass	

2♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3NT shows doubleton club, so exactly 3=4=4=2. 3NT is obviously best.

53.	♠ AQJ982	♠ K105
	♥ A4	♥ QJ86
	♦ 96	♦ A74
	♣ AJ5	♣ Q97

WEST	EAST
1 ♣	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♣
4 ♠	Pass

2♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3♣ shows 4-3-3-3 with a 4-card major. 3♥ shows 4 hearts, so exactly 3=4=3=3. 4♣ shows 3 controls. Clearly not enough controls for slam.

54.	♠ K65	♠ QJ93
	♥ AJ9	♥ KQ52
	♦ AKQ4	♦ 6
	♣ 1095	♣ AK82

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3NT	4 ♣
4 ♦	4 ♥
4 ♠	5 ♥
5 ♠	6 ♣
6NT	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with a small singleton, so exactly 4=4=1=4. West has an obvious 3NT call. With 4 controls and 15 HCP East has a move even though West had a Weak Relay available. 4 ♣ shows 4 controls and considerable extras. West knows that East doesn't have a mere 13-point hand for the override, since East would not have overridden with that after West failed to make a Weak Relay. That means at least 31 or 32 combined HCP, so West decided to press on figuring that at least 11 tricks in notrump were available. 4 ♥ is {"No" in spades}. 5 ♥ is {"Yes" in hearts, "Yes" in spades [queen], "Yes" in hearts [queen], "No" in clubs [no queen]}. East's barebones hand is:

♠ Qxxx ♥ KQxx ♦ x ♣ AKxx

If East doesn't have the jack of spades, slam will be poor. If East has the jack of spades there will be 11 top tricks. Slam will be at worst on a 3-3 spade split or North having Ax of spades, and might be cold if East has the 10 of spades or jack of diamonds, or have additional chances if East has the jack of clubs. West chose to DCB for the jack of spades,

planning on passing 5NT if East didn't have it. 6♣ is {"Yes" in spades [jack], "No" in hearts [no jack]}.

55.

♠ AQ65

♥ A96

♦ KQ4

♣ AJ8

♠ K732

♥ KQJ5

♦ J10

♣ 963

WEST

1 ♣

2 ♥

3 ♣

3NT

EAST

2 ♦

2NT

3 ♦

Pass

2♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3♦ shows doubleton diamond, so exactly 4=4=2=3. With a good diamond holding and mostly quick winners on the side, the 9-trick contract looks better than the 4–4 spade fit.

56.	♠ AJ105	♠ KQ3
	♥ AKQ	♥ J32
	♦ 763	♦ 108
	♣ Q83	♣ K10762

WEST	EAST
1 ♣	1NT
2 ♣	3 ♦
3 ♠	3NT
4 ♦	4 ♥
4 ♠	Pass

1NT shows clubs. 3♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=2=5. West decided that with the potential diamond weakness and the strong spade intermediates 4♠ was likely the best game, so he could Control Ask as there could be a slam if East produced 5 or more controls. West chose the 3♠ Weak Relay simply to bid spades first, so the unknown hand would remain concealed. 3NT shows less than a Super-Positive.

57.	♠ AK9	♠ J1054
	♥ AK102	♥ 86
	♦ Q8	♦ A1092
	♣ 10632	♣ AQJ

WEST	EAST
1 ♣	3 ♥
3NT	Pass

3♥ shows balanced 12–14, two suits same shape, doubleton heart, so exactly 4=2=4=3. 3NT is the obvious contract.

58.	♠ AK743	♠ 9
	♥ A	♥ KQJ1072
	♦ A10532	♦ J87
	♣ K6	♣ A82
	WEST	EAST
	1 ♣	1 ♠
	1NT	2 ♠
	2NT	3 ♥
	3 ♠	4 ♣
	4 ♦	4 ♠
	5 ♦	Pass

1 ♠ shows hearts. 2 ♠ shows one-suiter, either high-short or equal-short with high doubleton. 3 ♥ shows generic 6-3-3-1, so exactly 1=6=3=3. West's hand is suit-oriented, so 5 ♦ looks better than 3NT, and West can't determine if 4 ♥ is playable, so a Control Ask is okay. 4 ♣ shows 3 controls. Slam is barely possible if East has KQx of diamonds. The Death Response would be 5 ♣, which starts {"Yes" in hearts, "Yes" in diamonds}, which West knows is impossible since East must have an ace and a king, so DCB is safe. 4 ♠ shows {"Yes" in hearts, "No" in diamonds}. East's barebones hand is:

♠ x ♥ Kxxxxx ♦ xxx ♣ Axx

West has to take his chances in 5 ♦.

If using the semi-solid major specialty bid, E-W would have been able to reach the superior 4 ♥ contract.

59.	♠ 108	♠ J532
	♥ A2	♥ K10843
	♦ AKJ4	♦ Q
	♣ KJ1062	♣ A97

WEST

1 ♣

1 ♠

2 ♣

2 ♠

3 ♣

3 ♠

Pass

EAST

1 ♥

1NT

2 ♥

2NT

3 ♦

3NT

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 4=5=1=3. 6 ♣ is possible with 4 controls, but East would need extras in addition, so the Weak Relay looks best. 3NT shows less than a Super-Positive. When East doesn't produce, 3NT is clearly right.

60.	♠ AQ1062	♠ J8
	♥ AQ	♥ KJ543
	♦ 962	♦ K10
	♣ KQ9	♣ J1074

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
4 ♠	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=2=4. 3 ♥ shows 0-2 controls. Due to the diamond weakness, West chose to play in 4 of a major rather than 3NT, but which one? East's hearts might be weak, so 4 ♠ will often be better. However, if East has the king of hearts, then 4 ♥ is likely to be right. Will DCB work? If East has the king of hearts and 2 controls, when West bids 3 ♠ DCB East will bid 4 ♦ {2 controls, "Yes" in hearts, "No" in clubs}. This is the Death Response for 4 ♥, so West would have to play in 4 ♠ anyway. However, if East has just the king of hearts he will bid 3NT showing 1 control. Now when West bids 4 ♣ DCB, East will bid 4 ♥ {"Yes" in hearts, "No" in hearts [no queen]}, and that gets to 4 ♥. So, West can try DCB. 4 ♦ is {2 controls, "Yes" in hearts, "No" in clubs} as feared, so West must play 4 ♠.

61.	♠ AKQJ862 ♥ A10 ♦ Q9 ♣ 105	♠ 4 ♥ KQ3 ♦ K107 ♣ QJ9862

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♥
3 ♠	3NT
4 ♦	4 ♥
4 ♠	Pass

1NT shows clubs. 2♠ shows one-suiter, high-short or equal-short with high doubleton. 3♥ shows generic 6-3-3-1, so exactly 1=3=3=6. 5 controls (the 4♥ Death Response) is okay, so a Control Ask is fine. 3NT shows 0–2 controls. The diamond suit might be run in notrump and East can almost certainly cover two of West's losers, so West chose 4♠ over 3NT.

62.	♠ Q6 ♥ AKJ7 ♦ A86 ♣ Q832	♠ AK10 ♥ 10932 ♦ 32 ♣ KJ109

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♦
4 ♦	4 ♥
Pass	

2♦ shows balanced 9–11 or 15+. 3♦ shows two suits same shape, doubleton diamond, so exactly 3=4=2=4. 4♥ is the obvious contract of choice.

63.	♠ AKJ10743	♠ Q9
	♥ KJ9	♥ Q10
	♦ Q	♦ AK97
	♣ A4	♣ Q10932
	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♦
	2 ♥	3 ♣
	3 ♦	3 ♠
	4 ♠	5 ♣
	5 ♥	5NT
	6 ♠	Pass

1NT shows clubs. 2♦ shows diamonds. 3♣ shows presumably generic 5-4-2-2, so exactly 2=2=4=5. 3♠ shows 3 controls. Slam is possible opposite just about any combination of those 3 controls, but East will need the queen of spades and possibly something more. DCB might not work, and if East doesn't have the queen of spades 5♠ might be in jeopardy. West decided the best bet is a natural 4♠ slam try. East will definitely be excited about the queen of spades. On the actual hand, East has a trivial acceptance. His 5♣ response shows 1 keycard. 5♥ asks for the queen of trumps. 5NT shows the queen of trumps and lets opener pick the slam.

64.	♠ J83	♠ K1097
	♥ AK1065	♥ Q9
	♦ AKQ8	♦ —
	♣ 5	♣ AKQ10976

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	4 ♣
4 ♦	4 ♥
4 ♠	5 ♦
5 ♥	5NT
6NT	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 4 ♣ shows low-short, generic 7-4-2-0, so exactly $4=2=0=7$, with 4 controls and 13+ HCP (3NT is EOL). 4 ♥ is {“No” in clubs}. West knows East has AK of clubs and the king of spades. If East has the queen of clubs 6 ♣ will be fine, particularly since the opponents won’t know to lead a spade. If East doesn’t have the queen of clubs, in response to 4 ♠ DCB he will bid 5 ♣ {“Yes” in spades, “No” in clubs [no queen]}, and West can stop. 5 ♦ is {“Yes” in spades, “Yes” in clubs [queen], “No” in spades [no queen]}. East’s barebones hand is:

♠ Kxxx ♥ xx ♦ — ♣ AKQxxxx

6NT will produce 12 tricks if the clubs run and there aren’t 2 quick spade losers, and might have a chance if the clubs don’t run. West continues DCB, with the hope that East’s response will be 5NT to get the hand played from East’s side. (There is no Death Response to worry about, since 6NT is always to play.) 5NT is “Yes” in hearts [queen], “No” in clubs [no jack]}. That is what West was hoping for.

65.	♠ AQ98	♠ K4
	♥ K9	♥ Q632
	♦ K63	♦ AJ87
	♣ A543	♣ Q107

WEST	EAST
1 ♣	2 ♠
2NT	3 ♠
3NT	Pass

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3 ♠ shows doubleton spade, so exactly 2=4=4=3. 3NT is the clear choice.

66.	♠ K104	♠ A6
	♥ AK65	♥ Q97
	♦ KJ5	♦ Q9732
	♣ KQJ	♣ A76

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♦
3 ♠	3NT
Pass	

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=3=5=3. West needs 4 controls for slam, and that won't be enough unless East has a couple of queens, so West went with Weak Relay. East was just under a Super-Positive with 4 controls and 12 HCP. It turns out East has just the right fillers to make slam a favorite.

67.	♠ AQ92	♠ 104
	♥ AQ54	♥ 732
	♦ J65	♦ AQ97
	♣ A10	♣ K865

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3 ♠ shows doubleton spade, so exactly 2=3=4=4. 3NT is obvious.

68.	♠ KQ10876	♠ 52
	♥ A	♥ KQJ76
	♦ A6	♦ KQ94
	♣ KQ42	♣ 93

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
4 ♦	4 ♥
4 ♠	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=4=2. 3 ♥ shows 0–2 controls. West needs 3 controls for slam to be possible and judged to play the 6–2 fit instead of 3NT.

69.	♠ AKQ93	♠ J108
	♥ Q32	♥ A8
	♦ AJ7	♦ KQ985
	♣ 103	♣ K84

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♦
3 ♠	4 ♣
4 ♦	4 ♠
4NT	5 ♥
6 ♠	Pass

2 ♣ shows diamonds. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=2=5=3. Slam is possible if East has 4 controls, but only if East has extra strength, so Weak Relay looks right. 4 ♣ shows 4 controls, 13+ HCP. If West bids 4 ♦ DCB, 4 ♥ {“No” in diamonds} is the Death Response for 4 ♠, but West would figure to make 4NT so that is okay. 4 ♠ is {“Yes” in diamonds, “No” in spades}. Now if West bids 4NT, 5 ♥ {“Yes” in clubs, “Yes” in diamonds [queen], “No” in spades [no queen]} would be the Death Response for 5 ♠, but that is what West is hoping to hear, since the queen of diamonds along with a heart and club control makes slam good. 5 ♥ shows {“Yes” in clubs, “Yes” in diamonds [queen], “No” in spades [no queen]}. East’s barebones hand is:

♠ xxx ♥ Ax ♦ KQxxx ♣ Kxx

Either 6 ♦ or 6 ♠ is possible. West chose 6 ♠ because if the opponents don’t lead a club West has the option of discarding his clubs on the diamonds and playing for the king of hearts onside, and if East has the jack of hearts this will be a sure thing assuming no spade loser.

70.

♠ Q862

♥ AQ10

♦ KQJ2

♣ A5

♠ K1053

♥ K9

♦ 10973

♣ K104

WEST

1 ♣

2 ♥

4 ♦

4 ♠

EAST

2 ♦

3 ♥

4 ♥

Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♥ shows two suits same shape, doubleton heart, so exactly 4=2=4=3. With the possible club weakness and tricks that may take time to develop in the 4-card suits, West chose 4 ♠ over 3NT.

71.	♠ AQ1074	♠ K2
	♥ 3	♥ AK876
	♦ A107	♦ KQJ6
	♣ AQ108	♣ J2

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♣
3NT	4 ♦
4 ♥	4 ♠
4NT	5 ♥
6 ♦	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly $2=5=4=2$. West has no interest in anything other than 3NT, but East has a clear override. 4 ♦ shows 5 controls. 4 ♠ is {"No" in hearts}. 5 ♥ is {"Yes" in diamonds, "Yes" in spades, "No" in hearts [no queen]}. East's barebones hand is:

♠ Kx ♥ AKxxx ♦ Kxxx ♣ xx

West would like to find the queen of diamonds for possible play in the 4-3 fit. The problem is that if West bids 5 ♠ DCB, 6 ♣ {"Yes" in diamonds [queen], "No" in spades [no queen]} is the Death Response for playing 6 ♦, so that won't work. Since East did override West's weak 3NT call East figures to have a queen, because if all West needed for slam is 5 controls West could have safely control asked with 3 ♦ over 3 ♣. Thus, East figures to have the queen of diamonds. West can't know about the jack of diamonds, but even if East doesn't have it 6 ♦ looks like the best contract since there will be a heart ruff in the short hand.

72.	♠ Q76	♠ AJ
	♥ A9	♥ K53
	♦ AQJ3	♦ 9875
	♣ AQ75	♣ J832

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. West might not choose 3NT if East has a doubleton heart, and if East has the 15+ hand West will want to know East's exact shape, so West is correct to continue to relay. 3 ♠ shows doubleton spade, so exactly 2=3=4=4. 3NT is now clear.

73.	♠ AK104	♠ Q85
	♥ Q52	♥ K10643
	♦ KQ	♦ J2
	♣ QJ85	♣ A32

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	3 ♦
4 ♦	4 ♥
Pass	

1 ♠ shows hearts. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=5=2=3. West can see the terrible duplication in diamonds. If West Control Asks with 3 ♥, then 4 ♦ (5 controls) is the Death Response for 4 ♥, and West doesn't have 5-level safety opposite 5 controls. Thus West can't afford the Control Ask, so he goes for the immediate signoff. East should recognize that West has the worst, so East really needs the goods to override on this sequence.

74.	♠ AKQ8 ♥ KQJ52 ♦ Q ♣ A102	♠ 2 ♥ 6 ♦ AJ642 ♣ KQJ976
	WEST	EAST
	1 ♣	1NT
	2 ♣	2 ♦
	2 ♥	2 ♠
	2NT	3 ♦
	4 ♣	4 ♦
	4 ♥	5 ♦
	6 ♣	Pass

1NT shows clubs. 2 ♦ shows diamonds. 2 ♠ shows a long two-suiter. 3 ♦ shows equal-short. West doesn't care which way East is 6–5. Keycards in clubs are all that matter to West, so West bids an immediate 4 ♣, relay for RKC follow-up. Since it is unknown which minor suit is longer East's minors are assumed to be of equal length, and with the Mulberry RKC ties go to the lower ranking suit, so 4 ♥ is RKC for clubs. 5 ♦ shows 2 with the queen, so 6 ♣ it is. If East had bid 5 ♣, 2 without the queen, West would pass. If East had bid 4NT, 1 keycard, West would pass that.

This hand illustrates why it is important for ties to go to the lower suit in Mulberry RKC auctions. If ties went to the higher suit West would have to bid 4 ♠ in order to RKC for clubs, and he would not be able to stop in 5 ♣ when East had 2 keycards but no queen of clubs.

75.	♠ AKQJ1032	♠ 7
	♥ AK63	♥ 1075
	♦ 104	♦ AKJ9
	♣ —	♣ AKQ54

WEST	EAST
1 ♣	1NT
2 ♦	2 ♥
3 ♦	4 ♣
4 ♦	4 ♥
4 ♠	4NT
5 ♣	5 ♦
5 ♥	5 ♠
5NT	6 ♣
6 ♠	6NT
7 ♠	Pass

1NT shows clubs. West can see potential DCB ambiguity with a later DCB, since if East shows “No” in clubs he might have AK of clubs or AK of diamonds and West won’t know which. Therefore, West chooses to go immediately into Void Control Ask. 2♦ shows some void, 2♥ asks, and 3♦ shows a club void and asks for controls outside of clubs. 4♣ is 3 controls outside of clubs. East’s scanning order is spades, hearts, diamonds, with clubs not scanned because West is void. 4♥ is {“No” in spades}. 4NT is {“No” in hearts}. West now looks for any queen. 5♦ is {“No” in spades [no queen]}. 5♠ is {“No” in hearts [no queen]}. 6♣ is {“No” in diamonds [no queen]}. West gives up in 6♠. East knows his AK of clubs have to be of value considering that West was willing to bid more than 6♠ if East had the queen of diamonds, so East overrides with 6NT, giving West a chance to get out. West knows East has at least the ace of clubs for the override, probably more, so West is willing to take his chances in 7♠.

76.	♠ AQJ8	♠ K3
	♥ K105	♥ J83
	♦ K93	♦ A542
	♣ K104	♣ J985

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♠
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3 ♠ shows doubleton spade, so exactly 2=3=4=4. 3NT is obvious.

