Answers to Chances: Competition 4
by Richard Cowan

North
♠97
♥AQ73
♦J1062
♣J108

West leads the ♠J against South’s 2NT contract, bid via the 15-18 1NT-Stayman sequence: 1NT-2C ↔ 2D-2NT. East wins with the ♠K and leads the ♠2, whereupon West’s A captures the Q. West plays off the ♠10 and ♠8 (the suit splitting 4-4 as was predictable from East’s 2). Declarer discards in the knowledge of this even spade break. Using standard leads, West exits with the ♥2. What is the best line of play for declarer, both with regard to the discards chosen and the continuation? State the chance of success of your chosen line, given the play so far?

SOLUTION:
Inferences about West’s shape from the early play are discussed in the Appendix. We conclude that he was dealt either 1, 3 or 4 hearts and does not have a minor suit of 5+ cards (except perhaps a club holding such as ♣9xxxx).

Three lines are considered in detail.

Line A (try for 4 ♦ tricks):
Discard the ♥3 and ♦2 from dummy and the ♦4 from hand. Win the heart with South’s K, cross to the ♥A.

If West follows to the second heart:
Note that West has 3-4 hearts. Run the ♦J.
• If the ♦J is covered¹, win and play low to the 10².

* If both follow, cash the ♥Q pitching the ♦7. Then cross to the ♦A and hopefully a fourth club trick.
* Should East show out marking West for ♠9xxxx initially (and therefore either 4-3-1-5 or 4-4-0-5), play the ♥Q, discarding the ♦7. Low to the ♦9 next, covering any honour from East. This wins if West has 4-3-1-5 with a ♦ honour (♠ endplay) or any 4-4-0-5 (♦ endplay).³
• If East plays low and the J holds, play ♥Q pitching the ♦7, then run the ♦10.
* If the 10 is covered⁴, win and play the Q, hoping that either the suit breaks 3-3 or the 9 has fallen.
* If the 10 holds, claim.
• If the J loses to West’s K, concede.

If the play above has yielded 3 club tricks without loss, but either East started with K9xx or West with 9xxx, we have the ending:

North: ♦ K - ♥ - ♦ - ♣ -
South: ♦ - ♥ - ♦9 - ♣7

Play the ♦A, hoping that the hand with the master club also has a singleton diamond honour and the 13th heart. If so, the other hand has only diamonds and can be thrown in and endplayed.

If West shows out on the second heart: We reason (see Appendix) that West must have either a 4-1-4-4 shape or a 4-1-3-5 shape with ♣9xxxx.

marks East with K bare or K9 double”, and therefore considering “low to dummy’s 8” on the second round. He will not cover with K9xx(x). ¹ This explains why East would certainly not cover with K9xxx on the first round. If he covered, his 9 is now finessable and the ♦A is still available as an entry to South’s last club. ² The discard of the ♦7 under the ♥Q is inferior as it only works in the 4-4-0-5 case. ³ Given dummy’s lack of entries, East will certainly cover on the second round with K9xx(x) or Kx (x<9) originally -- and would be indifferent with Kxx.
West knows that South started with either 3-2-4-4 or 3-2-3-5, with 10-11 HCP in the minors. Furthermore, the ♦ discards show at least AQ or AK in clubs and a focus by declarer on clubs.

Therefore, from 4-1-4-4 West will pitch a ♦. From 4-1-3-5 with ♣9xxxx, he will usually discard a ♣ but may pitch a ♦ from ♦xxx.

If a ♦ is pitched, the odds strongly favour the 4-1-4-4 case (4-1-3-5 being at remote odds of more than 100 to 1 at this stage). Run the ♦J. An East with K9 will cover, but in this situation, so will an East with Kx. If not, his K will fall to the 8 and A on the next round. So, if the J is covered, the odds now favour a finesse of West for the 9. (In effect, an East with Kx realises that he is doomed whatever he does, so he covers to induce a losing finesse next time when he might hold K9.)

