

# bridge digest

CANADIAN BRIDGE FEDERATION

Vol. 4, No. 1

JUNE, 1974



# Editorial

## SYNOPSIS OF NEW C.B.F. PRESIDENT

This magazine will not be restricted to happenings in Canadian Bridge although this will be the prime concern. The title "Bridge Digest" suggests a wider view and this issue reflects that philosophy by reprinting articles which originally appeared in Australian Bridge and New Zealand Bridge, two first class magazines which appear bimonthly. Naturally, material from across the country is desirable so that the Canadian content (a popular phrase) can be increased, but worthwhile articles from around the world will give us a wider viewpoint.

Because of the recent mail strike, the only contribution received through the mail for this issue was the President's message. I urge all readers to allow me to put their words in print.

Jack Murphy is a thirty-four year veteran locomotive engineer with C.P. Rail. He operates "Robot" Trains west of Calgary via Banff, Lake Louise, spiral tunnels on the "Big Hill" in the Kicking-Horse Pass to Field, B.C.

Thirteen years ago bridge became a hobby with this affable Irishman who became a Life Master in 1966. He has been an executive member of the Calgary Unit #390 for twelve years and was recently appointed Canadian Co-Chairman ACBL Goodwill Committee.

Other interests include ex R.C.A.F., member of #2 Army, Navy Airforce Veterans, 4th Degree Knights of Columbus, member of Canadian Martyrs Church, member of Locomotive Engineers. A family man - five daughters and three sons, Jack's interest in bridge is ably supported by wife, Lil, who is also an avid bridge enthusiast.

### BRIDGE DIGEST

#### PART II OF THE CONTRACT BRIDGE BULLETIN

Editor, Bob Brooks

A Canadian Bridge Federation publication distributed free of charge to Canadian members of the ACBL.

Communications to Bridge Digest should be addressed to: Bob Brooks, 2708 Violet Street, North Vancouver, B.C., V7H 1H1.

CBF Zone directors and their addresses: President, Jack Murphy, 55 Cawder Drive, N.W. Calgary, Alta, T2L 0L8; Henry Smilie, 334-5740 Cambie St., Vancouver, B.C.; William Robinson, 45 Rollscourt Drive, Willowdale, Ont.; Karl Hicks, Box 6, Dominion, N.S.; Doug Cannell, 404 Hosmer Blvd., Tuxedo 25, Man.; Sam Maltin, 4607 Beaconsfield Avenue, Montreal, Que.; Treasurer, Aaron Goodman, 1437 Mackay St., Suite 8, Montreal, Que.; Executive Secretary, Doug Drew, Apt. 608, 10 Hogarth Ave., Toronto, Ont., M4K 1J9.

Canadian Bridge Federation: write Doug A. Drew.

# *Message from the President*

I am pleased to accept this new responsibility particularly in view of the fact that it is carrying on the rotation of the Presidents which started with Eric Murray, Toronto, Doug Cannell, Winnipeg, Dick Glube, Halifax, Bill Robinson, Toronto, and now it has come to Western Canada. The principal advantage of this rotation is for all of us to become familiar with the various aspects of management and bridge activities. The Presidency represents the focal point of the Canadian Bridge Federation and it is essential that people from different areas of Canada become directly involved. I have much to learn and I need and ask for your support; it will be a great experience for all of us. This new involvement of Western Canada will prove to be

beneficial to bridge in general.

I wish to encourage young people to become more active on Unit Committees and learn the art of organizing exciting tournaments. New ideas are constantly needed and from my experience I have seen new committee members do just that.

Working with the other Directors for the past three years has familiarized me with their capabilities and as a result I have great confidence in them. They do a lot of work for bridge throughout the year - much of which goes unrecognized by the rank and file player.

Especially I wish to thank Bill Robinson who has been our President for the past three years. His performance has been excellent and he has earned the highest respect of our Board of Directors.

---

## *Asking Bids 1*

The Theory and Logic of a  
Modernised Asking System

by M. Sapire, South Africa

Back in the 1930's, Ely Culbertson, one of the greatest thinkers and writers in the game, devised a new theory in order to improve the technique of slam bidding. In those days, slam bidding was much of a hit and miss affair, and in 1969 an American writer gave examples to show that in the U.S.A. today, it has not improved to any marked degree. It is not so long ago that the late Ewart Kempson remarked that if English internationals did not bid slams at all, they would win more matches, indicating an accuracy level below 50%. Had Culbertson's early attempt to introduce the asking principle met with more success, this level would today

be in the region of 75%.

The asking bid failed to take on, but recently there has been some renewed interest in this style of slam investigation. A new generation is seeking improvement, and such 'perfection' as is attainable at the table, and the constant criticism of the slam bidding of the veterans has made them seek new theories and conventions, and better techniques. It is the aim of this series of articles to place before them the asking principle, not as used in the 1930's, but the modern streamlined, inclusive exclusive styling, which it is hoped will open up the road to a bigger percentage of the available slams.