77.	♠ AJ9	♠ Q8
	♥ 10	♥ A852
	♦ AK10952	♦ J87
	♣ A105	♣ K982

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♠
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♠ shows two suits same shape, doubleton spade, so exactly 2=4=3=4. With the opponents holding only 8 hearts, 3NT figures to be best on balance.

78.	♠ 94	♠ A
	♥ AJ62	♥ KQ54
	♦ A94	♦ QJ6
	♣ AQJ2	♣ 87653

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	4NT
5 ♥	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=4=3=5. 3NT shows 3 controls. West could picture 6 ♥ being a great contract if East held:

♠ x ♥ KQxx ♦ Kxx ♣ Kxxxx

The danger is that if East has the stiff ace of spades and not the king of clubs there will be a Death Response of 4 ♦ to 4 ♣ DCB, and the 5-level might not be safe. West chose to take this risk, since with East having a singleton spade it is less likely that East will have exactly the singleton ace. 4 ♦ is {"No" in clubs}. Now West needed to choose the best 5-level contract. West decided that if East has the king of hearts 5 ♥ is probably better for the potential discard on the long club, but if East has the king of diamonds then 5 ♣ is better since handling the hand with the weak heart suit might prove difficult. 4NT is {"Yes" in hearts, "No" in clubs [no queen]}.

79.

♠ KQ5
♥ J1087
♦ KQ63
♣ KQ

♠ AJ10732
♥ K64
♦ A10
♣ A6

WEST

1 ♣

1 ♠

3 ♦

4NT

6NT

EAST

1 ♥

3 ♣

4 ♠

5 ♠

Pass

1 ♥ shows spades. 3 ♣ shows one-suiter, equal-short, 7-2-2-2 or 6-3-2-2 with two low doubletons. 4 ♠ shows generic 6-3-2-2, so exactly 6=3=2=2, 7 controls (3 ♠ EOL). If the ace of diamonds is missing it is better to play in 6 ♠, since declarer can lead up to the king-queen of diamonds twice and still have the heart finesse in reserve if the ace is offside and was held up. 5 ♠ is {“Yes” in spades, “Yes” in hearts, “Yes” in diamonds, “No” in spades [no queen]}. East’s barebones hand is:

♠ Axxxxx ♥ Kxx ♦ Ax ♣ Ax

Now there is no gain from playing in spades, so 6NT it is.

80.	♠ K6	♠ QJ1074
	♥ AJ1083	♥ 6
	♦ K	♦ AQJ75
	♣ AQJ98	♣ K6

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3NT	Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 3 ♥ shows generic 5-5-2-1, so exactly 5=1=5=2. Opposite this, 3NT looks best to West. East doesn't have the 4 controls needed for an override.

81.	♠ J94	♠ AK86
	♥ K852	♥ A6
	♦ AQJ4	♦ 10753
	♣ AJ	♣ 1083

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♥
3NT	Pass

2 ♦ shows balanced 9-11 or 15+. 3 ♥ shows two suits same shape, doubleton heart, so exactly 4=2=4=3. 3NT is clear.

82.

♠ Q
♥ AJ93
♦ Q986
♣ AK108

♠ AJ73
♥ K102
♦ AJ3
♣ 432

WEST

1 ♣
2NT
3 ♦
Pass

EAST

2 ♠
3 ♣
3NT

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. 3NT shows 4 spades, so exactly 4=3=3=3. It also shows 3+ controls, since 3 ♠ is EOL. 3NT looks right on balance.

83.

♠ A3
♥ K5
♦ Q9842
♣ AK63

♠ K109
♥ AJ1086
♦ K3
♣ J95

WEST

1 ♣
1NT
3 ♣
3NT

EAST

1 ♠
2NT
3 ♦
Pass

1 ♠ shows hearts. 2NT shows 1 suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=5=2=3. With no 8-card fit West isn't even strong enough for Weak Relay, and East is not tempted to override.

84.	♠ AQ765	♠ J1083
	♥ AJ3	♥ Q2
	♦ J7	♦ AKQ104
	♣ A64	♣ J8

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 4=2=5=2. 3 ♠ shows 3 controls. West knows 4 ♠ is the right contract.

85.	♠ AK7	♠ Q9865
	♥ AQ63	♥ 82
	♦ Q1096	♦ 5
	♣ J9	♣ AKQ84

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♠	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 5=2=1=5. 4 ♣ shows 3 controls. Not enough for there to be a good slam.

86.

♠ QJ92

♥ J62

♦ AK6

♣ KQ9

♠ K1064

♥ Q53

♦ 5

♣ A8432

WEST

1 ♣

1 ♠

2 ♦

2 ♠

4 ♦

4 ♠

EAST

1 ♥

2 ♣

2 ♥

3 ♦

4 ♥

Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly $4=3=1=5$. If West makes a 3 ♥ Control Ask, 4 ♥ (6 controls) is the Death Response for 4 ♠. West's hand is so terrible opposite East's shape that he can't even handle that, so he goes directly to 4 ♦ to sign off in 4 ♠.

87.	♠ KQ85	♠ 10762
	♥ AK765	♥ Q32
	♦ —	♦ AJ2
	♣ AJ65	♣ KQ3

WEST

1 ♣

2NT

3 ♦

4 ♣

4 ♥

Pass

EAST

2 ♠

3 ♣

3NT

4 ♦

4 ♠

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3 ♣ shows 4-3-3-3 with a 4-card major. 3NT shows 4 spades, so exactly 4=3=3=3, and 3+ controls since 3 ♠ is EOL. Slam is possible if East doesn't have diamond wastage, and since West can play in either major if necessary he doesn't have to worry about a 4-level Death Response. 4 ♦ shows 3 controls, since that is the minimum. West can still picture a slam in the 4–4 spade fit since the heart suit can be used to discard losing clubs, so West chooses to try. 4 ♠ is {"No" in spades}. Now slam would take perfect cards, which West can't find, so West passes.

88.

♠ QJ
♥ KQ3
♦ KJ
♣ AQ9642

♠ K7632
♥ 9
♦ AQ76
♣ K73

WEST

1 ♣

1 ♠

2 ♥

3 ♣

3NT

EAST

1 ♥

2 ♦

2NT

3 ♦

Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=1=4=3. West's hand is so junky he isn't close to even a Weak Relay, and East knows to subside when the Weak Relay isn't made.

89.	♠ K52 ♥ AQ63 ♦ Q7 ♣ AK82	♠ A9 ♥ J1098 ♦ AJ832 ♣ 94

WEST	EAST
1 ♣	1 ♠
1NT	2 ♥
2 ♠	3 ♣
3 ♦	3NT
4 ♣	4 ♥
Pass	

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=5=2. 3NT shows 4 controls. West can picture a slam if East has the 2 red kings and an ace. If West bids 4 ♣ DCB, 4 ♦ {“No” in diamonds} is the Death Response, but that is what West wants to hear as it would have to be AK of diamonds, so DCB is fine. 4 ♥ is {“Yes” in diamonds, “No” in hearts}. East’s barebones hand is:

♠ Ax ♥ xxxx ♦ Axxxx ♣ xx

Slam could be good if East has both red jacks, but it won’t be laydown and West can’t find that out in time. The percentage action appears to be to stop in 4 ♥.

90.	♠ A	♠ K10974
	♥ K642	♥ J
	♦ AKQ9765	♦ 1043
	♣ 3	♣ KQ64

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2NT
3 ♣	3 ♦
3 ♥	3 ♠
4 ♣	4NT
5 ♦	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=1=3=4. 3 ♠ shows 0–2 controls. 5 ♦ should be safe, and West will have decent play for slam if East has an ace, particularly since East will have a queen or two in the black suits for his positive response, so DCB is called for if safe. The Death Response to 4 ♣ DCB would be 5 ♣, which would be {2 controls, “Yes” in spades, “Yes” in clubs, “Yes” in spades [queen]}, “No” in clubs [no queen]}. That is a real danger. West can still sign off in 5NT, which might go down if the ace of hearts is offside, but the risk looks worth taking. 4NT is {2 controls, “Yes” in spades, “Yes” in clubs, “No” in spades [no queen]}. East’s barebones hand is:

♠ Kxxxx ♥ x ♦ xxx ♣ Kxxx

5 ♦ is the clear contract. A better approach would have been 4 ♣ (relay to 4 ♦ for RKC) immediately over 3 ♦, followed by 4NT (RKC for diamonds, third longest suit). That would give West the information he needs immediately without risking a Death Response.

91.	♠ QJ4	♠ A762
	♥ AKQ9	♥ 10854
	♦ A10532	♦ 7
	♣ 6	♣ AK102

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3 ♥	4 ♦
4 ♥	4NT
6 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with a small singleton, so exactly 4=4=1=4. The Death Response to a 3 ♥ Control Ask is 4 ♦ (5 controls), and West can handle that. 4 ♦ shows 5 controls. 4NT is {“Yes” in spades, “No” in hearts}. East’s barebones hand is:

♠ Axxx ♥ xxxx ♦ x ♣ AKxx

If East had the other black king West would be thinking about a grand. Now 6 ♥ will have some handling problems, but it looks like a good bet.

92.

♠ A	♠ Q63
♥ A9752	♥ J106
♦ A932	♦ K
♣ KJ2	♣ AQ10863

WEST	EAST
1 ♣	1NT
2 ♣	3 ♥
3 ♠	3NT
4 ♥	4NT
5 ♦	5 ♥
6 ♣	Pass

1NT shows clubs. 3♥ shows one-suiter, low-short, generic 6-3-3-1, so exactly 3=3=1=6. 3NT shows 0–2 controls. Slam could be there if East has enough fillers, but DCB isn't going to find that out in time. West judged that the best bet was a natural 4♥ slam try. East will be looking favorably at the queen of hearts, as well as other queens, since East will have shown his 2 controls (East won't be accepting with just 1 control). East doesn't have the queen of hearts, but he does have the J10, two other queens, and his stiff king of diamonds might be of value, so East accepts. 4NT shows 1 keycard. 5♦ asks for the queen of hearts. 5♥ shows no queen of hearts. West knows that for East to be accepting without the queen of hearts East must have the queen of clubs and probably something else of value, so West bids the slam in the stronger fit.

93.	♠ KJ82	♠ 65
	♥ A72	♥ KQJ104
	♦ A94	♦ QJ62
	♣ A106	♣ Q2

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
3NT	Pass

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=4=2. 3 ♥ shows 0-2 controls. With 4-3-3-3, mostly quick tricks, and a possibly important 10 of clubs to help stop the club suit, West judged to play for the 9-trick contract.

94.	♠ 93	♠ AJ1054
	♥ KQJ	♥ 3
	♦ K10865	♦ AQ94
	♣ AK3	♣ 1085

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3NT	Pass

1 ♥ shows spades. 2 ♦ shows diamonds, not a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=1=4=3. West's hand is terrible for slam, so 3NT is clear.

95.	♠ AK4	♠ QJ10972
	♥ 5	♥ KQJ87
	♦ AK73	♦ Q
	♣ KQ1085	♣ J

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	4 ♠
Pass	

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows a long two-suiter. 3 ♦ shows equal-short. 3NT shows generic 6-5-1-1, so exactly 6=5=1=1, not 5 controls or 4 controls with 13+ HCP. Since East has shown 6 spades and that is where West will be playing, West doesn't have to worry about a Death Response. 4 ♦ shows 0–2 controls. West is still willing to move beyond 4 ♠ if East has an ace. 4 ♠ is {1 control}, so West is done.

96.	♠ 54 ♥ KJ7642 ♦ AKQ ♣ K3	♠ KQ10973 ♥ AQ3 ♦ J32 ♣ 9

WEST

1 ♣

1 ♠

4 ♦

Pass

EAST

1 ♥

3 ♥

4 ♥

1 ♥ shows spades. 3 ♥ shows one-suiter, low-short, generic 6-3-3-1, so exactly $6=3=3=1$. If West bids 3 ♠ Control Ask, the Death Response is 4 ♦ (4 controls). West can't handle that. In fact, West needs 5 controls for slam prospects to be there, and even then he would like the queen of hearts. If East has 5 controls and a queen, he will be overriding a signoff. Puppeting to 4 ♥ looks right.

97.	♠ Q765 ♥ AQ43 ♦ J ♣ AK52	♠ AJ ♥ J862 ♦ A9765 ♣ 63

WEST

1 ♣

1NT

2 ♠

3 ♥

4 ♦

Pass

EAST

1 ♠

2 ♥

3 ♣

3 ♠

4 ♥

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly $2=4=5=2$. Even if East has 4 controls, he still needs fillers for slam to be good, so West employs Weak Relay. 3 ♠ shows less than a Super-Positive.

98.	♠ A	♠ KJ76
	♥ 87	♥ AK62
	♦ AJ87632	♦ 9
	♣ AK9	♣ J865

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3NT	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with a small singleton, so exactly 4=4=1=4. This is terrible opposite West's hand, so West simply quit in 3NT.

99.	♠ 97	♠ KJ654
	♥ AK10	♥ —
	♦ AKJ98	♦ 1073
	♣ J94	♣ AQ632

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3 ♠
3NT	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♠ shows a long two-suiter. 3 ♣ shows high-short. 3 ♠ shows generic 5-5-3-0, so exactly 5=0=3=5. West's hand is not good for slam opposite this, and 3NT looks best unless East is strong enough to override.

100.	♠ J8 ♥ AQ1064 ♦ AQ2 ♣ AK5	♠ KQ107432 ♥ J ♦ KJ3 ♣ J9

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3NT
4 ♣	4 ♦
4 ♥	5 ♥
6NT	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or equal-short with high doubleton. 3NT shows generic 7-3-2-1 so exactly 7=1=3=2, less than 5 controls or 4 controls and 13+ HCP. Since East has 6+ spades there is no Death Response worry. 4 ♦ shows 0–2 controls. Two kings and the queen of spades make slam laydown, so West is willing to risk the 5-level if East has 2 controls. 5 ♥ shows {2 controls, “Yes” in spades, “Yes” in diamonds, “Yes” in spades [queen], “No” in diamonds [no queen]}. Does West know that, or might the 2 controls be ace of spades? If so, East would then be scanning for the queen of spades immediately, and he would be showing {2 controls, “Yes” in spades, “Yes” in spades [queen], “No” in diamonds [no queen]}. Since East found 3 yesses he must have the 2 kings and the queen of spades. East’s barebones hand is:

♠ KQxxxxx ♥ x ♦ Kxx ♣ xx

Since West bid notrump first his hearts are protected, so 6NT is the right contract.

EAST HANDS SET 2

1. ♠ 6 ♥ KQ1032 ♦ 1063 ♣ KQ94
2. ♠ 1042 ♥ 4 ♦ AJ9743 ♣ A107
3. ♠ AKQ104 ♥ J108 ♦ Q42 ♣ K7
4. ♠ K10 ♥ K10872 ♦ Q2 ♣ KJ64
5. ♠ AJ62 ♥ K96 ♦ Q7654 ♣ K
6. ♠ AK9762 ♥ 108 ♦ J2 ♣ AJ3
7. ♠ 854 ♥ AK52 ♦ K4 ♣ K752
8. ♠ A9862 ♥ AJ1032 ♦ 87 ♣ 10
9. ♠ K5 ♥ 94 ♦ J852 ♣ KQ932
10. ♠ 32 ♥ Q104 ♦ K85 ♣ A10854
11. ♠ Q9 ♥ QJ3 ♦ AK107 ♣ QJ84
12. ♠ 42 ♥ J103 ♦ A10742 ♣ A96
13. ♠ 83 ♥ A87 ♦ AQ8543 ♣ 96
14. ♠ 1094 ♥ Q1053 ♦ Q3 ♣ KQ72
15. ♠ KQ97 ♥ 95 ♦ K64 ♣ Q972
16. ♠ J96 ♥ AK95 ♦ J743 ♣ 102
17. ♠ Q32 ♥ AJ10 ♦ K43 ♣ KQ103
18. ♠ 73 ♥ Q1054 ♦ AQJ2 ♣ Q92
19. ♠ QJ2 ♥ AK104 ♦ 8732 ♣ K3
20. ♠ 985 ♥ 432 ♦ AKJ ♣ KQ52
21. ♠ 97543 ♥ AQ10872 ♦ K9 ♣ —
22. ♠ 8432 ♥ A107 ♦ A ♣ Q9642
23. ♠ 10532 ♥ AJ86 ♦ 8 ♣ AQJ2
24. ♠ KJ52 ♥ AQ1042 ♦ J3 ♣ 109
25. ♠ K ♥ J932 ♦ AQJ864 ♣ K3
26. ♠ — ♥ K1098754 ♦ Q ♣ AK652

27. ♠ J9652 ♥ QJ93 ♦ 5 ♣ AJ5
28. ♠ AK953 ♥ Q10732 ♦ 2 ♣ KQ
29. ♠ J6 ♥ QJ3 ♦ AJ ♣ K98762
30. ♠ 743 ♥ AQ98 ♦ K32 ♣ Q87
31. ♠ A98 ♥ 94 ♦ KQJ874 ♣ 93
32. ♠ Q976 ♥ J53 ♦ Q4 ♣ A876
33. ♠ J74 ♥ Q82 ♦ AQ87 ♣ J92
34. ♠ QJ ♥ KQJ6 ♦ 1075 ♣ 10642
35. ♠ K10 ♥ 106 ♦ KQJ1054 ♣ AQ8
36. ♠ 2 ♥ QJ5 ♦ KQ954 ♣ J1052
37. ♠ KQ963 ♥ AJ ♦ 72 ♣ 10532
38. ♠ J2 ♥ K874 ♦ K2 ♣ KQ964
39. ♠ Q63 ♥ K75 ♦ A2 ♣ Q9843
40. ♠ Q4 ♥ AK ♦ Q108642 ♣ 972
41. ♠ AK7 ♥ Q43 ♦ 432 ♣ 10643
42. ♠ A965 ♥ 432 ♦ AKQJ2 ♣ J
43. ♠ J5 ♥ K732 ♦ K10742 ♣ K3
44. ♠ 1042 ♥ J10853 ♦ AKQ2 ♣ J
45. ♠ KJ62 ♥ Q2 ♦ 973 ♣ KQ109
46. ♠ 5 ♥ QJ765 ♦ K1083 ♣ A53
47. ♠ 9 ♥ J8 ♦ KQ9653 ♣ K843
48. ♠ Q82 ♥ Q762 ♦ J963 ♣ A10
49. ♠ KQ1063 ♥ Q873 ♦ 63 ♣ Q2
50. ♠ KQJ10 ♥ J93 ♦ A9 ♣ Q875
51. ♠ 10732 ♥ QJ52 ♦ K92 ♣ K2
52. ♠ QJ64 ♥ Q63 ♦ Q ♣ K9873
53. ♠ A864 ♥ — ♦ J65 ♣ A87643
54. ♠ J932 ♥ KJ94 ♦ 108 ♣ A96
55. ♠ A10 ♥ J76 ♦ KJ7643 ♣ 94