If a ♣ is pitched, play the ♣8 which should capture the bare ♣K and give the contract. (Chance = 34.39%.)

**Line B: (test ♦ before trying for ♣ tricks)**

Discard on tricks 3-4 as in Line A. Win the heart exit with the K. Play the ♦A, testing for a singleton K or Q or KQ bare.

- If an honour falls, play to the ♦J forcing the other honour and establishing a second ♦ trick. Now declarer needs only 3 club tricks via an onside ♦K (suit-split and the location of the ♦9 being irrelevant).
- If West shows out, marking him for 4-4-0-5 with the ♦9xxxx, concede (as lack of an entry prevents the cashing of the 4 obvious club tricks).
- If both follow low, success hinges only on the club suit. Play as in Line A to achieve 4 club tricks.

(Chance = 36.42%.)

**Line C: (double finesse of ♦ by running the J first)**

For this line, declarer pitches the ♥9 and ♦8 from dummy and the ♦3 from hand. Trick 5 is won by the ♥K and dummy is entered via the ♥A.

Run the ♥J. If it is covered, win and play the ♥9.

- Should East have started with KQ8x, declarer fails. He can't get back to dummy. Note: with that holding the J will always be covered, as it would with KQ8xx.
- If East has KQ8xx, declarer can prevail, because this marks East with the singleton ♦K.
- Otherwise, the defence cannot prevent declarer taking three ♦ tricks and the ♥Q -- before trying one club finesse (which must succeed for the contract).

Should an East with both diamond honours (including the case with KQxx, x<8) play a waiting game and let the ♥J hold, cash the heart (pitching a ♦) and run the ♥J immediately, making 3 club tricks if the ♥K is onside.

If West takes the ♥J, he will exit with a heart if he has one (as this forces South to make an early discard and thereby restrict his options). Declarer discards the ♦7 on the ♥Q and plays the ♦2 toward the ♦9 (but covering an honour from East).

- If East started with K8xx or Q8xx, declarer fails.
- Otherwise if the 9 holds, declarer makes 3 diamond tricks and can enter dummy to take the club finesse.

If West has just one heart, he cannot exit with a heart, but the conditions for making the contract remain unchanged --
K and the other ♦ honour with East (the fatal K8xx or Q8xx with East being impossible if West has only one heart).
(Chance = 36.02%.)

Note: Line C, when the cards lie favourably, yields 3H, 3D and 2C tricks (or 3H-2D-3C in one rare situation). An equivalent line, attempting 3 diamond tricks in exactly the same way as Line C and failing under exactly the same combinations, was put forward by one entrant. He made only 2 heart tricks, using this suit for two entries to dummy, but made 3 in each minor whenever Line C players were succeeding.

**Line C1: (double finesse of ♦ by playing low to 9 first)**

The first 6 tricks follow Line C. Now diamonds are tackled by playing low to the 9, covering an honour from East.
- If the 9 loses to West, the conditions for success are the same as in Line C.
- If East plays an honour (as he would only do with a singleton or KQ bare), cover and lead the ♦9. Declarer can score 3 ♦ tricks and force the entry to dummy for a club finesse.

If the 9 holds, with West showing out, South can drop East’s singleton ♣K and come home. If the 9 holds and both follow, declarer has one chance left:
- Cash the ♦A, hoping that East was dealt ♦KQx and the ♣K.
As an alternative, he might try for 3 club tricks by playing low to the ♦J. This cannot succeed if East has the ♣K, for he leads the ♦K and South’s entry is knocked out. If West has the ♣K, a diamond exit has the same effect, but if he has none (and therefore has the 4-4-1-4 shape), he defeats the contract by ducking the first club. So success via 3 club tricks is not an option.

Clearly Line C1 is inferior to Line C as it loses to the ♦8-♦KQxx combination that C deals with successfully. All else is the same. (Chance = 35.23%).