It must be borne in mind that there are hands where no useful purpose can be served by making an asking bid. A proportion of slams can be better bid without asking, by means of the 4 NT convention or by a straight jump to six. In tight cases, where an asking bid, same as a cue bid, might indicate to the defence the killing lead one must think twice before making it. The asking bid should not be made as a matter of habit because that is one's normal slam technique. It should be made only where the requisite strength seems to be present, and when the sequence and circumstances reveal the necessity to find a specific control, or in the case of a grand slam where precision is essential.

An asking bid is a bid in a new suit at the level of 4 or higher, made after a suit has been agreed as trumps by actual bid and support, or by inference. On occasion the asking bid can be made at the 3 level. The sequence 2C, 2D; 2S, 3S agrees spades as trumps, and a bid of 4C, 4D, or 4H by opener is now an asking bid. As the 2C and 2D bids are artificial, they are not bid suits, and bidding them at the 4 level implies mention as a new suit. Inference arises where there is an unnecessary jump in a suit, such as 1S, 2C, 2S, 4D. In any rational system a bid of 3D after 2S would be forcing, hence 4D is an asking bid with spades as trumps. The asking bid actually resembles an advance cue bid, with the obvious difference that the cue bid indicates a control whereas the asking bid inquires about controls.

Culbertson created 7 responses to the first asking bid. Later he created two more, but

these were not adopted. The initial 7 remain and they were devised in such a logical manner that it is difficult to confuse or forget them. Suppose spades is the agreed trump suit, and the first asking bid is 4C. The first two responses are the sign off bid 4S, which must be made if responder does not possess first or second round club control, which means Ace, void, king or singleton, or if he possesses second round control and no ace. The other 5 responses concern cases where responder has first or second round control in the asked suit.

If he has second round control and one outside ace or void, he bids this ace or void suit. If this ace is the trump ace, he jumps a level to distinguish from the sign-off. If he has Ace or void in the asked suit and no other ace, he raises the asked suit. There are three more responses, and the last two arise where responder has more than one ace. If he has the ace of the asked suit and one other ace, or second round control in the asked suit and two other aces, he responds 4 NT, while with the same holding and an extra ace (3 aces in all), he responds 5 NT. Those are the 7 responses and for a time players could keep them tabulated at the table in practice or friendly games and refer to the note until accustomed to them.

In regard to the 7 responses, time and experience has shown that no system can replace human judgment altogether, and in rare cases variation becomes necessary to avoid the loss of a slam which was likely to be on, but which might not be reached if one signed off.

A few examples of these exceptional situations might be helpful.

S. K x x x  
H. K Q x  
D. x x x x x  
C. x

This is West and assume East opens 2C, West 2 NT, East 3S, West 4S. East now makes an asking bid of 5C. West should sign off 5S as he has no Ace with which to show his second round control in clubs. But West can see that with the club control held and with his strength opposite a 2C opening, there must be a good play for a slam, hence he does not sign off but jumps to 6S. If East held S. AQJxx, H. Axx, D. AKQ, C. Qx, he would pass a 5S sign off and the laydown slam would be lost. No mature player allows himself to be straight-jacketed by a convention, even one so meticulous as the asking system.

S. K x x  
H. K x x x  
D. K x x x x  
C. x

Your partner opens 1S, you respond 2D, and your partner bids 4C. As 3C is forcing, the 4C

bid is clearly an asking bid with diamonds agreed as trumps. You should sign off 4D, but if your partner now bids 5D, you still have to go 6 as it is likely he has clubs open and expects to lose tricks there. In view of your three king holding it is heavy odds that partner has three aces to warrant his making the slam suggestion, hence over 4C jump to 6D. Partner will get the message that you have second round control in clubs, no ace to show it with, but almost certainly 3 kings to warrant this unusual jump. There is of course no response of 6D to a 4C asking bid ordinarily. Partner sitting with something like S. AQxxx, H. \_\_\_\_, D. AJxxx, C. Axx, is in good position to consider 7D.

Further articles in this series will deal with how to recognise an asking bid, who asks, when to ask, what suit first, the void suit, effect of opponent's overcalls, and the trump suit asking bids.

(This series is being republished with kind permission of the author and New Zealand Bridge. Ed.)

---

## *Manual Versus Machine Shuffling*

For Rubber Bridge, before the cards are dealt they must be shuffled thoroughly. The laws of duplicate bridge state simply that before play starts, each pack is shuffled. There is no mention of the word "thoroughly" however the following definition for "Shuffle" appears in the official Encyclopedia of Bridge: Shuffle. "Noun: the mixing together of the pack of cards prior to the next, or first deal. Several thorough mixings, or shuffles, are required as it is important that the deck be mixed completely from deal to deal. Verb: to mix the cards. This is generally a two-handed operation,

with each hand holding roughly half the deck between the thumb and fore and middle fingers. The halves are then blended together with a riffle effect."

It is true that machine (computer) deals are not normal but this is only because the shuffle is imperfect. If duplicate players would learn to shuffle the deck thoroughly, as they should, they would find many of the sedate hands would disappear. If any club decides to try, just once, to ensure that all packs are thoroughly shuffled I would be interested in the results.