56. ♠ J864 ♥ J32 ♦ AKQJ ♣ 93
57. ♠ J54 ♥ QJ54 ♦ K73 ♣ Q65
58. ♠ 6 ♥ KQ952 ♦ J10 ♣ KJ986
59. ♠ KJ109 ♥ K7 ♦ 64 ♣ K7543
60. ♠ AKQ3 ♥ K9862 ♦ 4 ♣ QJ2
61. ♠ Q54 ♥ Q32 ♦ Q865 ♣ QJ2
62. ♠ 8752 ♥ AJ8 ♦ AQ52 ♣ J2
63. ♠ J65 ♥ Q ♦ KJ102 ♣ A8643
64. ♠ A63 ♥ Q7654 ♦ K7 ♣ 864
65. ♠ J109732 ♥ KJ7 ♦ 52 ♣ AJ
66. ♠ AQ765 ♥ K642 ♦ Q ♣ K108
67. ♠ 109 ♥ KJ106 ♦ Q63 ♣ AKJ6
68. ♠ K8 ♥ KJ106 ♦ Q3 ♣ 97653
69. ♠ J1073 ♥ Q7 ♦ AQJ ♣ J972
70. ♠ Q3 ♥ J84 ♦ AJ984 ♣ J92
71. ♠ 83 ♥ Q7 ♦ AK83 ♣ K7542
72. ♠ AJ98732 ♥ K72 ♦ Q62 ♣ —
73. ♠ A62 ♥ AJ ♦ K8 ♣ Q109864
74. ♠ KQ42 ♥ 64 ♦ AKJ9 ♣ 983
75. ♠ 854 ♥ A8 ♦ AJ1065 ♣ 542
76. ♠ KQ6 ♥ J ♦ Q1072 ♣ A9843
77. ♠ Q ♥ AJ10 ♦ A1075 ♣ 109852
78. ♠ K105 ♥ 4 ♦ AJ73 ♣ K9743
79. ♠ KQ10987 ♥ A865 ♦ K73 ♣ —
80. ♠ KQ73 ♥ J4 ♦ 7543 ♣ KJ2
81. ♠ K108 ♥ Q954 ♦ A1063 ♣ K2
82. ♠ AJ1065 ♥ — ♦ A984 ♣ AJ103
83. ♠ AQ86 ♥ Q4 ♦ A762 ♣ J98
84. ♠ 843 ♥ K10 ♦ K63 ♣ AQ742

85. ♠ A1095 ♥ A832 ♦ J2 ♣ 976
86. ♠ QJ87 ♥ QJ ♦ Q1096 ♣ K86
87. ♠ QJ94 ♥ Q86 ♦ 7532 ♣ KQ
88. ♠ A932 ♥ Q9763 ♦ 8 ♣ AQ10
89. ♠ Q86 ♥ AK8 ♦ AK7 ♣ Q1042
90. ♠ KJ105 ♥ AJ7 ♦ 94 ♣ Q642
91. ♠ AK9853 ♥ A964 ♦ 6 ♣ 73
92. ♠ AK10876 ♥ 10 ♦ QJ8 ♣ K86
93. ♠ KJ954 ♥ A10983 ♦ 32 ♣ Q
94. ♠ A975 ♥ Q2 ♦ J64 ♣ QJ85
95. ♠ A9764 ♥ 87 ♦ K52 ♣ A84
96. ♠ 84 ♥ AQ652 ♦ KJ98 ♣ 109
97. ♠ KQ983 ♥ AJ ♦ A107 ♣ 1097
98. ♠ KJ5 ♥ KQ983 ♦ A108 ♣ J3
99. ♠ 1093 ♥ Q43 ♦ 5 ♣ AQJ953
100. ♠ KQ742 ♥ A3 ♦ 1052 ♣ A72

WEST HANDS SET 2

1. ♠ Q83 ♥ AJ6 ♦ AKQ7 ♣ 1063
2. ♠ KJ5 ♥ KQJ76 ♦ KQ10 ♣ J5
3. ♠ J2 ♥ AQ53 ♦ AKJ1083 ♣ J
4. ♠ AQ ♥ AQJ43 ♦ K73 ♣ 1095
5. ♠ KQ ♥ A4 ♦ AK1098 ♣ AJ53
6. ♠ Q8 ♥ AK964 ♦ AK10 ♣ 976
7. ♠ AKJ63 ♥ 3 ♦ A9 ♣ AJ1084
8. ♠ KJ4 ♥ 5 ♦ AQ53 ♣ AQ853
9. ♠ A1098 ♥ K86 ♦ KQ104 ♣ A8
10. ♠ K876 ♥ AK9 ♦ AJ3 ♣ QJ6
11. ♠ AK1072 ♥ AK2 ♦ Q ♣ K653
12. ♠ AQJ105 ♥ A876 ♦ K ♣ Q42
13. ♠ AJ5 ♥ KJ53 ♦ K7 ♣ KQ107
14. ♠ AK8 ♥ J7 ♦ K85 ♣ AJ1084
15. ♠ A542 ♥ K4 ♦ A932 ♣ AJ6
16. ♠ A4 ♥ 8 ♦ KQ1092 ♣ AQJ75
17. ♠ AKJ4 ♥ Q86 ♦ Q82 ♣ A96
18. ♠ A108 ♥ AJ3 ♦ 76 ♣ AK764
19. ♠ A83 ♥ Q72 ♦ KQ6 ♣ AQ75
20. ♠ AQ2 ♥ AKQJ7 ♦ Q103 ♣ J3
21. ♠ AJ6 ♥ J3 ♦ AQ64 ♣ A543
22. ♠ Q6 ♥ KJ865 ♦ K63 ♣ AK7
23. ♠ AJ4 ♥ Q532 ♦ AKQ ♣ K86
24. ♠ 98 ♥ KJ63 ♦ AKQ4 ♣ K52
25. ♠ AJ1072 ♥ A4 ♦ 9 ♣ AQJ98
26. ♠ QJ ♥ A2 ♦ AK82 ♣ QJ1083

27. ♠ AK ♥ AK876 ♦ A103 ♣ K102
28. ♠ Q64 ♥ AK8 ♦ AK954 ♣ 102
29. ♠ AKQ10932 ♥ AK82 ♦ — ♣ A4
30. ♠ AKJ ♥ KJ4 ♦ AJ ♣ AK432
31. ♠ K1043 ♥ A65 ♦ A96 ♣ AJ8
32. ♠ K1083 ♥ K92 ♦ AK86 ♣ QJ
33. ♠ AK53 ♥ K754 ♦ K62 ♣ A5
34. ♠ AK84 ♥ A ♦ AQJ8 ♣ AKQ8
35. ♠ AJ93 ♥ AQJ ♦ A76 ♣ 643
36. ♠ QJ5 ♥ A764 ♦ AJ7 ♣ KQ4
37. ♠ AJ7 ♥ Q97 ♦ AQJ4 ♣ Q64
38. ♠ A ♥ AQ10 ♦ AQ6543 ♣ J107
39. ♠ KJ ♥ AQ642 ♦ J64 ♣ AJ10
40. ♠ AJ965 ♥ 86 ♦ AK ♣ AK108
41. ♠ QJ ♥ AJ1082 ♦ A108 ♣ AK7
42. ♠ 3 ♥ AKJ76 ♦ 85 ♣ AKQ75
43. ♠ A2 ♥ AQ10 ♦ AJ853 ♣ Q74
44. ♠ AQ9 ♥ KQ62 ♦ 103 ♣ KQ54
45. ♠ AQ3 ♥ 104 ♦ AKQ4 ♣ A873
46. ♠ AK74 ♥ A8 ♦ Q952 ♣ QJ2
47. ♠ AQ73 ♥ KQ9 ♦ AJ72 ♣ A2
48. ♠ AJ6 ♥ KJ ♦ K104 ♣ KJ653
49. ♠ A942 ♥ A2 ♦ AQ82 ♣ K105
50. ♠ A832 ♥ AK86 ♦ J1052 ♣ A
51. ♠ AKQ ♥ K9643 ♦ AJ43 ♣ 5
52. ♠ AK10 ♥ KJ7 ♦ K94 ♣ QJ102
53. ♠ KJ72 ♥ AK1065 ♦ AQ9 ♣ 2
54. ♠ AK87 ♥ A ♦ J542 ♣ KJ75
55. ♠ QJ94 ♥ AQ1092 ♦ A ♣ KQ10

56. ♠ AK952 ♥ K5 ♦ 2 ♣ AKQ104
57. ♠ AKQ6 ♥ AK862 ♦ — ♣ AJ97
58. ♠ KQ1087 ♥ 6 ♦ AK87 ♣ AQ5
59. ♠ AQ7542 ♥ Q6 ♦ AQJ ♣ AJ
60. ♠ J109876 ♥ AQ ♦ KQ3 ♣ A4
61. ♠ A ♥ AK107 ♦ KJ9 ♣ K9854
62. ♠ Q104 ♥ KQ75 ♦ 7 ♣ AKQ74
63. ♠ AK ♥ J1084 ♦ A875 ♣ KQ7
64. ♠ KQJ5 ♥ AJ ♦ A96 ♣ QJ109
65. ♠ KQ5 ♥ A983 ♦ AQ9 ♣ K108
66. ♠ — ♥ AQJ107 ♦ KJ1084 ♣ AJ2
67. ♠ AK764 ♥ AQ82 ♦ K ♣ 973
68. ♠ J74 ♥ A53 ♦ A85 ♣ AQJ8
69. ♠ AKQ962 ♥ K985 ♦ 63 ♣ A
70. ♠ K1074 ♥ K632 ♦ K ♣ AK74
71. ♠ AQJ52 ♥ AK65 ♦ J9 ♣ J8
72. ♠ KQ104 ♥ A5 ♦ K10 ♣ AQ765
73. ♠ QJ98 ♥ K108 ♦ A76 ♣ AK3
74. ♠ A10 ♥ A10 ♦ Q10652 ♣ AQ104
75. ♠ AK1062 ♥ 42 ♦ Q7 ♣ AKQ6
76. ♠ A8 ♥ AK7432 ♦ K6 ♣ QJ2
77. ♠ AK92 ♥ 987 ♦ K8 ♣ KQJ6
78. ♠ A83 ♥ AK73 ♦ KQ10 ♣ J108
79. ♠ AJ3 ♥ QJ9 ♦ A6 ♣ AJ753
80. ♠ J85 ♥ A953 ♦ AQ ♣ AQ106
81. ♠ AQ3 ♥ J76 ♦ KQ75 ♣ AJ9
82. ♠ KQ42 ♥ AQJ84 ♦ KJ7 ♣ Q
83. ♠ 43 ♥ AK1092 ♦ K95 ♣ AK7
84. ♠ AK102 ♥ J8762 ♦ AQ ♣ K10

85. ♠ K63 ♥ K65 ♦ KQ1073 ♣ AK
86. ♠ A4 ♥ AK63 ♦ A7 ♣ AJ532
87. ♠ A32 ♥ AJ43 ♦ AK ♣ 9763
88. ♠ K1087 ♥ AK ♦ AKJ9 ♣ 752
89. ♠ AKJ4 ♥ Q104 ♦ Q ♣ AJ963
90. ♠ A ♥ 6532 ♦ AK106 ♣ AKJ10
91. ♠ 74 ♥ KQJ ♦ AQJ102 ♣ QJ5
92. ♠ QJ ♥ AK72 ♦ 3 ♣ AQJ952
93. ♠ A86 ♥ KQJ ♦ K96 ♣ A743
94. ♠ K64 ♥ KJ85 ♦ Q8 ♣ AK73
95. ♠ KQJ ♥ A109 ♦ J6 ♣ KQ752
96. ♠ AKQ65 ♥ 73 ♦ A ♣ QJ862
97. ♠ 106 ♥ K43 ♦ KQJ42 ♣ AK8
98. ♠ AQ97 ♥ A102 ♦ 63 ♣ AK52
99. ♠ AKQ85 ♥ AK108 ♦ 762 ♣ 2
100. ♠ A ♥ KQ1075 ♦ AJ6 ♣ K543

SET 2 ANSWERS

1.

♠ Q83
♥ AJ6
♦ AKQ7
♣ 1063

♠ 6
♥ KQ1032
♦ 1063
♣ KQ94

WEST

1 ♣

1NT

2 ♦

3 ♣

3 ♠

4 ♦

Pass

EAST

1 ♠

2 ♣

2NT

3 ♦

3NT

4 ♥

1 ♠ shows hearts. 2 ♣ shows clubs. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=5=3=4. Four controls could be enough, something like:

♠ x ♥ KQxxx ♦ xxx ♣ AKQx

but would need fillers in addition. Perfect for Weak Relay. 3NT shows less than a Super-Positive. It's now clear to sign off in 4 ♥.

2.

♠ KJ5

♥ KQJ76

♦ KQ10

♣ J5

♠ 1042

♥ 4

♦ AJ9743

♣ A107

WEST

1 ♣

2 ♦

3 ♣

3NT

EAST

2 ♣

2NT

3 ♥

Pass

2 ♣ shows diamonds. 2NT shows one-suiter, middle-short. 3 ♥ shows generic 6-3-3-1, so exactly 3=1=6=3. 3NT is the best shot.

3.	♠ J2	♠ AKQ104
	♥ AQ53	♥ J108
	♦ AKJ1083	♦ Q42
	♣ J	♣ K7

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♦
3 ♥	4 ♣
4 ♦	4 ♥
4 ♠	4NT
5 ♦	5 ♠
6 ♦	Pass

1 ♥ shows spades. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 5=3=3=2. Slam is possible with 3 controls and we will be playing in diamonds anyway, so normal Control Ask. 4 ♣ shows 4 controls. 4 ♥ is {"No" in spades}. It is possible that East has AK doubleton of clubs, but the odds are huge that he has AK of spades. If West continues, the Death Response is 5 ♣, which would be {"Yes" in hearts, "No" in spades [no queen]}. Slam would be about 50–50 without the queen of diamonds and very good if East has the queen of diamonds, so we are willing to play slam opposite that. If East has the king of clubs he will bid 4NT, so we can stop in 5 ♦ if so desired. 4NT is {"No" in hearts}. East's barebones hand is:

♠ AKxxx ♥ xxx ♦ xxx ♣ Kx

Slam is bad opposite that. East needs both the queen of spades and the queen of diamonds for slam to be good, so it looks right to sign off. However, East does have both queens. East knows that West had interest opposite 4 controls, so with 2 likely working queens East was willing to move. The best move looked to be 5 ♠, giving West the option to get out there or in 5NT if there was no slam.

4.

♠ AQ

♥ AQJ43

♦ K73

♣ 1095

♠ K10

♥ K10872

♦ Q2

♣ KJ64

WEST

1 ♣

1NT

2 ♦

3 ♥

4 ♦

Pass

EAST

1 ♠

2 ♣

3 ♣

3 ♠

4 ♥

1 ♠ shows hearts. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=2=4. Opposite 4 controls West will need some fillers for slam, so Weak Relay looks right. 3 ♠ shows less than a Super-Positive. Signing off in 4 ♥ is now clear.

5.	♠ KQ	♠ AJ62
	♥ A4	♥ K96
	♦ AK1098	♦ Q7654
	♣ AJ53	♣ K

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	3 ♦
3 ♥	3NT
4 ♣	4 ♦
4 ♥	5 ♣
5 ♦	5 ♥
5 ♠	5NT
6 ♣	6 ♥
6 ♠	7 ♣
7NT	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 4=3=5=1. Control Ask is clear. 3NT shows 3 controls. East's barebones hand is:

♠ Axxx ♥ Kxx ♦ xxxxx ♣ x

7 ♦ is fine opposite that, so West can DCB all the way for 7NT. 4 ♦ is {"No" in diamonds}. 5 ♣ is {"Yes" in spades, "Yes" in diamonds [queen], "No" in spades [no queen]}. 5 ♥ is {"No" in hearts [no queen]}. 5NT is {"No" in diamonds [no jack]}. 6 ♥ is {"Yes" in spades [jack], "No" in hearts [no jack]}. 7 ♣ is {"Yes" in clubs [king]}. East's hand is known to be:

♠ AJxx ♥ Kxx ♦ Qxxxx ♣ K

West can count 13 top tricks in notrump. Just barely got to the singleton king of clubs in time.

6.	♠ Q8	♠ AK9762
	♥ AK964	♥ 108
	♦ AK10	♦ J2
	♣ 976	♣ AJ3

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♥
4NT	5 ♣
5 ♦	5 ♠
5NT	6 ♣
6 ♦	6 ♥
6 ♠	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3 ♥ shows 2-3 in rank order, so exactly 6=2=2=3. Slam is possible, and you don't have to worry about the Death Response since East has shown 6 spades. 4 ♥ shows 5 controls. 4 ♠ would be a signoff, so 4NT is DCB. 5 ♣ is {"No" in spades}. East's barebones hand is now:

♠ AKxxxx ♥ xx ♦ xx ♣ Axx

Opposite that 6 ♠ is fine, so it is safe to probe for a grand. 5 ♠ is {"Yes" in clubs, "No" in spades [no queen]}. 6 ♣ is {"No" in clubs [no queen]}. 6 ♥ is {"No" in hearts [no queen]}. This is not a Death Response since East has 6-card spade suit. It is clear to quit in 6 ♠.

