

Hand Evaluation using Zar Points

Provided by Neil H. Timm

Zar Points (ZP) is a statistically derived method for evaluating bridge hands developed by Zar Petkov. The Zar formula provides a simple method that allows one to quickly evaluate bridge hands.

A very simple formula that incorporates **hand strength** and **distribution** follows.

$$\text{Zar Points} = \text{HCP} + \text{Control Points} + (\text{Longest} - \text{Shortest Suit}) + (\text{Two Longest Suits})$$

Where HCP are 4=A, 3=K, 2=Q and 1=J and Control Points are A=2 and K=1.

A bridge hand is opened if the number of $\text{ZP}/2 = 12.5$ rounded to 13 or more.

While the terms in the formula are not independent, the method is very simple.

It is very similar to the method proposed by the Four Aces in the 1930's where HCP are defined as 3=A, 2=K, 1=Q, $\frac{1}{2}$ =J; and you then add the length of your longest suit, to half the difference in length of the second and fourth longest suits; --- where again 12.5 rounded to 13 or more is an opening bid.

However, unlike Bergen's Adjust 3-method it does not distinguish between good and bad hands.

To compare the method with Bergen's Adjust-3 method, we will use the hands in the Hand Evaluation article in Timm's Bridge Bits on the Ocala site:
www.bridgewebs.com/ocala.

Hand 1	Hand 2	Hand 3	Hand 4	Hand 5
♠AKQ105	♠AK10	♠A67	♠A104	♠K78
♥10982	♥KJ3	♥KQ54	♥10543	♥AQ9852
♦6	♦J1052	♦Q7	♦KJ67	♦A109
♣J67	♣567	♦J68	♣K10	♣A

Hand Evaluation with Zar Points

Hand 1:	HCP	10
	Controls	3
	Longest - Shortest	5-1=4
	Two Longest	9
	Zar points	25/2=12.5 rounded to (13)

Hand 2:	HCP	12
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Controls	4
Longest - Shortest	4-3=1
Two Longest	7
Zar points	24/2=12

Hand 3:	HCP	12
	Control	3
	Longest - Shortest	4-3=1
	Two Longest	6
	Zar points	21/2=10.5 rounded to 11

Hand 4:	HCP	11
	Controls	4
	Longest - Shortest	4-2=2
	Two Longest	7
	Zar points	24/2=12

Hand 5:	HCP	17
	Controls	7
	Longest - Shortest	6-1=5
	Two Longest	9
	Zar points	38/2=19

Counting only HCP, one would have opened hands 2, 3, and 5; using Bergen's Adjust-3 method, hands 1 and 5 are opened. However, using Zar Points; hands 3 and 5 would be opened. While there is not agreement between the two, observe that both require **TWO QUICK TRICKS**.

RULE: Open a bridge hand one of a suit with at least 12 Adjust-3 Bergen points or 12.5 (rounded to 13) Zar points and two quick tricks (in the first or second seat--- there are exceptions in the third and fourth seats).

Dummy Points

When partner opens one of a **major** and you have three-card support, you have found a fit in the major, playing the 2/1 Game Force System. If you win the major suit contract, you will become dummy and partner will play the hand. When you have a short-suit or two, you must reevaluate your hand.

The dummy hand reevaluation process is used when partner opens a major; it does not apply to minor suit or notrump openings. Conversely, if opener opens a minor and partner (responder) bids a major, opener must reevaluate his starting points with a major suit fit. Thus, the reevaluation process may be done by responder when opener opens a major and a fit is found or by opener when opening a minor and partner bids a major (with 4+ cards) and opener has a four-card major, a fit has also been found; **the "dummy" reevaluation process may be employed by opener or responder.**

Recall that the short-suit Dummy Points are evaluated as follows with Bergen's Adjust-3 method:

Doubleton 1 point for each doubleton
Singleton 2 points each, **but 3 each with 4+trump**
Void equal to the value of the number of trumps in hand

Revaluation with shortness with Zar points requires 4+trump support (NOT 3) – a 9 card Fit:

Singleton 1 point each for each trump over 3
Void 2 points each for each trump over 3

Dummy Points = Zar Points + Revaluation Zar Points

For a major suit game you need 12.5+12.5 Dummy Zar Points = 25 Total Zar Points

Rounding each to 13, observe that the requirement is the familiar number 26!

Let's look at a few examples, when your partner opens 1♠ and you hold the following hands.