**Conclusion:** Line B is a narrow winner by 0.40%.

**APPENDIX:**

The defence’s knowledge:
Before the opening lead: At this stage, the defence knows that South has 15-16 HCP, with no 4-card major. Should this knowledge deter West from leading a minor suit of 5+ cards? In other words, does West’s choice of a spade lead (which worked well for the defence here, but had its own risks of giving declarer a trick he would not make otherwise) imply that both minors are <5 cards in length?

The following table shows the chances (from the perspective of a West with 4 spades and 5 diamonds) that South has the various shapes consistent with his bidding (given the class of shapes that North might have consistent with his). The same table is applicable if the 5-card minor is clubs (just reverse ♦ and ♣).

<table>
<thead>
<tr>
<th>Given West has</th>
<th>South might have with chance</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1-5-3</td>
<td>3-3-4-3 14.9%</td>
</tr>
<tr>
<td>3-3-3-4</td>
<td>23.4%</td>
</tr>
<tr>
<td>4-4 in minors</td>
<td>17.9%</td>
</tr>
<tr>
<td>5 diamonds</td>
<td>9.6%</td>
</tr>
<tr>
<td>5 clubs</td>
<td>33.2%</td>
</tr>
<tr>
<td>4-3-5-1</td>
<td>3-3-4-3 8.6%</td>
</tr>
<tr>
<td>3-3-3-4</td>
<td>20.2%</td>
</tr>
<tr>
<td>4-4 in minors</td>
<td>18.2%</td>
</tr>
<tr>
<td>5 diamonds</td>
<td>5.8%</td>
</tr>
<tr>
<td>5 clubs</td>
<td>47.1%</td>
</tr>
<tr>
<td>4-4-5-0</td>
<td>3-3-4-3 6.5%</td>
</tr>
<tr>
<td>3-3-3-4</td>
<td>17.8%</td>
</tr>
<tr>
<td>4-4 in minors</td>
<td>18.1%</td>
</tr>
<tr>
<td>5 diamonds</td>
<td>4.6%</td>
</tr>
<tr>
<td>5 clubs</td>
<td>54.8%</td>
</tr>
<tr>
<td>4-2-5-2</td>
<td>3-3-4-3 11.4%</td>
</tr>
<tr>
<td>3-3-3-4</td>
<td>22.5%</td>
</tr>
<tr>
<td>4-4 in minors</td>
<td>18.2%</td>
</tr>
<tr>
<td>5 diamonds</td>
<td>7.4%</td>
</tr>
<tr>
<td>5 clubs</td>
<td>40.5%</td>
</tr>
</tbody>
</table>

I believe the table shows that West would not be deterred from leading away from ♦KQxxx or ♣Kxxxx by South’s “no-4-card-major” statement (and even
less so from ♦K9xxxx). Often the suit will belong to the defence.

After trick 4: In all lines of play, declarer pitches a heart from dummy. This shows that South has only two hearts (and not the KJ bare). With 3, he would have tried for the 3-3 break and hence 4 heart tricks.

The defence can also make deductions from the card discarded from South’s hand. If South pitches a diamond, he has 4 or 5 clubs (because with a 3-2-5-3 shape, he would certainly retain his 5th diamond and attack that suit). Likewise if he pitches a club, South has 4-5 diamonds.

**Declarer’s inference from the opening lead:**

So, South might reasonably infer from West’s spade lead that he does not have a decent minor suit of 5+ cards. He might have the weak ♦9xxxx holding.

From the ♥2 continuation, he can infer that West has either 1, 3 or 4 hearts.

- If 3, it excludes J102, 1092 or xx2 — leaving Jx2 or 10x2.
- If 4, it excludes J1092, J1082, 10982, or xxx2 — leaving Jx2, 109x2, 10xx2 or J10x2.

The probabilities of the various hands that West might hold take into account the constraints mentioned above.

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5 This holding is excluded too if declarer has pitched a heart, revealing only 2 hearts in South’s hand.