7.	♠ AKJ63	♠ 854
	♥ 3	♥ AK52
	♦ A9	♦ K4
	♣ AJ1084	♣ K752

WEST

1 ♣

3 ♥

6 ♣

EAST

3 ♦

4 ♦

Pass

3 ♦ shows balanced 12–14, two suits same shape, doubleton diamond, so exactly 3=4=2=4. Control Ask is clear. 4 ♦ shows 5 controls. East's barebones hand is:

♠ xxx ♥ AKxx ♦ Kx ♣ Kxxx.

Since East is limited to 14 HCP he can't have a queen, so there is no need to look further. 6 ♣ is clearly the right contract.

8.	♠ KJ4	♠ A9862
	♥ 5	♥ AJ1032
	♦ AQ53	♦ 87
	♣ AQ853	♣ 10

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♥
3 ♠	4 ♦
4 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 5=5=2=1. Fine for Control Ask, as the Death Response of 4 ♥ shows 5 controls, which is great. 4 ♦ shows 4 controls. East would need the queen of spades for slam to have decent play, and even with that there will be big handling charges and maybe a finesse. In addition, the 5-level is not safe. Signing off looks best. If East has the queen of spades and more fillers, he might be able to override anyway.

9.	♠ A1098	♠ K5
	♥ K86	♥ 94
	♦ KQ104	♦ J852
	♣ A8	♣ KQ932

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
3NT	Pass

1NT shows clubs. 2 ♦ shows diamonds. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=2=4=5. The cheap Control Ask has nothing to lose. 3 ♥ shows 0–2 controls. This means East has a few quacks (queens and jacks), so 3NT is probably best.

10.	♠ K876	♠ 32
	♥ AK9	♥ Q104
	♦ AJ3	♦ K85
	♣ QJ6	♣ A10854

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♦
3 ♠	3NT
Pass	

1NT shows clubs. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=3=3=5. Slam is possible opposite 4 controls, but only if East has some fillers, so this is a good hand for Weak Relay. 3NT is less than a Super-Positive. 3NT is now best.

11.	♠ AK1072	♠ Q9
	♥ AK2	♥ QJ3
	♦ Q	♦ AK107
	♣ K653	♣ QJ84

WEST	EAST
1 ♣	2NT
3 ♣	3 ♠
5 ♣	5NT
6 ♣	Pass

2NT shows balanced 12–14, 2 suits same rank. East had to treat this hand as 12–14 since he has only 3 controls. 3 ♠ shows doubleton spade, so exactly 2=3=4=4. Slam in clubs is quite possible, since East has to have his 12–14 HCP somewhere. Controls aren't really the problem. The main focus is on the trump suit. East could have something like:

♠ Qx ♥ Qxx ♦ KJxx ♣ Axxx

And slam would be hopeless. But give East the queen of clubs and slam becomes decent to great. West judged the best bet was to make a natural slam try. East would be looking largely at his club holding, and is likely to get it right. East has an obvious acceptance with great club intermediates and an extra high card point. East bids 5NT rather than 6 ♣ to let West know his values are scattered in case West has another strain in mind. West does not.

12.	♠ AQJ105 ♥ A876 ♦ K ♣ Q42	♠ 42 ♥ J103 ♦ A10742 ♣ A96
	WEST	EAST
	1 ♣	2 ♣
	2 ♦	2 ♠
	2NT	3 ♦
	3NT	Pass

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=3=5=3. Not even worth a Weak Relay.

13.	♠ AJ5 ♥ KJ53 ♦ K7 ♣ KQ107	♠ 83 ♥ A87 ♦ AQ8543 ♣ 96
	WEST	EAST
	1 ♣	2 ♣
	2 ♦	2 ♠
	2NT	3 ♣
	3 ♦	3NT
	Pass	

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3NT shows 3-2 in rank order, so exactly 2=3=6=2, 3+ controls, less than a Super-Positive. East needs a Super-Positive for there to be a slam.

14.	♠ AK8 ♥ J7 ♦ K85 ♣ AJ1084	♠ 1094 ♥ Q1053 ♦ Q3 ♣ KQ72

WEST 1 ♣ 2 ♥ 3NT	EAST 2 ♦ 3 ♦ Pass

2♦ shows balanced 9–11 or 15+. 3♦ shows two suits same shape, doubleton diamond, so exactly 3=4=2=4. 3NT is clear.

15.	♠ A542 ♥ K4 ♦ A932 ♣ AJ6	♠ KQ97 ♥ 95 ♦ K64 ♣ Q972

WEST 1 ♣ 2 ♥ 2NT 4 ♦ 4 ♠	EAST 2 ♦ 2 ♠ 3 ♥ 4 ♥ Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♥ shows doubleton heart, so exactly 4=2=3=4. 4♠ is clearly best.

16.	♠ A4	♠ J96
	♥ 8	♥ AK95
	♦ KQ1092	♦ J743
	♣ AQJ75	♣ 102

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3NT
4 ♣	4 ♥
5 ♦	Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3NT shows 9–11, doubleton club, so exactly 3=4=4=2. West has a clear Control Ask. 4♥ shows 3 controls. If East has the ace of diamonds and the king of clubs slam is a claim. If East has the ace of hearts and the king of clubs, slam may depend upon the lead. If East is missing the king of clubs he has a major-suit king, so slam is probably on a club finesse. East could just have 3 kings, in which case slam is down off the top. If West tries DCB the Death Response for 5♦ is 5♣, which would be {“Yes” in hearts, “No” in diamonds}—possibly the hand that is off two aces. On balance it looks best to give up on slam.

17.	♠ AKJ4	♠ Q32
	♥ Q86	♥ AJ10
	♦ Q82	♦ K43
	♣ A96	♣ KQ103

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3NT	4 ♣
4NT	Pass

2♦ is balanced 9–11 or 15+. 3♣ is 4-3-3-3 with a 4-card minor. West doesn’t care about the minor. 4♣ is 15+, 4 controls. West still isn’t interested, and holding a minimum East must pass 4NT.

18.	♠ A108	♠ 73
	♥ AJ3	♥ Q1054
	♦ 76	♦ AQJ2
	♣ AK764	♣ Q92

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♠
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♠ shows doubleton spade, so exactly 2=4=4=3. 3NT figures to be best.

19.	♠ A83	♠ QJ2
	♥ Q72	♥ AK104
	♦ KQ6	♦ 8732
	♣ AQ75	♣ K3

WEST	EAST
1 ♣	2 ♠
2NT	3NT
Pass	

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3NT shows doubleton club, so exactly 2=4=4=3. 3NT is clearly best.

20.	♠ AQ2	♠ 985
	♥ AKQJ7	♥ 432
	♦ Q103	♦ AKJ
	♣ J3	♣ KQ52

WEST	EAST
1 ♣	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
4 ♥	4NT
6NT	Pass

3 ♣ shows balanced 12–14, 4-3-3-3 with a 4-card minor. 3 ♥ shows 4 clubs, so exactly 3=3=3=4. Control Ask looks right. 4 ♦ shows 4 controls. The 5-level, even 5NT, figures to be safe with at least 31 combined HCP, so DCB may let West determine what East has, in particular to make sure East isn't off the AK of clubs. 4NT is {“Yes” in clubs, “No” in spades}. This means East could have either both minor-suit aces or the king of clubs and the AK of diamonds, and West can't determine which since the next scan will be for hearts. East has to get up to 12 HCP, which means he almost has to have the queen of clubs. With the 2 aces, he needs every unseen queen and jack. So, his two possible barebones hands are:

♠ Jxx ♥ xxx ♦ AJx ♣ AQxx

or

♠ xxx ♥ xxx ♦ AKx ♣ KQxx

Opposite either of these hands, slam is from fair to good depending on intangibles such as black tens. On balance it is probably a favorite. There seems to be no value in having a trump suit, and hearts could be 5–0, so play in notrump.

21.	♠ AJ6	♠ 97543
	♥ J3	♥ AQ10872
	♦ AQ64	♦ K9
	♣ A543	♣ —

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3NT
4 ♦	4 ♥
Pass	

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows long two-suiter. 3NT shows low-short, generic 5-6-2-0 with less than a Super-Positive, so exactly 5=6=2=0. Not enough for slam, and the 6-2 fit seems better for protection against getting forced.

22.	♠ Q6	♠ 8432
	♥ KJ865	♥ A107
	♦ K63	♦ A
	♣ AK7	♣ Q9642

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
4 ♦	4 ♥
Pass	

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 4=3=1=5. West's hand is terrible and needs considerable extras for slam, so a signoff in 4 ♥ looks right.

23.	♠ AJ4	♠ 10532
	♥ Q532	♥ AJ86
	♦ AKQ	♦ 8
	♣ K86	♣ AQJ2

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3NT	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♦ shows three-suiter, short minor. 2NT shows high-short. 3 ♦ shows generic 4-4-4-1 with small singleton, so exactly 4=4=1=4. 3NT is clearly better than the 4-4 heart fit with this diamond holding, and not enough for even Weak Relay. Since Weak Relay was available, East would need a Super-Duper Positive to override.

24.	♠ 98	♠ KJ52
	♥ KJ63	♥ AQ1042
	♦ AKQ4	♦ J3
	♣ K52	♣ 109

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	3 ♣
3 ♥	3 ♠
4 ♦	4 ♥
Pass	

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 3 ♣ show s presumably generic 5-4-2-2, so exactly 4=5=2=2. Slam is possible opposite 4 controls, but East would need a couple of fillers if all he has is two aces. This is a good hand for Weak Relay. 3 ♠ shows less than a Super-Positive. Clear to sign off in 4 ♥.

25.

♠ AJ1072

♥ A4

♦ 9

♣ AQJ98

♠ K

♥ J932

♦ AQJ864

♣ K3

WEST

1 ♣

1NT

2 ♠

3 ♣

3NT

EAST

1 ♠

2 ♥

2NT

3 ♥

Pass

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 1=4=6=2. 3NT looks clear. East cannot override since he doesn't have 4 controls, as a stiff king can't be counted as a control.

26.	♠ QJ ♥ A2 ♦ AK82 ♣ QJ1083	♠ — ♥ K1098754 ♦ Q ♣ AK652
	WEST	EAST
	1 ♣	1 ♠
	1NT	2 ♣
	2 ♦	2 ♠
	2NT	3 ♣
	3 ♦	4 ♣
	4 ♦	4NT
	7 ♣	Pass

East has a shape he can't completely show, since we can't show 12 cards in two suits. He decided that 0=6=2=5 was the best approximation. 1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows long two-suiter. 3 ♣ shows high-short. 4 ♣ shows generic 6-5-2-0, so exactly 0=6=2=5. Control Ask is okay, since opposite 3 controls at least 5 ♣ is fine. 4NT shows 4 controls. East's barebones hand is:

♠ — ♥ Kxxxxx ♦ xx ♣ AKxxx

7 ♣ is virtually laydown.

27.	♠ AK ♥ AK876 ♦ A103 ♣ K102	♠ J9652 ♥ QJ93 ♦ 5 ♣ AJ5

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	3 ♠
4 ♣	4 ♥
4 ♠	4NT
5 ♣	5 ♦
5 ♥	5NT
7 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5=4=1=3. West has a clear Control Ask. 3 ♠ shows 0–2 controls. West isn’t giving up, of course. 4 ♥ is {2 controls, “No” in spades}. That means East has the ace of clubs, so West will be bidding at least 6 ♥; he can DCB safely for a while. 4NT is {“No” in hearts}. 5 ♦ is {“No” in spades [no queen]}. 5NT is {“Yes” in hearts [queen], “No” in clubs [no queen]}. East’s barebones hand is:

♠ xxxxx ♥ Qxxx ♦ x ♣ Axx

If hearts are 2–2 and spades 4–2, there are 7 heart tricks, 3 spade tricks, 1 diamond trick, and 2 club tricks. If hearts are 3–1 and spades 3–3, there are 6 heart tricks, 4 spade tricks, 1 diamond trick, and 2 club tricks. More DCB doesn’t help, since 6 ♦ {“No” in spades [no jack]} is the Death Response for 6 ♥. However, East has to have a bit more for his positive response, and either black jack improves the chances in a grand. It looks worth it.

28.	♠ Q64	♠ AK953
	♥ AK8	♥ Q10732
	♦ AK954	♦ 2
	♣ 102	♣ KQ

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♦
4 ♥	4 ♠
Pass	

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows long two-suiter. 3 ♣ shows high-short. 3 ♥ shows generic 5-5-2-1, so exactly 5=5=1=2. Since West can play in either major, he doesn't have to worry about a Death Response. 4 ♦ shows 4 controls. 4 ♠ is {"No" in spades}. East's barebones hand is:

♠ AKxxx ♥ xxxxx ♦ x ♣ Kx

It may be necessary to play in hearts to protect the king of clubs if going higher. The problem is that West can't find out about the queen of hearts in time to stop at the 5-level if East doesn't have it, and that's the card he needs to know about. East has 5 unknown hearts, as do the opponents, so it is 50–50 whether or not East has the queen of hearts. There might not be a heart loser if we're off the queen of hearts. On the other hand, either major suit might not split. On balance, stopping in game looks percentage.

29.	♠ AKQ10932	♠ J6
	♥ AK82	♥ QJ3
	♦ —	♦ AJ
	♣ A4	♣ K98762

WEST	EAST
1 ♣	1NT
2 ♣	2 ♠
2NT	3 ♣
3 ♦	3NT
4 ♣	4 ♦
4 ♥	4NT
5 ♦	5 ♥
5 ♠	5NT
6 ♦	6 ♠
7NT	Pass

1NT shows clubs. 2♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3♣ shows 6-3-2-2 with high doubleton. 3NT shows 3-2 in rank order so exactly 2=3=2=6, 3+ controls, less than a Super-Positive. West will clearly bid 6♠ at least, so he has all the room he needs to find what he can. 4♦ shows 3 controls, since East's 3NT call showed 3+ controls. 4NT is {"Yes" in clubs, "No" in hearts}, so East has the king of clubs and the ace of diamonds. West must bid 5♦ DCB, as 5♣ is to play. 5♥ is {"No" in spades}. 5NT is {"No" in clubs [no queen]}. East's barebones hand is:

♠ xx ♥ xxx ♦ Ax ♣ Kxxxxx

Now West seems to have a problem. 6♣ is a signoff, since East has shown a 6-card club suit, so 6♦ would be the DCB call. A 6♥ response {"No" in hearts [no queen]} is the Death Response for 6♠. However, West can bail out in 6NT, since he can count 7 spades, 2 hearts, 1 diamond, and 2 clubs. So DCB is okay. 6♠ is {"Yes" in hearts [queen], "No" in spades [no queen]}. West can count 13 tricks in notrump.

30.	♠ AKJ	♠ 743
	♥ KJ4	♥ AQ98
	♦ AJ	♦ K32
	♣ AK432	♣ Q87

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♣
4 ♦	4 ♠
4NT	5 ♥
5 ♠	5NT
6 ♣	6 ♥
7NT	Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♣ shows 4-3-3-3 with a 4-card major. 3♥ shows 4 hearts, so exactly 3=4=3=3. 4♣ shows 3 controls. West can probe all the way from here, since 6NT has to be fine with at least 33 HCP. 4♠ is {“Yes” in hearts, “No” in spades}. 5♥ is {“Yes” in diamonds, “Yes” in hearts [queen], “No” in spades [no queen]}. 5NT is {“No” in diamonds [no queen]}. 6♥ is {“Yes” in clubs [queen], “No” in hearts [no jack]}. East’s barebones hand is:

♠ xxx ♥ AQxx ♦ Kxx ♣ Qxx

13 tricks on a 3–2 club split.

31.	♠ K1043	♠ A98
	♥ A65	♥ 94
	♦ A96	♦ KQJ874
	♣ AJ8	♣ 93

WEST	EAST
1 ♣	2 ♣
2 ♦	3 ♣
3 ♦	3NT
Pass	

2 ♣ shows diamonds. 3 ♣ shows one-suiter, 7-2-2-2 or 6-3-2-2 with high tripleton. 3NT shows 6-3-2-2 with high tripleton so exactly 3=2=2=6, 3+ controls, less than a Super-Positive. 3NT looks best.

32.	♠ K1083	♠ Q976
	♥ K92	♥ J53
	♦ AK86	♦ Q4
	♣ QJ	♣ A876

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♦
3NT	Pass

2 ♦ shows balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with 4-card major. 3 ♦ shows doubleton diamond, so exactly 4=3=2=4. With the opponents having no 8-card fit and likely no ruffing value in clubs, 3NT looks better than 4 ♠.

33.

♠ AK53

♥ K754

♦ K62

♣ A5

♠ J74

♥ Q82

♦ AQ87

♣ J92

WEST

1 ♣

2 ♥

3 ♦

3NT

EAST

2 ♦

3 ♣

3 ♠

Pass

2♦ shows balanced 9–11 or 15+. 3♣ shows 4-3-3-3 with a 4-card minor. 3♠ shows 4 diamonds so exactly 3=3=3=4, 0–2 controls. 3NT is obvious.

34.	♠ AK84	♠ QJ
	♥ A	♥ KQJ6
	♦ AQJ8	♦ 1075
	♣ AKQ8	♣ 10642

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♠
4 ♣	4 ♦
4 ♥	4 ♠
4NT	5 ♥
5 ♠	5NT
6 ♣	6 ♠
7NT	Pass

2♦ shows balanced 9–11 or 15+. 3♠ shows two suits same shape, doubleton spade, so exactly 2=4=3=4. West’s hand is so huge he will almost certainly be bidding a grand, so he can DCB all the way. 4♦ shows 0–2 controls. 4♠ is {1 control}. 5♥ is {“Yes” in hearts, “Yes” in hearts [queen], “No” in clubs [no queen]}. 5NT is {“No” in diamonds [no queen]}. 6♠ is {“Yes” in spades [queen], “Yes” in hearts [jack], “No” in clubs [no jack]}. East has to have the jack of spades to get up to 9 HCP, so his hand is:

♠ QJ ♥ KQJx ♦ xxx ♣ xxxxx

If the clubs are 3–2 there are 4 spade tricks, 4 heart tricks, 1 diamond trick, and 4 club tricks, so there is no need to play in clubs. 7NT it is. Note that if East had the jack of clubs he might not have the jack of spades, so West would have chosen 7♣.