Hand A: ♠ AJ62 ♥ 6542 ♦ void ♣ AK987

12HCP+5 Control +L-S=5+L=9=31 Zar + Dummy=2 or 33/2=16.5 rounded to 17 Zar Dummy points

Hand B: ♠ AQ67 ♥ 678 ♦ AK10432 ♣ void

13HCP + 5 Control +L-S=6 +L=10= 34 Zar + Dummy=2 or 36/2 = 18 Zar Dummy points

Hand C: ♠ KQJ32 ♥ 1098 ♦ 7 ♣ J987

7HCP+ 1 Control+ L-S= 4+ L=10=22 Zar +Dummy=2=24/2=12 Zar Dummy points

Hand D: ♠ 9876 ♥ AK ♦ 75 ♣ AQ1084

13HCP+ 5 Control +L-S=3+L=9=30 Zar + Dummy=0 =30/2=15 Zar Dummy points

Hand E: ♠ 10986 ♥ K ♦ 753 ♣ Q9432

5HCP+ 1 Control+ L-S=4+L=9=19 Zar + Dummy=1=20/2=10 Zar Dummy points

Hand F: ♠ 102 ♥ J64 ♦ KQJ ♣ KQ1098

12 HCP+ 2 Control+ L-S=3+L=8=25 Zar + Dummy=0=25/2=12.5 or 13 Zar Dummy Points

In review the corresponding Bergen Dummy Points were:

Hand A = 13 starter points + 4 shortness points = 17 Dummy Points (Zar =17)

Hand B = 16 starter points + 4 shortness points = 20 Dummy Points (Zar =18)

Hand C = 09 starter points + 3 shortness points = 12 Dummy Points (Zar =12)

Hand D = 15 starter points + 1 shortness points = 16 Dummy Points (Zar =15)

Hand E = 05 starter points + 4 shortness points = 8 Dummy Points (Zar =10)

Hand F = 14 starter points + 1 shortness points = 15 Dummy Points (Zar =13)

When considering both hands, there is close agreement between the two methods; however, in most cases Bergen's method is more liberal; perhaps an over evaluation. The Zar method appears to be more conservative!

For a minor suit game or a Flat NT hand you need $57/2=28.5$ or 29 Total Zar Points

However, with a 5-4 or 4-4 minors suit fit the NT requirements are again 26 rounded Zar points.

Small slams require between 31 and 34 rounded Zar points, depending on the fit. While a grand slam needs 34 to 36 rounded Zar points.

I have provided an overview of the Zar Point Hand Evaluation method; Mr. Petkov has made several adjustments to the basic formula. A more extensive overview is available on the Wikipedia.org web site.

For a comprehensive analysis one may consult the paper by Mr. Petkov: *Petkov, Zar (2003). Zar Points – Aggressive Bidding Hand Evaluation. pp. 38.* The paper is available on the web if you visit: www.bridgeguys.com/pdf/ZarPoints.pdf

As you will see, the Zar approach looks at strength and Fit! Forgets shortness! That is to say one adds points for "Honors" and extra trumps. What does that mean?

1) Location of your honors in partner's suits - add a point for each honor (10 including) to a maximum of 2.

2) Location of your honors in opponents' suits – subtract/add a point for the honors in the suits bid by the opponents depending on location of the opponent (chances are you don't have many of these, so no limit there): an AQ or Kx behind (offside) the bidder can be upgraded while QJx – downgraded respectively. The same AQ or Kx should be downgraded if you are in front of (onside) the bidding opponent.

3) Location of your "depreciated" honors in short suits - add the honors bonus points for the partner's suits while further discount the honors in short suits bid by your opponents. Doubleton QJ in the opponents' suit can be dropped to zero while in the partners suit it gets to 4 points, since the 1-point discount for 'blank honors' stays due to the inflexibility it presents in playing the suit by

blocking the communications.

What about Fit?

We have to be able to “calculate” the fact that we have extra lengths in “our” suits and the numbers that fit the calculations are:

- 3 additional HC points for any trump over the promised length, i.e. 3 additional for 5 trumps, 6 for 6 trumps.

-3 additional HC point for any Invitational Second suit card over the length of 4 (secondary fit).

You know already that the calculations that led us to these point-assignments are based on the Over determined system of equations with “X_superfit” additional variable, so let’s only notice that these reevaluations are in line with the “**Law of Total Tricks**”.