35.	♠ AJ93	♠ K10
	♥ AQJ	♥ 106
	♦ A76	♦ KQJ1054
	♣ 643	♣ AQ8
	WEST	EAST
	1 ♣	2 ♣
	2 ♦	2 ♠
	2NT	3 ♣
	3 ♦	3 ♥
	3NT	4 ♣
	4 ♦	5 ♥
	6 ♦	Pass

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3 ♥ shows 2-3 in rank order, so exactly 2=2=6=3. West has a clear 3NT choice. 4 ♣ shows 4 controls, Super-Positive. 5 ♥ is {“Yes” in diamonds, “Yes” in clubs, “Yes” in spades, “Yes” in diamonds [queen], “Yes” in clubs [queen], “No” in spades [no queen]}. East’s barebones hand is:

♠ Kx ♥ xx ♦ KQxxxx ♣ AQx

There are only 11 top tricks and the jack of clubs wouldn’t increase that, so you should play in 6 ♦, as that leaves the possibility of ruffing out the queen of spades.

36.	♠ QJ5	♠ 2
	♥ A764	♥ QJ5
	♦ AJ7	♦ KQ954
	♣ KQ4	♣ J1052

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3NT	Pass

2 ♣ shows diamonds. 2 ♥ shows clubs. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=3=5=4. Even with the spade problem, prospects in 3NT look better than anywhere else.

37.	♠ AJ7	♠ KQ963
	♥ Q97	♥ AJ
	♦ AQJ4	♦ 72
	♣ Q64	♣ 10532

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	3 ♣
3 ♦	3 ♠
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 3 ♣ shows presumably generic 5-4-2-2, so exactly 5=2=2=4. West will almost certainly get to 4 ♠, but the Control Ask is so cheap he might as well make it just in case something exciting happens. 3 ♠ shows 3 controls. Now 4 ♠ is clearly the contract of choice.

38.

♠ A	♠ J2
♥ AQ10	♥ K874
♦ AQ6543	♦ K2
♣ J107	♣ KQ964

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠
5 ♣	5 ♥
6 ♣	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=2=5. The Control Ask is cheap. 3 ♠ shows 3 controls. If East has 3 kings including both minor-suit kings and the queen of clubs, slam will be good. The problem with DCB is that East's calls might not be readable. Suppose West bids 4 ♣ DCB, and East bids 4 ♠. What is East showing? He might be showing {"Yes" in clubs, "Yes" in hearts, "No" in spades} if he has three kings. But if he has the ace of clubs, he would be showing {"Yes" in clubs, "Yes" in hearts, "No" in clubs [no queen]}. West can't tell, so DCB won't work. A natural slam try looks better. East will be keying on the queen of clubs, and certainly won't be accepting if he doesn't have that card since all else he can have which he hasn't shown is the queen of spades, which might be worthless. If he has the queen of clubs, he may accept, and that could be great or fair depending on what else he holds. On the actual hand, East has 3 kings, one of them the king of trumps, to go along with the queen of trumps, so East has a clear acceptance. East shows keycards, just in case.

39.

♠ KJ

♥ AQ642

♦ J64

♣ AJ10

♠ Q63

♥ K75

♦ A2

♣ Q9843

WEST

1 ♣

2 ♣

4 ♦

Pass

EAST

1NT

3 ♦

4 ♥

1NT shows clubs. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=3=2=5. East needs well more than a minimal Super-Positive for slam, and even opposite 5 controls (the Death Response for 4 ♥), the 5-level isn't safe, so it is right to directly sign off.

40.	♠ AJ965	♠ Q4
	♥ 86	♥ AK
	♦ AK	♦ Q108642
	♣ AK108	♣ 972

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	4 ♣
4 ♦	4 ♥
4 ♠	4NT
5 ♣	5 ♦
Pass	

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3 ♥ shows 2-3 in rank order, so exactly 2=2=6=3. Control Ask looks okay, since West will be playing in 5 ♦ anyway, meaning there is no Death Response to worry about. 4 ♣ shows 3 controls. 4 ♥ is {"No" in diamonds}. 4NT is {"No" in clubs}. If West continues with DCB there is the danger of flying past 5 ♦. That would happen if East has the king of spades. The worst-case East hand would be:

♠ Kx ♥ Ax ♦ xxxxxx ♣ xxx

Even opposite that 6 ♦ has decent play, and of course East could have some helpful queens, so it looks right to continue. 5 ♦ is {"No" in spades}. East's barebones hand now is:

♠ xx ♥ AK ♦ xxxxxx ♣ xxx

East has to have a little something more for his positive response. Unfortunately the entries aren't there to bail out in 5NT if East doesn't have the queen of diamonds, so West has to guess now. East has 6 diamonds and the opponents have 5 diamonds, so East is a slight favorite to have the queen. However, the diamonds might split badly, and even with 6 diamond tricks there still might be only 11 winners.

Stopping looks like the percentage action. Unfortunately, East's queen of spades makes slam a favorite.

41.	♠ QJ	♠ AK7
	♥ AJ1082	♥ Q43
	♦ A108	♦ 432
	♣ AK7	♣ 10643

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3 ♥
4 ♦	4 ♥
Pass	

2 ♦ shows balanced 9–11 or 15+. 3 ♣ shows 4-3-3-3 with a 4-card minor. 3 ♥ shows 4 clubs, so exactly 3=3=3=4. With some potential danger in spades, 4 ♥ looks marginally better than 3NT from West's point of view.

42.	♠ 3	♠ A965
	♥ AKJ76	♥ 432
	♦ 85	♦ AKQJ2
	♣ AKQ75	♣ J

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♥
2 ♠	3 ♦
3 ♥	4 ♦
4 ♥	4 ♠
4NT	5 ♥
5 ♠	5NT
6 ♥	Pass

1 ♥ shows spades. 2 ♥ shows diamonds, Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 4=3=5=1. Control Ask looks clear. 4 ♦ shows 5 controls. Early Train to Queensland is possible since it won't matter which king East has playing in hearts, but since there is plenty of room to get to the queen of hearts (since you can always bid 6 ♥), it is possible that diamonds is a better strain if East has solid diamonds. 4 ♠ is {"No" in diamonds}. 5 ♥ is {"Yes" in spades, "Yes" in diamonds [queen], "No" in spades [no queen]}. 5NT is {"No" in hearts [no queen]}. East's barebones hand is:

♠ Axxx ♥ xxx ♦ AKQxx ♣ x

If East has the jack of diamonds then diamonds is a better trump suit, and even 7 ♦ is a pretty good contract, taking 6 diamond tricks, 4 club tricks, 1 spade trick, and 2 heart tricks on decent splits. However, if East doesn't have the jack of diamonds, 6 ♥ is best. Unfortunately, if West DCBs with 6 ♣, then 6 ♦ {"No" in diamonds [no jack]} is the Death Response for playing in 6 ♥, so West would have to pass 6 ♦. With East having only 2 unknown diamonds and the opponents having 6 diamonds the odds are that East doesn't have the jack, so the percentage choice is 6 ♥.

43.	♠ A2	♠ J5
	♥ AQ10	♥ K732
	♦ AJ853	♦ K10742
	♣ Q74	♣ K3

WEST	EAST
1 ♣	1 ♠
1NT	2 ♥
2 ♠	3 ♣
3 ♦	3 ♠
3NT	Pass

1 ♠ shows hearts. 2 ♥ shows diamonds, Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=5=2. 3 ♦ is a cheap Control Ask. 3 ♠ shows 3 controls. That isn't enough for slam. There are too many losers for 5 ♦, but there might be enough quick tricks for 3NT.

44.	♠ AQ9	♠ 1042
	♥ KQ62	♥ J10853
	♦ 103	♦ AKQ2
	♣ KQ54	♣ J

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	3 ♦
3 ♥	3NT
4 ♦	4 ♥
Pass	

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=5=4=1. 3NT shows 3 controls. That means we're off 2 aces, so 4 ♥ is clear.

45.	♠ AQ3	♠ KJ62
	♥ 104	♥ Q2
	♦ AKQ4	♦ 973
	♣ A873	♣ KQ109

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥
4 ♦	4 ♥
4 ♠	Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♥ shows doubleton heart, so exactly 4=2=3=4. The matching doubletons in hearts make 3NT dangerous, and 11 tricks might be too many. West has the nice queen of spades, so he chose the 4–3 spade game.

46.	♠ AK74	♠ 5
	♥ A8	♥ QJ765
	♦ Q952	♦ K1083
	♣ QJ2	♣ A53

WEST	EAST
1 ♣	1 ♠
1NT	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3NT	Pass

1♠ shows hearts. 2♦ shows diamonds, not a Reverser. 2NT shows high-short. 3♦ shows generic 5-4-3-1, so exactly 1=5=4=3. 3NT is certainly the best game, and even opposite a Super-Positive 5♦ is not safe.

47.	♠ AQ73	♠ 9
	♥ KQ9	♥ J8
	♦ AJ72	♦ KQ9653
	♣ A2	♣ K843

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♥
3 ♠	3NT
4 ♣	5 ♣
6 ♦	Pass

2 ♣ shows diamonds. 2 ♥ shows clubs. 2NT shows high-short. 3 ♥ shows generic 6-4-2-1, so exactly 1=2=6=4. 3NT shows 0–2 controls. 5 ♦ is probably okay and slam makes opposite both minor-suit kings, so it's worth it to use DCB. 5 ♣ is (2 controls, “Yes” in diamonds, “Yes” in clubs, “Yes” in diamonds [queen], “No” in clubs [no queen]). East's barebones hand is:

♠ x ♥ xx ♦ KQxxxx ♣ Kxxx

6 ♦ is virtually cold.

48.	♠ AJ6	♠ Q82
	♥ KJ	♥ Q762
	♦ K104	♦ J963
	♣ KJ653	♣ A10

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3NT
Pass	

2 ♦ show balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3NT shows 9–11, doubleton club, so exactly 3=4=4=2. 3NT is clearly best.

49.	♠ A942	♠ KQ1063
	♥ A2	♥ Q873
	♦ AQ82	♦ 63
	♣ K105	♣ Q2

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	3 ♣
3 ♦	3 ♥
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 3 ♣ shows presumably generic 5-4-2-2, so exactly 5=4=2=2. Slam can be there opposite 3 controls, so normal Control Ask. 3 ♥ shows 0–2 controls. Opposite that, 4 ♠ is clear.

50.	♠ A832	♠ KQJ10
	♥ AK86	♥ J93
	♦ J1052	♦ A9
	♣ A	♣ Q875

WEST	EAST
1 ♣	2 ♠
2NT	3 ♦
4 ♦	4 ♥
4 ♠	Pass

2 ♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3 ♦ shows doubleton diamond, so exactly 4=3=2=4. There might be a slam if East has nothing in clubs, but even opposite a perfect hand slam won't be laydown, and there is no way to safely find out if East has the right cards.

51.	♠ AKQ	♠ 10732
	♥ K9643	♥ QJ52
	♦ AJ43	♦ K92
	♣ 5	♣ K2

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3NT
4 ♦	4 ♥
Pass	

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3NT shows 9–11, doubleton club, so exactly 4=4=3=2. 4 ♥ is the obvious contract.

52.	♠ AK10	♠ QJ64
	♥ KJ7	♥ Q63
	♦ K94	♦ Q
	♣ QJ102	♣ K9873

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	3 ♦
3 ♥	3 ♠
4 ♦	4 ♥
4 ♠	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 4=3=1=5. Slam is not likely, but a normal Control Ask looks right, as the response may help the choice-of-games decision. 3 ♠ shows 0–2 controls. The diamond lead will likely defeat 3NT, and there are too many losers for 5 ♣. However, 4 ♠ has a decent chance, particularly since East almost has to have the queen of spades for his positive response.

53.	♠ KJ72	♠ A864
	♥ AK1065	♥ —
	♦ AQ9	♦ J65
	♣ 2	♣ A87643

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♣
2 ♦	2 ♥
2 ♠	2NT
3 ♣	3 ♠
4 ♠	Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♠ shows generic 6-4-3-0, so exactly 4=0=3=6. Controls aren't the main issue: West needs fillers, in particular the queen of spades. A natural slam try looks best. East has the nice aces, but if that is what West needed West would have made a Control Ask. With no fillers and an otherwise minimal hand, East quits.

54.	♠ AK87	♠ J932
	♥ A	♥ KJ94
	♦ J542	♦ 108
	♣ KJ75	♣ A96

WEST	EAST
1 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
4 ♦	4 ♥
4 ♠	Pass

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3 ♦ shows doubleton diamond, so exactly 4=4=2=3. 4 ♠ looks clear.

55.	♠ QJ94	♠ A10
	♥ AQ1092	♥ J76
	♦ A	♦ KJ7643
	♣ KQ10	♣ 94

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♣
3 ♦	3NT
Pass	

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♣ shows 6-3-2-2 with high doubleton. 3NT shows 3-2 in rank order, so exactly 2=3=6=2, 3+ controls, less than a Super-Positive. With clubs double-stopped and absolutely no ruffing value in the short hand, 3NT looks better than the 5-3 heart fit.

56.	♠ AK952	♠ J864
	♥ K5	♥ J32
	♦ 2	♦ AKQJ
	♣ AKQ104	♣ 93

WEST	EAST
1 ♣	3NT
4 ♣	4 ♥
6 ♠	Pass

3NT shows balanced 12-14, two suits same shape, doubleton club, so exactly 4=3=4=2. 4 ♥ shows 3 controls. Slam is at worst on a 2-2 spade split, since there can be only one red-suit loser, and that loser might go away if the opponents don't cash their ace on this blind auction. That makes bidding slam percentage.

57.	♠ AKQ6	♠ J54
	♥ AK862	♥ QJ54
	♦ —	♦ K73
	♣ AJ97	♣ Q65

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♣
3 ♦	3 ♥
3 ♠	3NT
4 ♣	4 ♦
4 ♥	4 ♠
4NT	5 ♣
5 ♦	5NT
6 ♥	Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♣ shows 4-3-3-3 with a 4-card major. 3♥ shows 4 hearts, so exactly 3=4=3=3. 3NT shows 0–2 controls. 4♦ shows 1 control. West can certainly go to 5♥ at least, so DCB is safe for now. 4♠ is {“No” in hearts}. 5♣ is {“No” in spades}. If East has the king of diamonds his next DCB response will be above 5♥, but East has to have his 9 HCP somewhere, so slam figures to be okay. 5NT is {“Yes” in diamonds, “Yes” in hearts [queen], “No” in spades [no queen]}. East’s barebones hand is:

♠ xxx ♥ Qxxx ♦ Kxx ♣ xxx

East likely has both minor-suit queens to get up to his 9 HCP, but there is still a club loser and the grand would need the club finesse, so West settles for 6♥.

58.

♠ KQ1087

♥ 6

♦ AK87

♣ AQ5

♠ 6

♥ KQ952

♦ J10

♣ KJ986

WEST

1 ♣

1NT

2 ♦

2NT

3 ♦

3 ♠

Pass

EAST

1 ♠

2 ♣

2 ♠

3 ♣

3 ♥

3NT

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♠ shows long two-suiter. 3 ♣ shows high-short. 3 ♥ shows generic 5-5-2-1, so exactly 1=5=2=5. There could easily be a club slam, so a Control Ask is necessary. 3NT shows 0–2 controls. That kills slam, and 9 tricks are probably easier than 11.

59.

♠ AQ7542

♥ Q6

♦ AQJ

♣ AJ

♠ KJ109

♥ K7

♦ 64

♣ K7543

WEST

1 ♣

1 ♠

2 ♦

2 ♠

3 ♦

4 ♣

6 ♠

EAST

1 ♥

2 ♣

2 ♥

3 ♣

3 ♠

4NT

Pass

1 ♥ shows spades. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows generic 5-4-2-2, so exactly $4=2=2=5$. 3 ♠ shows 3 controls. 4 ♥ would be Death Response for 4 ♠, which would be {"Yes" in clubs, "No" in spades}. That would make East's barebones hand:

♠ xxxx ♥ Ax ♦ xx ♣ Kxxxx

It would take very bad luck for 5 ♠ to go down opposite that, so DCB looks okay. 4NT is {"Yes" in clubs, "Yes" in spades, "Yes" in hearts, "No" in clubs [no queen]}. That is barebones:

♠ Kxxx ♥ Kx ♦ xx ♣ Kxxxx

Slam is at worst on a diamond finesse, and the clubs could come in for enough tricks.

60.	♠ J109876 ♥ AQ ♦ KQ3 ♣ A4	♠ AKQ3 ♥ K9862 ♦ 4 ♣ QJ2

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♥
2 ♠	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	4 ♠
6 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♥ shows a Reverser. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 4=5=1=3. 4 ♣ shows 4 controls. The Death Response for DCB would be 4 ♥ {“No” in hearts}, and 5 ♠ would be safe. 4 ♠ is {“Yes” in hearts, “No” in spades}. On a bad day East could have a stiff ace of diamonds and Kxx of clubs, but it much more likely that his honors are in his long suit and he has AK of spades. That would make his barebones hand:

♠ AKxx ♥ Kxxxx ♦ x ♣ xxx

Even If they lead a club the heart suit will provide the needed discard. 6 ♠ is the percentage call.

61.	♠ A ♥ AK107 ♦ KJ9 ♣ K9854	♠ Q54 ♥ Q32 ♦ Q865 ♣ QJ2

WEST 1 ♣ 2 ♥ 3 ♦ 4 ♦ Pass	EAST 2 ♦ 3 ♣ 3 ♠ 4 ♥

2♦ shows balanced 9–11 or 15+. 3♣ shows 4-3-3-3 with a 4-card minor. 3♠ shows 4 diamonds, so exactly 3=3=4=3, and 0–2 controls. It is not clear which game is best between 3NT, 4♥, and 5♣. West took a guess at 4♥.

62.	♠ Q104 ♥ KQ75 ♦ 7 ♣ AKQ74	♠ 8752 ♥ AJ8 ♦ AQ52 ♣ J2

WEST 1 ♣ Pass	EAST 3NT

3NT shows balanced 12–14, two suits same shape, doubleton club, so exactly 4=4=3=2. 3NT looks best.

63.	♠ AK	♠ J65
	♥ J1084	♥ Q
	♦ A875	♦ KJ102
	♣ KQ7	♣ A8643

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	3 ♦
3 ♥	3NT
4 ♣	4 ♠
4NT	5 ♣
Pass	

1NT shows clubs. 2 ♦ shows diamonds. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=1=4=5. 3NT shows 3 controls. East has the king of diamonds and an ace, probably the ace of clubs. If East has the queen of diamonds, slam will be from decent to very good. There is some danger of a 5 ♣ Death Response down the road if West uses DCB, but since 5 ♣ is probably about as good a contract if East doesn't have the queen of diamonds that is not a problem. 4 ♠ is {"Yes" in clubs, "Yes" in diamonds, "No" in clubs [no queen]}. 5 ♣ is {"No" in diamonds [no queen]}. East's barebones hand is:

♠ xxx ♥ x ♦ Kxxx ♣ Axxxx

Since 5 ♦ would be more DCB, West has to pass 5 ♣.

64.	♠ KQJ5	♠ A63
	♥ AJ	♥ Q7654
	♦ A96	♦ K7
	♣ QJ109	♣ 864

WEST	EAST
1 ♣	1 ♠
1NT	2NT
3 ♣	3 ♦
3NT	Pass

1 ♠ shows hearts. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=5=2=3. 3NT is clearly best game, and with no 8-card fit West isn't worth a Weak Relay.

65.	♠ KQ5	♠ J109732
	♥ A983	♥ KJ7
	♦ AQ9	♦ 52
	♣ K108	♣ AJ

WEST	EAST
1 ♣	1 ♥
1 ♠	3 ♣
3 ♦	3NT
Pass	

1 ♥ shows spades. 3 ♣ shows one-suiter, 7-2-2-2 or 6-3-2-2 high tripleton. 3NT shows 6-3-2-2, so exactly 6=3=2=2, 3+ controls, less than a Super-Positive. Too many holes for slam, and 3NT pretty much has to be cold.

66.	♠ —	♠ AQ765
	♥ AQJ107	♥ K642
	♦ KJ1084	♦ Q
	♣ AJ2	♣ K108

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2NT
3 ♣	3 ♦
3 ♥	4 ♣
4 ♦	5 ♣
6 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 5-4-1-3. 4 ♣ shows 4 controls. 5 ♣ is {“Yes” in spades, “Yes” in hearts, “Yes” in spades [queen], “No” in hearts [no queen]}. East has either the ace of spades, king of hearts, king of clubs, or king-queen of spades, king of hearts, ace of diamonds, so his barebones hand is either:

♠ AQxxx ♥ Kxxx ♦ x ♣ Kxx

or

♠ KQxxx ♥ xxxxx ♦ A ♣ xxx

The first hand is more likely since singleton ace of diamonds and xxx in clubs is less likely than singleton small diamond and Kxx of clubs, but you are happy to be in slam opposite either hand. 6 ♥ is clear.

67.

♠ AK764

♥ AQ82

♦ K

♣ 973

♠ 109

♥ KJ106

♦ Q63

♣ AKJ6

WEST

1 ♣

4 ♦

Pass

EAST

3 ♠

4 ♥

3 ♠ shows balanced 12–14, two suits same shape, doubleton spade, so exactly 2=4=3=4. 4 ♦, 0–2 controls, is the Death Response for 4 ♥, but that is almost impossible and if it happens 4 ♠ figures to be okay since East would have a ton of queens. Can there be a slam opposite 4 controls? That would be slim. What about opposite 5 controls, say:

♠ xx ♥ Kxxx ♦ Axx ♣ Axxx

along with enough to get to 12 HCP? Possible, but it won't be a claim. In addition, the 5-level isn't safe opposite 4 controls since trumps might be 4–1. All things considered, it looks best to give up on slam.

68.	♠ J74 ♥ A53 ♦ A85 ♣ AQJ8	♠ K8 ♥ KJ106 ♦ Q3 ♣ 97653

WEST	EAST
1 ♣	1 ♠
1NT	2 ♣
2 ♦	2 ♥
2 ♠	3 ♣
3 ♥	3 ♠
3NT	Pass

1 ♠ shows hearts. 2 ♣ shows clubs. 2 ♥ shows a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=4=2=5. Weak Relay looks best, since 4 controls won't be enough without some fillers. 3 ♠ shows less than a Super-Positive. That makes 3NT likely best.

69.	♠ AKQ962 ♥ K985 ♦ 63 ♣ A	♠ J1073 ♥ Q7 ♦ AQJ ♣ J972

WEST	EAST
1 ♣	2 ♦
2 ♥	2 ♠
2NT	3 ♥
3 ♠	3NT
4 ♦	4 ♥
4 ♠	Pass

2 ♦ shows balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♥ shows doubleton heart, so exactly 4=2=3=4. 3NT shows 0–2 controls. 4 ♠ looks best now.

70.	♠ K1074	♠ Q3
	♥ K632	♥ J84
	♦ K	♦ AJ984
	♣ AK74	♣ J92

WEST	EAST
1 ♣	2 ♣
2 ♦	2 ♠
2NT	3 ♦
3NT	Pass

2 ♣ shows diamonds. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 2=3=5=3. 3NT is clear, and since no Weak Relay East would need a Super-Duper Positive to override.

71.	♠ AQJ52	♠ 83
	♥ AK65	♥ Q7
	♦ J9	♦ AK83
	♣ J8	♣ K7542

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	3 ♣
3 ♦	3NT
Pass	

1NT shows clubs. 2 ♦ shows diamonds. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=2=4=5. 3NT shows 4 controls. Not enough.

72.	♠ KQ104	♠ AJ98732
	♥ A5	♥ K72
	♦ K10	♦ Q62
	♣ AQ765	♣ —

WEST	EAST
1 ♣	1 ♥
1 ♠	4 ♣
4 ♦	4 ♠
4NT	5 ♥
6 ♠	Pass

1 ♥ shows spades. 4 ♣ shows one-suiter, low-short, generic 7-3-3-0, so exactly 7=3=3=0. 4 ♠ shows 3 controls. 5 ♥ is {“Yes” in spades, “Yes” in hearts, “No” in spades [no queen]}. That gives East a barebones hand of:

♠ Axxxxxx ♥ Kxx ♦ xxx ♣ —

Slam is at worst on a diamond finesse, and with plenty of other chances it is clear to bid 6 ♠.

73.	♠ QJ98	♠ A62
	♥ K108	♥ AJ
	♦ A76	♦ K8
	♣ AK3	♣ Q109864

WEST	EAST
1 ♣	1NT
2 ♣	3 ♣
3 ♦	4 ♦
4 ♥	4 ♠
4NT	5 ♠
5NT	6 ♣
6NT	Pass

1NT shows clubs. 3 ♣ shows one-suiter, either 7-2-2-2 or 6-3-2-2 with high tripleton. 4 ♦ shows 6-3-2-2 so exactly 3=2=2=6 with 5 controls. 4 ♠ is {“No” in clubs}. West is probably going to have to take his chances in at least 6 ♣ (although 5NT is a possible bailout), so he might as well continue with DCB. 5 ♠ is {“Yes” in spades, “Yes” in hearts, “Yes” in clubs [queen], “No” in spades {[no queen]}}. East’s barebones hand is:

♠ Axx ♥ Ax ♦ Kx ♣ Qxxxxx

6NT is fine and both red queens get to 13 tricks, so West might as well continue. 6 ♣ is {“No” in hearts [no queen]}. 6NT it is, with 6 club tricks and 2 tricks in every other suit.

74.	♠ A10 ♥ A10 ♦ Q10652 ♣ AQ104	♠ KQ42 ♥ 64 ♦ AKJ9 ♣ 983

WEST 1 ♣ 3 ♠ 4 ♥ 5 ♣ 6 ♦	EAST 3 ♥ 4 ♦ 4NT 5 ♥ Pass

3♥ shows balanced 12–14, two suits same shape, doubleton heart, so exactly 4=2=4=3. We will be playing in diamonds, so a Control Ask can't hurt. 4♦ shows 4 controls. If West tries DCB, the Death Response for playing in 5♦ is 5♣, which would be {"Yes" in spades, "Yes" in diamonds, "No" in clubs} for a barebones hand of:

♠ Kxxx ♥ Kx ♦ Axxx ♣ xxx

along with a bit more to get up to 12 HCP. West would not want to be in 5NT opposite that. Still, 6♦ would have some play, and there are hands where 6♦ is quite good, so it looks worth the risk. 4NT is {"Yes" in spades, "No" in diamonds}. East's barebones hand is:

♠ Kxxx ♥ xx ♦ AKxx ♣ xxx

If East has the queen of spades slam is pretty good, and if not East's response will be 5♦ which West can pass, so continuing is okay. 5♥ is {"Yes" in spades [queen], "No" in diamonds [no queen]}, making 6♦ a good proposition.

75.	♠ AK1062	♠ 854
	♥ 42	♥ A8
	♦ Q7	♦ AJ1065
	♣ AKQ6	♣ 542

WEST	EAST
1 ♣	2 ♣
2 ♦	2NT
3 ♣	3 ♦
3 ♠	3NT
4 ♦	4 ♥
4 ♠	Pass

2 ♣ shows diamonds. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=2=5=3. Weak Relay looks right, since slam is possible with 4 controls but needs some fillers. 3NT shows less than a Super-Positive.

76.	♠ A8	♠ KQ6
	♥ AK7432	♥ J
	♦ K6	♦ Q1072
	♣ QJ2	♣ A9843

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	3 ♦
3 ♥	3NT
Pass	

1NT shows clubs. 2 ♦ shows diamonds. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=1=4=5. 3NT shows 3 controls. Not enough for slam, and with the clubs source of tricks 3NT is probably the best game.

77.	♠ AK92	♠ Q
	♥ 987	♥ AJ10
	♦ K8	♦ A1075
	♣ KQJ6	♣ 109852

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	2NT
3 ♣	3 ♦
3 ♠	3NT
Pass	

1NT shows clubs. 2 ♦ shows diamonds. 2NT shows high-short. 3 ♦ shows generic 5-4-3-1, so exactly 1=3=4=5. Weak Relay looks right, since we don't want to be any higher than 3NT opposite 2 bare aces. 3NT shows less than a Super-Positive.

78.	♠ A83	♠ K105
	♥ AK73	♥ 4
	♦ KQ10	♦ AJ73
	♣ J108	♣ K9743

WEST	EAST
1 ♣	1NT
2 ♣	2 ♦
2 ♥	3 ♦
3 ♠	3NT
Pass	

1NT shows clubs. 2 ♦ shows diamonds. 3 ♦ shows low-short, generic 5-4-3-1, so exactly 3=1=4=5. Slam is possible opposite 4 controls, but East would definitely need some fillers. This looks like a good hand for the Weak Relay. East does have 4 controls, but not enough strength for a Super-Positive. With the opponents having only 8 hearts, 3NT is probably safer than 5 ♣ on balance.

79.	♠ AJ3	♠ KQ10987
	♥ QJ9	♥ A865
	♦ A6	♦ K73
	♣ AJ753	♣ —

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	3 ♠
4 ♣	4 ♠
4NT	5 ♠
6 ♠	Pass

1 ♥ shows spades. 1NT shows hearts. 3 ♠ shows low-short, generic 6-4-3-0, so exactly $6=4=3=0$. Since we will be playing in spades there is no Death Response worry, so using the Control Ask is free. 4 ♠ shows 4 controls. The 5-level should be safe, so onward with DCB. 5 ♠ is {"Yes" in spades, "Yes" in hearts, "Yes" in spades [queen], "No" in hearts {"No" queen}}. East's barebones hand is:

♠ KQxxxx ♥ Axxx ♦ Kxx ♣ —

6 ♠ is clearly right.

80.	♠ J85	♠ KQ73
	♥ A953	♥ J4
	♦ AQ	♦ 7543
	♣ AQ106	♣ KJ2

WEST	EAST
1 ♣	2 ♦
2 ♥	3 ♥
3NT	Pass

2♦ shows balanced 9–11 or 15+. 3♥ shows two suits same shape, doubleton heart, so exactly 4=2=4=3. 3NT is trivial.

81.	♠ AQ3	♠ K108
	♥ J76	♥ Q954
	♦ KQ75	♦ A1063
	♣ AJ9	♣ K2

WEST	EAST
1 ♣	2 ♠
2NT	3NT
Pass	

2♠ shows balanced 12–14, two suits same color or 4-3-3-3 with a 4-card major. 3NT shows a doubleton club, so exactly 3=4=4=2. 3NT is clear.

82.

♠ KQ42
♥ AQJ84
♦ KJ7
♣ Q

♠ AJ1065
♥ —
♦ A984
♣ AJ103

WEST

1 ♣
2 ♣
2 ♠
4 ♠
5 ♥
6 ♠

EAST

1NT
2 ♥
4 ♥
5 ♦
5 ♠
Pass

1NT shows clubs. 2♥ shows three-suiter, short major. 4♥ shows low-short, generic 5-4-4-0, so exactly 5=0=4=4 with 6 controls. 5♦ is {“Yes” in spades, “Yes” in diamonds, “No” in spades [no queen]}. We’ll be bidding at least 6♠, so we can continue all the way. 5♠ is {“No” in diamonds [no queen]}. East’s barebones hand is:

♠ Axxxx ♥ — ♦ Axxx ♣ Axxx

6♠ looks best.

83.	♠ 43	♠ AQ86
	♥ AK1092	♥ Q4
	♦ K95	♦ A762
	♣ AK7	♣ J98

WEST	EAST
1 ♣	3 ♥
3NT	Pass

3 ♥ shows balanced 12–14, two suits same shape, doubleton heart, so exactly 4=2=4=3. 3NT is clear.

84.	♠ AK102	♠ 843
	♥ J8762	♥ K10
	♦ AQ	♦ K63
	♣ K10	♣ AQ742

WEST	EAST
1 ♣	1NT
2 ♣	2NT
3 ♣	3 ♦
3NT	Pass

1NT shows clubs. 2NT shows one-suiter, middle-short. 3 ♦ shows generic 5-3-3-2, so exactly 3=2=3=5. 3NT is clearly the best game, and West needs more than a Super-Positive for slam. East isn't close to the Super-Duper Positive needed to override.

85.	♠ K63 ♥ K65 ♦ KQ1073 ♣ AK	♠ A1095 ♥ A832 ♦ J2 ♣ 976

WEST 1 ♣ 2 ♥ 3 ♣ 3NT	EAST 2 ♦ 2NT 3 ♦ Pass

2 ♦ shows balanced 9–11 or 15+. 2NT shows two suits same rank. 3 ♦ shows doubleton diamond, so exactly 4=4=2=3. 3NT is obvious.

86.	♠ A4 ♥ AK63 ♦ A7 ♣ AJ532	♠ QJ87 ♥ QJ ♦ Q1096 ♣ K86

WEST 1 ♣ 2 ♥ 3NT	EAST 2 ♦ 3 ♥ Pass

2 ♦ shows balanced 9–11 or 15+. 3 ♥ shows two suits same shape, doubleton heart, so exactly 4=2=4=3. 3NT is right opposite that.

87.	♠ A32 ♥ AJ43 ♦ AK ♣ 9763	♠ QJ94 ♥ Q86 ♦ 7532 ♣ KQ

WEST 1 ♣ 2 ♥ Pass	EAST 2 ♦ 3NT

2♦ shows balanced 9–11 or 15+. 3NT shows 9–11, two suits same shape, doubleton club, so exactly 4=4=3=2. 3NT is obvious.

88.	♠ K1087 ♥ AK ♦ AKJ9 ♣ 752	♠ A932 ♥ Q9763 ♦ 8 ♣ AQ10

WEST 1 ♣ 1 ♠ 2 ♣ 2 ♠ 3 ♣ 3 ♠ 4 ♦ 4 ♠	EAST 1 ♥ 1NT 2 ♥ 2NT 3 ♦ 3NT 4 ♥ Pass

1♥ shows spades. 1NT shows hearts. 2♥ shows a Reverser. 2NT shows high short. 3♦ shows generic 5-4-3-1, so exactly 4=5=1=3. Slam needs fillers opposite 4 controls, so Weak Relay is best. 3NT shows less than a Super-Positive. East is a jack away. 4♠ is probably better than 3NT.

89.

♠ AKJ4
♥ Q104
♦ Q
♣ AJ963

♠ Q86
♥ AK8
♦ AK7
♣ Q1042

WEST

1 ♣

2 ♥

3 ♦

4 ♦

5 ♦

6NT

EAST

2 ♦

3 ♣

3 ♥

5 ♣

5 ♥

Pass

2♦ shows balanced 9–11 or 15+. 3♣ shows 4-3-3-3 with a 4-card minor. 3♥ shows 4 clubs, so exactly 3=3=3=4. West bid 4♦, planning on signing off in 5♣. But East overruled the sign-off; 5♣ shows 15+ HCP, 6 controls. West can play 6♣ at least, so DCB is fine. 5♥ is {“No” in clubs}. East’s barebones hand is:

♠ xxx ♥ AKx ♦ AKx ♣ xxxxx

4 club winners mean 12 tricks in notrump, so no need to play in clubs.

90.	♠ A ♥ 6532 ♦ AK106 ♣ AKJ10	♠ KJ105 ♥ AJ7 ♦ 94 ♣ Q642

WEST 1 ♣ 2 ♥ 2NT 3NT	EAST 2 ♦ 2 ♠ 3 ♦ Pass

2♦ shows balanced 9–11 or 15+. 2♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3♦ shows doubleton diamond, so exactly 4=3=2=4. Perfect cards would be needed to make 6♣. With the opponents having only 8 spades, 3NT is probably better than 5♣ on balance.

91.	♠ 74 ♥ KQJ ♦ AQJ102 ♣ QJ5	♠ AK9853 ♥ A964 ♦ 6 ♣ 73

WEST 1 ♣ 1 ♠ 2 ♣ 3 ♣ 3 ♠ 4 ♠	EAST 1 ♥ 1NT 2NT 3 ♥ 4 ♥ Pass

1♥ shows spades. 1NT shows hearts. 2NT shows high-short. 3♥ shows generic 6-4-2-1, so exactly 6=4=1=2. There is no Death Response, since we will be playing in teller's 6-card spade suit, so a Control Ask is free. 4♥ shows 5 controls. Not enough.

92.	♠ QJ ♥ AK72 ♦ 3 ♣ AQJ952	♠ AK10876 ♥ 10 ♦ QJ8 ♣ K86

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♥
3 ♠	4 ♦
4 ♥	4 ♠
4NT	5 ♣
6 ♣	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♥ shows generic 6-3-3-1 so exactly 6=1=3=3. 4 ♦ shows 4 controls. The 5-level should be safe, so West can continue with DCB. 4 ♠ is {“No” in spades}. It is conceivable that East has AK of diamonds and the king of clubs, but the odds greatly favor his holding AK of spades, in which case slam will be at worst on a club finesse. 5 ♣ is {“No” in diamonds}. East’s barebones hand presumably is:

♠ AKxxxx ♥ x ♦ xxx ♣ Kxx

But it could be:

♠ xxxxxx ♥ x ♦ AKx ♣ Kxx

West chooses to play in 6 ♣, since that at least has a chance of making if we’re off the AK of spades.

93.	♠ A86	♠ KJ954
	♥ KQJ	♥ A10983
	♦ K96	♦ 32
	♣ A743	♣ Q

WEST	EAST
1 ♣	1 ♥
1 ♠	1NT
2 ♣	2 ♠
2NT	3 ♥
3 ♠	4 ♣
4 ♦	4NT
5 ♥	Pass

1 ♥ shows spades. 1NT shows hearts. 2 ♠ shows a long two-suiter. 3 ♥ shows low-short, generic 5-5-2-1, so exactly 5=5=2=1. 4 ♣ shows 3 controls. Slam will be from decent to great opposite the queen of spades, and since we can play in either major West doesn't have to worry about a Death Response, so DCB is okay. 4NT is {"Yes" in spades, "Yes" in hearts, "No" in spades [no queen]}. East's barebones hand is:

♠ Kxxxx ♥ Axxxx ♦ xx ♣ x

West chooses to play in 5 ♥ because he has the heart intermediates.

94.

♠ K64
♥ KJ85
♦ Q8
♣ AK73

♠ A975
♥ Q2
♦ J64
♣ QJ85

WEST

1 ♣

2 ♥

2NT

3NT

EAST

2 ♦

2 ♠

3 ♥

Pass

2 ♦ shows balanced 9–11 or 15+. 2 ♠ shows two suits same color or 4-3-3-3 with a 4-card major. 3 ♥ shows doubleton heart, so exactly 4=2=3=4. 3NT is probably best.

95.	♠ KQJ	♠ A9764
	♥ A109	♥ 87
	♦ J6	♦ K52
	♣ KQ752	♣ A84

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♦
3 ♥	4 ♦
4 ♥	5 ♦
6 ♠	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 5=2=3=3. 4 ♦ shows 5 controls. Slam may depend upon which controls, so it is worth continuing with DCB. 5 ♦ is {"Yes" in spades, "Yes" in diamonds, "Yes" in clubs, "No" in spades [no queen]}. East's barebones hand is:

♠ Axxxx ♥ xx ♦ Kxx ♣ Axx

West has the jack of spades, so 6 ♠ looks best.

96.

♠ AKQ65

♥ 73

♦ A

♣ QJ862

♠ 84

♥ AQ652

♦ KJ98

♣ 109

WEST

1 ♣

1NT

2 ♥

3 ♠

Pass

EAST

1 ♠

2 ♦

3 ♣

3NT

1 ♠ shows hearts. 2 ♦ shows diamonds, not a Reverser. 3 ♣ shows presumably generic 5-4-2-2, so exactly 2=5=4=2. Even 5 controls is not enough to make slam good opposite that shape, but if East has more than that slam is still possible. The Very Weak Relay hits the spot.

97.	♠ 106	♠ KQ983
	♥ K43	♥ AJ
	♦ KQJ42	♦ A107
	♣ AK8	♣ 1097

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♦
3NT	4 ♦
4 ♥	5 ♣
5 ♦	5 ♠
6 ♦	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 5=2=3=3. 3NT looks right. 4 ♦ shows 5 controls. That is 2 aces and the king of spades, so 6 ♦ will be okay and West can probe for 6NT. 5 ♣ is {“Yes” in spades, “Yes” in diamonds, “No” in clubs}. 5 ♠ is {“Yes” in spades [queen], “No” in diamonds [no queen]}. East’s barebones hand is:

♠ KQxxx ♥ Ax ♦ Axx ♣ xxx

It is not safe to continue with DCB since the Death Response for playing in 6 ♦ is 6 ♣, which would be {“No” in clubs [no queen]}, and that is not what West wants to hear for playing 6NT. Thus, West must settle for 6 ♦.

98.

♠ AQ97

♥ A102

♦ 63

♣ AK52

♠ KJ5

♥ KQ983

♦ A108

♣ J3

WEST

1 ♣

1NT

3 ♠

4 ♦

6 ♥

EAST

1 ♠

3 ♦

4 ♣

5 ♦

Pass

1 ♠ shows hearts. 3 ♦ shows one-suiter, low-short, generic 5-3-3-2, so exactly 3=5=3=2. Weak Relay looks best on this control-rich hand, as you need 4 controls and fillers would help. 4 ♣ shows 4 controls, 13+ HCP. Now DCB is okay, provided West can handle the Death Response of 5 ♦ which would be {"Yes" in hearts, "Yes" in spades, "Yes" in diamonds, "Yes" in hearts [queen], "No" in spades [no queen]} for a barebones hand of:

♠ Kxx ♥ KQxxx ♦ Axx ♣ xx

West is happy to play in 6 ♥ opposite that. And that is what East shows.

99.	♠ AKQ85 ♥ AK108 ♦ 762 ♣ 2	♠ 1093 ♥ Q43 ♦ 5 ♣ AQJ953

WEST	EAST
1 ♣	1NT
2 ♣	3 ♥
3 ♠	3NT
4 ♦	4 ♥
4 ♠	Pass

1NT shows clubs. 3 ♥ shows one-suiter, low-short, generic 6-3-3-1, so exactly 3=3=1=6. 3NT shows 0–2 controls. Even if East has the ace of clubs and the queen of hearts there is plenty of work to be done, so it looks best to settle for game.

100.	♠ A ♥ KQ1075 ♦ AJ6 ♣ K543	♠ KQ742 ♥ A3 ♦ 1052 ♣ A72

WEST	EAST
1 ♣	1 ♥
1 ♠	2 ♠
2NT	3 ♦
3NT	4 ♦
4NT	Pass

1 ♥ shows spades. 2 ♠ shows one-suiter, high-short or 6-3-2-2 with high doubleton. 3 ♦ shows generic 5-3-3-2, so exactly 5=2=3=3. 3NT looks like the clear choice. 4 ♦ shows 5 controls. With no 8-card fit West can't really go beyond 4NT. Hopefully if East has enough power he will take another move.

OTHER RELAYS

Once the relay concept is mastered, there is potential to extend it to sequences other than a strong 1♣ opener and a positive response. Whether or not one chooses to do so depends upon the individual partnership. In this chapter, we will discuss several possibilities for other relay sequences.

It might appear that playing relay complicates partnership agreements, but in fact the converse is true. Once you are in a relay auction where the Control Ask is made, you need no agreements other than the agreements which exist with the normal 1♣–positive relay. Confusion about what cuebids do or do not show, follow-ups to RKC, and all other issues with slam bidding no longer exist. Everything is completely defined with the Control Ask and DCB rules.

There are three important factors that should be taken into account when deciding whether or not to employ a relay structure. They are:

1. **Practicality.** Not all hands and sequences are made for relay. Sometimes natural bidding works better. The big gains for relay are on slam auctions, where pinpointing partner's exact hand can be vital. Relay works well for choice-of-games decisions, but natural auctions can work fine also. If there might not be a game relay is not good, since if stopping short of game is a possibility there won't be enough room for everything. For this reason, relay auctions should apply only when in a game force. Also, if the opponents are in the bidding relay may be less effective than natural auctions.
2. **Efficiency.** As has been seen, space is the number one enemy of relay. It doesn't help if you find out what the best contract is when you are already beyond that contract. For this reason, relay sequences are most effective when a game force can be established at a low level.

3. **Memory.** We are not computers. It is important for the coding of any relay structure to be as simple and consistent as possible to ease memory constraints and reduce the possibility of an accident.

We will discuss two relay structures in detail. These will give the reader an idea about how to construct a relay structure. After that, we will outline other sequences that lend themselves to relay. Interested partnerships can use these outlines to develop structures to suit their taste.

Relay After 2 Club Opener (Two To Go)

Assume your 2♣ opener shows 6+ clubs, 10–15 HCP. You may have a 4-card major, but with a 5-card major you will always open the major. This is a common agreement for pairs playing a strong 1♣ opener.

The 2♣ opener is tailor-made for relay, since so much is known about opener's hand to begin with. The structure is as follows:

2♦ is a game-forcing relay. Opener rebids as follows:

If opener does not have a second suit, he bids 2♠ or higher. His bids have exactly the same meaning as with a one-suiter after a 1♣ opener and a 1NT response showing clubs. The same HMEL structure, and 3♦ is the same pivot point. This makes the structure very easy to learn, since you already know most of it. The only difference is that since opener can't be 5-3-3-2, all the final shape-showing calls that don't go through 3♣ are dropped one step. For example, after:

WEST	EAST
—	2♣
2♦	?

- **3♦:** Low-short, generic 6-3-3-1, so exactly 3=3=1=6
- **3♥:** Low-short, generic 7-2-3-1, so exactly 2=3=1=7
- **3♠:** Low-short, generic 7-3-2-1, so exactly 3=2=1=7
- **3NT:** Low-short, generic 7-3-3-0, so exactly 3=3=0=7

Hands with a second suit start with 2♥. After the 2♠ relay, the second suit is shown via high, middle, equal, low structure. Thus:

WEST	EAST
—	2♣
2♦	2♥
2♠	?

- **2NT:** Spades
- **3♣:** Hearts
- **3♦:** “Equal”
- **3♥ and higher:** Diamonds

After the second suit is known, shortness is shown via high, equal, low. Thus:

- **3♥:** High-short
- **3♠:** Equal-short
- **3NT and higher:** Low-short

The equal-short can be only 7-4-1-1, since opener can’t have 5-4-2-2. Also, since he can’t have 5-4-3-1, the final expansion starts with 6-4-2-1. Thus:

- **3NT:** 6-4-2-1
- **4♣:** 6-4-3-0
- **4♦:** 7-4-2-0

For example, consider the auction:

WEST	EAST
—	2♣
2♦	2♥
2♠	3♣
3♦	3♥
3♠	4♣

2♥ shows a second suit. 3♣ shows middle-suit, hearts. 3♥ shows high-short. 4♣ shows generic 6-4-3-0, so exactly 0=4=3=6.

The “equal” step is used to show hands with 6 clubs and 5 diamonds. The slow route to equal (2♥, then 2NT, then 3♦) shows exactly 1=1=5=6. The fast route to equal (2♥, then 3♦) shows generic 6-5-2-0, with the final expansion to 3♥ relay showing the order of the 2–0 numerically. Thus, after:

WEST	EAST
—	2♣
2♦	2♥
2♠	3♦
3♥	?

3♠ shows exactly 0=2=5=6, and 3NT shows exactly 2=0=5=6.

♠ ♥ ♦ ♣

♠ ♥ ♦ ♣

Other responses to 2♣ are less than game-forcing as follows:

- 2M: Natural, constructive but NF, 5+ major
- 2NT: Natural invite
- 3♣: Courtesy raise
- 3♦, 3♥, 3♠: Natural invite

Over 2NT or 3♣, if opener is accepting he bids shortness if he has any. Natural bidding after that. It is possible to back into a 4–4 major-suit fit.

Relay After 1 of a Major Opening (Grammy)

Grammy stands for Game-Forcing Relay after Major.

For most pairs, a 2♣ response to 1 of a major opening isn't particularly descriptive. It is game-forcing, but might not even be a real club suit. Thus, it makes sense for 2♣ to be a game-forcing relay if that can be done conveniently. The relay is starting higher than after a strong 1♣ opening. On the other hand, more is known about opener's hand. His range starts at a minimum opening bid (and also has an upper range if playing a strong 1♣ system), as opposed to a range of 9 HCP to very strong. His primary suit is known from the opening bid. Also, since his major is a 5-card suit we don't have to worry about the concept of a Reverser.

It turns out to be more efficient to focus first on hand type. The initial rebids are as follows:

- **2♦**: Short two-suiter or three-suiter
- **2♥**: Long two-suiter
- **2♠ and higher**: one-suiter

It is noted that after 1♣—positive, one-suiters are shown with bids of 2♠ and higher. Thus, the structure is exactly the same after 1 major–2♣ as it is after 1♣—positive for one-suiters. This makes things much easier, both for efficiency and for memory.

After 2♦ showing a short two-suiter or three-suiter, the next focus is on opener's second suit. The concept is high, middle, equal, low. Thus, after responder's 2♥ relay:

- **2♠**: High second suit (other major) or "equal"
- **2NT**: Middle second suit (diamonds)
- **3♣**: "Equal"
- **3♦ and higher**: Low second suit (clubs)

The routes through "equal" are used for three-suiters and 7-4-1-1 hands. An immediate 3♣ rebid over 2♥ shows some 7-4-1-1. The "slow" route—2♠ then 3♣—shows some three-suiter. Since opener's major

is known, in both cases there are only three possible distributions. Responder relays with 3♦, and the exact shape is shown numerically. For example:

WEST	EAST
—	1♥
2♣	2♦
2♥	3♣
3♦	3♠

2♦ shows a short two-suiter or three-suiter. 3♣ shows some 7-4-1-1. 3♠ shows 1-4-1 for the other suits, so exactly 1=7=4=1. 3♥ would have shown 1=7=1=4, and 3NT would have shown 4=7=1=1.

WEST	EAST
—	1♥
2♣	2♦
2♥	2♠
2NT	3♣
3♦	3♠

2♦ shows a short two-suiter or three-suiter. 2♠ shows other major or some three-suiter. 3♣ shows some three-suiter. 3♠ shows 4-0-4 in the other suits, so exactly 4=5=0=4. 3♥ would have shown 0=5=4=4, and 3NT would have shown 4=5=4=0.

♠ ♥ ♦ ♣ ♠ ♥ ♦ ♣

For sequences not going through 3♣, shortness is shown next via HELL coding. Thus:

- **3♦:** High-short
- **3♥:** Equal short (so generic 5-4-2-2)
- **3♠ and higher:** Low short

It is noted that these are exactly two steps higher than with the 1♣-positive structure. Thus, the pivot point is 3♠:

- **3♠**: Generic 5-4-3-1
- **3NT**: Generic 6-4-2-1
- **4♣**: Generic 6-4-3-0
- **4♦**: Generic 7-4-2-0

Once again, these are two steps higher than after 1♣—positive. This leaves a little less room for further exploration since the Control Ask will be at least 4♣, but since a lot is known about opener’s hand to begin with it works out okay. For example:

WEST	EAST
—	1♠
2♣	2♦
2♥	2NT
3♣	3♦
3♥	3NT

2♦ shows short two-suiter or three-suiter. 2NT shows middle suit (diamonds). 3♦ shows high-short. 3NT shows generic 6-4-2-1, so exactly 6=1=4=2.



After the 2♥ rebid showing a long two-suiter, opener again shows his second suit in response to the 2♠ relay as follows:

- **2NT**: High second suit (other major) or “equal”
- **3♣**: Middle second suit (diamonds)
- **3♦**: “Equal”
- **3♥ and higher**: Low second suit (clubs)

The equal is used for 6-5-1-1 major-minor two-suiters with a 6-card minor. 2NT then 3♦ shows a club suit; an immediate 3♦ shows a diamond suit. For example:

WEST	EAST
—	1♥
2♣	2♥
2♠	2NT
3♣	3♦

2♥ shows long two-suiter. 2NT shows high second suit or 6-5-1-1 with clubs. 3♦ shows 6-5-1-1 with clubs, so exactly 1=5=1=6.

Otherwise, opener shows his shortness, starting with 3♥, using HELL coding. Thus:

- **3♥**: High-short
- **3♠**: Equal-short
- **3NT and higher**: Low-short

The equal-short will be 6-5-1-1 hands. The 6-card suit will always be the suit that was opened.

After 3♥ showing high-short, responder can relay with 3♠ and get opener's exact shape with the same coding as with the long-two-suiter after 1♣—positive, only two steps higher. Thus:

- **3NT**: Generic 5-5-2-1
- **4♣**: Generic 5-5-3-0
- **4♦**: Generic 5-6-2-0
- **4♥**: Generic 6-5-2-0

For example:

WEST	EAST
—	1♠
2♣	2♥
2♠	3♣
3♦	3♥
3♠	3NT

2♥ shows some long two-suiter. 3♣ shows middle second suit (diamonds). 3♥ shows high-short. 3NT shows generic 5-5-2-1, so exactly 5=1=5=2.

If opener has low-short, he immediately shows his exact shape starting at 3NT, using the same coding. Thus, for the long two-suiter 3NT is the pivot point.

When opener has a long two-suiter with both majors, there are some distributions that are impossible due to the opening bid. For example, if the opening bid is 1♥ opener can't be 5-5 or 6-5 (6 spades) in the majors, so if he shows the other major high-short his only possible distribution would be 5=6=0=2. The impossible distributions are skipped when showing the exact shape with the final expansion.

Several of these sequences go past 3NT, but that probably won't matter. When responder finds opener's suits responder usually won't care about the shortness if responder wants to play 3NT. Thus, if responder continues to relay for the exact shape he will either be slamming or will be planning on playing someplace other than 3NT if opener is distributional.



After opener has shown his shape, normal Control Ask, signoff, and DCB principles apply. There is one exception. Four of any major where opening has shown 5 cards is not available for DCB. It is a signoff. The reason is that responder may have a fit for opener's major and need some number of controls for slam, but cannot afford a Death Response that would force the contract to 5 of the major. Also, since opener is limited (assuming a strong 1♣ system), there are no overrides, since responder has a lid on opener's hand. Responder's signoffs are final.



If playing this 2♣ game-forcing relay, there are two possible approaches for other responses. One is to keep everything the same, such as 2♦ natural game-force with 5+ diamonds and Jacoby 2NT. This has the advantage of simplicity, as well as giving responder the option of choosing whether to relay or take a natural approach. The other concept is to make 2♣ the only game-forcing call, with all other calls less than a game force. Some transfers might be included here. This approach will usually be more accurate on partscore hands and game vs. partscore decisions.



Here are some examples of Grammy in action.

♠ QJ96432

♥ A4

♦ A10

♣ A8

♠ K

♥ KJ632

♦ 8643

♣ KQ4

WEST

—

2♣¹

2♥

3♣

3♥

4♠⁶

6♠

EAST

1♥

2♦²

2NT³

3♦⁴

3♠⁵

5♣⁷

Pass

1. Grammy: Game-Forcing Relay after One Major
2. Some short two-suiter or three-suiter
3. Middle suit (diamonds)
4. High-short (spades)
5. Generic 5-4-3-1, so exactly 1=5=4=3
6. Natural slam try. Control Ask is obviously worthless. This will put big focus on a stiff spade honor
7. Accept, 1 keycard

In their pre-relay days Kit and Bart Bramley missed this one, as did their opponents, after a bungled natural auction. We tried it again with Grammy and sailed into 6♠.

The stiff king of spades is obviously worth its weight in uranium. The rest of the hand is fine also, as Asker clearly has the aces. What started as a pile of junk has evolved into a mountain.

♠ KJ	♠ Q1098632
♥ A8632	♥ K10
♦ AK3	♦ J42
♣ 1075	♣ A

WEST	EAST
—	1 ♠
2 ♣ ¹	3 ♠ ²
4 ♣	4 ♥ ³
4NT	5 ♣ ⁴
6 ♠	

1. Grammy
2. 7-2-3-1 low-short, so 7=2=3=1
3. 3 controls
4. “No” in spades

Players using standard methods have struggled with this deal, taken from Karen’s coaching files, but Kit and Sally Woolsey had no difficulty getting to the 25-point spade slam using Grammy.

5 ♣ clarifies East’s hand as ♠ ?xxxxxx ♥ Kx ♦ ?xx ♣ A with no ace of spades. He’ll have at least one side queen to get up to an opening bid, probably two, and he’s a big favorite to hold the spade queen. So West knows that slam is good and may be cold.

♠ AQ9652	♠ K83
♥ 108	♥ AKQ432
♦ AQ	♦ 106
♣ A83	♣ Q10

This deal is from the 2007 Bermuda Bowl Semi-Final, Netherlands vs Norway. Huub Bertens and Ton Bakkeren bid:

WEST	EAST	
—	1 ♥	
1 ♠	2 ♥	
3 ♠	4 ♣	(Dbl)
Rdbl	4 ♥	
4NT	5 ♥	
6 ♠		

At the other table, Boye Brogeland and Erik Saelensminde bid:

WEST	EAST
—	1NT
2 ♥	2 ♠
3 ♠	4 ♥
4NT	5 ♠
6 ♠	

In a recent BBO replay, Karen and Axel Johannsson got to the grand with Grammy:

WEST	EAST
—	1 ♥
2 ♣	3 ♣
3 ♦	3NT
4 ♣	4 ♥
4 ♠	4NT
5 ♣	5 ♠
5NT	6 ♣
6 ♦	6 ♠
7 ♠	

3♣ is one-suiter, equal-short (3-6-2-2 or 2-7-2-2). 3NT is 3=6=2=2, 3+ controls. 4♥ is 4 controls (must be an ace and two kings). 4NT is {"No" in hearts} (must be the AK). 5♠ is {"Yes" in spades, "Yes" in hearts [queen], "No" in spades [no queen]}. At this point East knows he will bid a grand, but he has room to look for the major-suit jacks. 6♣ is {"No" in diamonds [no queen]}. 6♠ is {"Yes" in clubs [queen] and "No" in hearts [no jack]}. West can count 14 tricks with normal breaks, and can perhaps handle a bad heart split—and maybe even a bad spade split if East produces the spade jack (or 10), which is why West chose to play in spades.

♠ 8	♠ AKJ65
♥ K72	♥ 9
♦ KQ863	♦ AJ74
♣ KQJ10	♣ 952

WEST	EAST
—	1♠
2♣	2♦
2♥	2NT
3♣	3♦
3♥	3♠
4♣	4NT
5♦	Pass

2♦ is some short two-suiter. 2N shows diamonds (middle step). 3♦ is high-short (hearts). 3♠ is 5=1=4=3. 4NT shows 5 controls, and responder knows there is no slam—she needed to find 6! Perhaps a little optimistic, but since Karen had decided on diamonds when she learned the shape, why not look for the perfecto ♠ Axxxx ♥ x ♦ Axxx ♣ Axx when there is plenty of room to do so.

Karen and Axel played this hand in a 2020 BBO match. At the other table the slam auction was a bit too revealing. 5NT was defeated by 4 tricks(!) on a club lead and a heart switch.

Relay After Semi-Positive

A semi-positive response to a strong 1♣ is a hand with about 6–8 HCP—a little under a positive response. A weaker hand is called a double negative. After a negative response of 1♦ (0–8), some pairs play that a 1♥ call by opener is either natural or any very strong hand (about 19+ HCP, game values opposite a semi-positive). Opposite this, one can play relay. If responder has a double negative he bids 1♠, but if he has a semi-positive he starts to show his shape.

The structure is very simple. Responder's bids are exactly two steps higher than they would be for the normal 1♣–positive relay structure. This relay structure is known as the Semi-Positive Track, or SPT:

- **1NT:** Spades
- **2♣:** Hearts
- **2♦:** Clubs
- **2♥:** Diamonds
- **2♠ and higher:** Balanced

The balanced hand type structure is exactly the same as an immediate response to 1♣, only the point count is 6–8 instead of 12–14.

For the unbalanced hands, everything is two steps higher. This leaves less room for the follow-up Control Ask and DCB, but this is somewhat compensated for by the fact that responder's hand has such a tight point range.

If opener has a natural 1♥ call, he doesn't relay at his third call but makes a natural bid and there is no relay. Also, this means that opener's calls other than 1♥ are in the 16–18 range.



Here's are some examples. This deal was first played in the 2011 Bermuda Bowl final, Netherlands vs. USA2. Brink/Drijver bid to 6♠, while Woolridge/Hurd got to 6♥.

OTHER RELAYS

♠ AQ732	♠ K65
♥ AK54	♥ QJ92
♦ AKQ6	♦ 985
♣ —	♣ J82

Brink and Drijver bid:

WEST	EAST
2 ♣	2 ♦
2 ♠	2NT
3 ♣	3 ♠
6 ♠	

Woolridge and Hurd were impeded by competition and had a tough time of it. 42 pairs in the Transnationals played in 6♥ or 6♠. None reached a grand. Perhaps it's just too tough to bid.

Karen and Kit played it on BBO, and we'd like to think that partner would obligingly produce the spade ten or diamond jack, justifying our optimistic KK auction to 7♥:

WEST	EAST
1 ♣	1 ♦
1 ♥	2 ♠ ¹
2NT	3 ♣ ²
3 ♦	3 ♥ ³
3 ♠	3NT ⁴
4 ♣	4 ♥ ⁵
4 ♠	5 ♦ ⁶
5 ♥	5 ♠ ⁷
5NT	6 ♣ ⁸
6 ♦	6 ♠ ⁹
7 ♥	Pass

1. 6–8 balanced, 4-3-3-3 with a 4-card major, or 2 suits same color
2. 4-3-3-3 with a 4-card major
3. 3=4=3=3
4. 0 or 1 control
5. 1 control, no ♥A or ♥K
6. ♠K, ♥Q, no ♠Q
7. No ♦Q
8. No ♣Q
9. ♥J, no ♠J

Teller's barebones hand is ♠ Kxx ♥ QJxx ♦ xxx ♣ xxx—enough to justify a semi-positive response. He has no other queen, but may hold the diamond jack—there is not room to find it, so we guess. If Teller hadn't had the jack of hearts he would have bid 6♥, not 6♠, and we would have passed.

In fact, on the existing deal, 7♥ cannot be made without help from the defense. Spades are 4–1. Hearts are 3–2, but diamonds are 4–2. Had East's jack been in diamonds instead of clubs the grand would have been a make. KK Relay isn't quite good enough for that fine distinction this time.

On BBO, Karen and Axel Johannsson bid these hands to an easy 6♣:

♠ K10	♠ A763
♥ K4	♥ Q1065
♦ AK6	♦ 93
♣ AKQJ75	♣ 863

WEST	EAST
1 ♣	1 ♦ ¹
1 ♥	2NT ²
3 ♣	3 ♦ ³
3 ♥	4 ♣ ⁴
4 ♦	4 ♠ ⁵
5 ♣	5 ♦ ⁶
5 ♥	5 ♠ ⁷
6 ♣	Pass

1. 0-8
2. 6-8 balanced hand, 2 suits same rank
3. 4=4=2=3
4. 2 controls
5. 1 yes, A or K in spades, no ♠Q
6. 1 yes, ♥Q, no ♣Q
7. No ♦Q

Note that Teller goes straight to Queensland after showing the ♠A, since that's his only control card. Asker can commit to slam at this point,

since even if Teller doesn't have a queen slam will be at worst on the heart finesse. There is still room over 5♣ to look for the diamond queen, which would allow them to play in a safer 6NT.

The KK Relay auction is simple and accurate, with virtually no chance of landing in the wrong slam.

The deal originates from the 2011 Bermuda Bowl Final, USA2 vs the Netherlands, where Brink/Drijver made short work of it after a strong 2♣ opening and a natural auction to 6♣. Nevertheless, slam was missed by the world-class American pair at the other table, who rested in 3NT.

Relay After Double Negative

The relay concept can be used after the start of:

WEST	EAST
1♣	1♦
1♥	1♠

Where 1♥ is either natural or some 19+ hand and 1♠ is a double negative. If opener has game-forcing values, he can bid 2♣, artificial game force. If responder has a balanced hand, he bids 2♦, and the follow-up is exactly the same as if responder had bid 2♦ in response to the 1♣ opener. Otherwise, responder shows his shape in the same way he does with a positive response, only a full level higher. This is known as the Double-Negative Track, or DNT.

- **2♥**: Spades
- **2♠**: Hearts
- **2NT**: Clubs
- **3♣**: Diamonds

The follow-ups for the one-suiters and two-suiters are all the same as with 1♣-positive. There won't be room for responder to show his full shape, but at least he will get his suits in, which is usually all that opener needs.

Relay After Interference

When the opponent doesn't pass over the 1♣ opening bid, it may still be possible to employ relay. If second seat doubles or bids 1♦, it is easy. All bids starting with 1♥ are available to responder, and bids mean exactly the same as if second seat had passed.

It is higher overcalls that present a problem. If the overcall is 1♥ one can slide everything up one step, which isn't terrible. Over a 1♠ overcall it would be necessary to slide everything up two steps. Using double as one of the steps is possible, but that removes other important uses for the double. There are good arguments for simply reverting to natural bidding. Fourth seat may be raising, which would gobble up the room needed for relay to function. Also, focus on a stopper in the overcalled suit becomes an important issue. For these reasons, it may be best to forget about relay if the overcall is higher than 1♦.

Relay After Weak Notrump

Pairs who play a 10–12 notrump often use a 2-way Stayman structure rather than transfers. Instead of 2♦ being game-forcing Stayman, it makes sense for 2♦ to be a game-forcing relay, with opener showing his exact shape.

The question is whether or not this can be done without going above the 3NT safety level. If we re-visit the Fibonacci series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, and so on, we see that opener can convey 34 pieces of information without going past 3NT. Let's consider the shapes opener might have for his 1NT opening:

- 4-3-3-3: 4 distributions
- 4-4-3-2: 12 distributions
- 5-3-3-2: 12 distributions
- 5-4-2-2, 5-card minor: 6 distributions

This comes to exactly 34 possible distributions. Somebody up there is telling us something. The problem is how to match the sequences with the distributions in a way that can be easily learned and memorized.

The most practical way appears to be to retain the CR4SH structure used for balanced hands in the 1♣–positive structure. This takes care of the 4-3-3-3 and 4-4-3-2 shapes, and they will all start with 2♠ or higher. Sequences starting with 2♥ can be used for most of the 5-3-3-2 shapes, and the 5-4-2-2 shapes have to be squeezed into what is left over. Note that since every sequence is used, opener’s final shape-showing call will always be 3♥, 3♠, or 3NT, since if he has bid 3♦ or lower responder has another relay available.

In theory, such a relay structure could be used for any range notrump opening. However, for a strong notrump normal Stayman and transfers tend to work better. The reason is that opener usually has most of the partnership strength, so he is better placed to choose the best strain.

Relay After 1NT Rebid

After the start of:

WEST	EAST
1♦	1M
1NT	?

Many pairs play 2-way checkback: 2♣ is a relay to 2♦, either to play or to start an invitational sequence, and 2♦ is game-forcing checkback. Given that, it makes sense for 2♦ to be a game-forcing relay instead of merely checkback, where opener can show his exact shape.

Since opener won’t have a hand with 4-card support for responder’s major, his possible distributions are significantly fewer than for an opening 1NT, so there is plenty of leeway when constructing the coding. The goal is to have a simple structure where the final shape-showing call is as low as possible, allowing responder to start his slam exploration cheaply. One idea is for 2♥ to be bid with all shapes that have 3-card support for responder’s major. The exact shape can then be unwound via a CR4SH approach. Higher calls can handle all hands with a doubleton in responder’s major, with the initial call showing the generic shape. For example, 2♠ with generic 4-4-3-2, 2NT with generic 5-3-3-2, and 3♣ and higher with generic 5-4-2-2. The final call can then show the exact shape.

Relay After Opener's 2♦ Rebid

After the bidding starts:

WEST	EAST
1♦	1M
2♦	?

most pairs play that bidding 2 of the other major is an artificial game force. Given that, it makes sense for this call to be a game-forcing relay, allowing opener to show his exact shape.

It makes a difference which major responder has bid. If the response is 1♠, opener might have 4 hearts. However, if the response is 1♥ opener cannot have 4 spades, since he would have rebid 1♠ rather than 2♦. As it happens, when the response is 1♠ the game-forcing relay is 2♥, leaving a 2♠ call available for opener. It is logical for 2♠ to show 4 hearts. After responder's 2NT relay, opener can show his exact shape the same way shape is shown with a short two-suiter.

Otherwise, opener must have a one-suiter. This is described starting with 2NT or higher, using the same structure that is used with 1♣—positive, only 1 step higher. Since opener won't be rebidding 2♦ with 5-3-3-2 shape the final expansion after showing shortness will start with 6-3-3-1. Since we are one step higher the Pivot Point will be 3♥, so the final expansion of a one-suiter with unique shortness will coincide with 1♣—positive one-suiter final expansion.

Relay After Opener's 2♣ Rebid

After the start:

WEST	EAST
1 ♦	1M
2 ♣	?

Similar to after a 2♦ rebid, 2 of the other major can be a game-forcing relay. If the response was 1♠ opener might have 4 hearts. Over responder's 2♥ relay, opener bids 2♠ with 4 hearts. His next call defines his exact shape.

Opener bids 2NT with a long two-suiter. His next call shows his shortness via HEL, and then his final call shows his exact distribution following long two-suiter expansion coding.

Otherwise opener bids 3♣ or higher to show a short two-suiter. HEL on shortness, and finally short two-suiter expansion. The coding takes into account that opener's clubs might be longer.

Relay After 1 ♦ Opening

Auctions that start:

WEST	EAST
1 ♦	2 ♣
?	

are usually awkward sequences. There is a lot to be said for making 2 ♣ an artificial game-forcing relay and having opener show his exact distribution. There are so many possible distributions the 1 ♦ bidder might have that it is impossible to show all distributions below the 3NT safety level. However, a reasonable relay structure can be made.

First of all, if responder has a 4-card major he should always respond in 1 of the major rather than bid 2 ♣. There are relays available for all of opener's rebids, so responder will still be able to find opener's exact shape. Since responder will never have a 4-card major for the 2 ♣ call, an 8-card major-suit fit cannot exist. That makes responder's decisions easier.

After the 2 ♣ relay, opener's calls are as follows:

- **2 ♦**: This is bid on all 4-4-3-2 and 4-3-3-3 hands. The exact shape is shown in the same way that balanced hands are handled after 1 ♣-2 ♦. There are a few leftover sequences which aren't used in the 1 ♣-positive structure. These sequences are used here.
- **2 ♠ and higher**: Diamond one-suiter. The structure is exactly the same as with one-suiters after 1 ♣-positive. This makes life easier.
- **2 ♥**: All other hands, which will be two-suiters. There are so many possible distributions that they can't all be shown below 3NT, but most of the time responder will know enough to stop relaying and sign off in 3NT if that is the desired contract.

ABOUT THE AUTHORS

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Karen lives in Exeter, New Hampshire, in a 225-year-old farmhouse that holds her library of over 30,000 books. She also designs hand-crafted glass jewelry under the name Eclectica.

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