# Convention Corner

Conventions which appear here are not necessarily approved by the ACBL and players wishing to adopt them must ensure that they are authorised for the event concerned.

## Irregular Redouble

This useful convention was taught to me on a visit to Calgary several years ago.

It is used on a weak hand to escape into a suit after a double of partners opening weak no trump.

Redouble - for the minors or weak with diamonds  
2 Clubs - Natural, sign off  
2 Diamonds - for the majors  
2 Hearts/Spades - Natural, sign off

PASS - This can be to play or it can force a redouble by opener promising at least (say) 9 points. In either case this pass must be alerted since responder could hold from 0-11 points in the first case or 9 points and up in the second case.

This convention is very useful for players who prefer the weak no trump but I have made some modifications to allow descriptions of other hands by responder. The revised schedule is as follows:

Redouble - forces 2 clubs and promises an undisclosed long suit  
2 Clubs - shows clubs and diamonds  
2 Diamonds - shows diamonds and hearts  
2 Hearts - shows hearts and spades  
2 Spades - shows spades and clubs  
Pass - sign off (0-11 points).

# Reflection

Ron McConnell  
(Richmond, B.C.)

We are the players, not very good

Read lots of books, more than we should

Play lots of systems game to game

Forget and blow them even their names.

We flock to the tournaments all over the place

Trying to catch up in the master point race.

We're the first to enter the tournament door  
the first to slink from the playing floor

One club, three hearts, or seven spade  
who gives a damn, it'll never be made.

The LM asks us "What is that jump?"

The answer "Who knows, my partner's a chump".

We end up in seven diamonds having a fit

Since we happen to be playing in a three-two fit

We don't win a point not even a fraction

My partner, I'm sure, should end up in traction

But we're not giving up this crazy game

The next tournament we'll be there playing the same

So! when you look up, please say "Hello"

Don't forget- WE MAKE IT GO.

# Vancouver Spring Nationals

There were 8329 tables at this tournament which was the first Spring Nationals to be held in Canada. The only other ACBL Nationals held in Canada since they began in 1927 were Summer Nationals (Toronto in 1964 -- Montreal in 1967).

The Victoria team of Fraser McCoy, Denise McColl, Margaret and Jack McAvoy, Birdie and James Duprau nobly withdrew from the Vanderbilt to simplify the operation when they learned that 65 teams had entered. They decided instead to play in the WSNC Swiss Team event and just happened to draw team number 65 out of the total entry of 232 teams.

Mrs. DUCK drew the bottle

of Fuddle DUCK wine.

Mrs. Hatholy, a new life master, flummoxed the director and the rest of the table in a side game when her partner said "it's your deal partner" and she immediately passed holding S. AK1076 H. 75 D. AK5 C. Q53 (16 HCP) without removing her hand from the board. It was not intentional but the director ruled the pass would stand and the new life master bid and made 3NT, missing a 9 card spade fit, after preemptive bidding by the enemy. Four spades went down at every other table but one.

This tournament was the largest North American championship ever held in the Pacific North West.



**THEY CAME FROM FAR AND WIDE  
TO DISCOVER WHAT . . . . .**

# *. . . . HAPPINESS IS*







# Edna Lougheed Memorial Trophy

by Helen Roche, Calgary

Calgary Sectionals and Regionals - synonymous with success! Prejudiced? Yes! But not foolishly so, for we have a strong backup for this firm rather immodest opinion. That backup? The many fine, thoughtful, considerate players who belong to our unit and who bring to our tournaments the human warmth of sincere friendliness. This type of competitor was exemplified to the nth degree by the late Mrs. Edna Lougheed - a dignified, gracious little lady. Our unit is extremely proud that in her memory we have a Masters' trophy presented to us by the Lougheed family.

Edna's life was a busy one. The Lougheed's, an outstanding pioneer family of this Province have expansive social business and political activities (Edna's son, The Honorable Peter Lougheed, is presently the Premier of Alberta) but, despite her necessarily hectic life, she gave as much time as possible to the game she loved. However it was not until her family were well "on their own" that Edna became a devotee of duplicate. Then, to the surprise of none of us, she became Life Master bent. Determined to do it her way with the able assistance of two of her favourite partners, Mrs. Maude Goodall and Mr. Mort Van Ostrand, she quickly became one of our local competitors and it was not long before she achieved her goal. It is with some wry amusement that this writer often reflects on a moment when, with only a few red points to go, I suggested she could quickly "go over" with a session or two with a professional. Her explosive retort is

now a priceless memory.

It was a real tribute to our petite, spunky colleague, that shortly after her death in 1972, many unit members made overtures to the effect that we should have some way of perpetuating her memory in our Calgary bridge world. On our behalf, Mort Van Ostrand conveyed this feeling to the Lougheed family and as a result the Edna Lougheed memorial cup came into existence. At any Sectional tournament in Calgary, this cup is awarded to the winners of the Masters Pairs and up to now the following names have been inscribed: Lee Barton - Barry Pritchard (Edmonton); Jack Murphy - Veryl Norquay (Calgary); Mike Chomyn - Veryl Norquay (Edm-Calg); C. Liegerot - N. Sutherland (Calg. - Edm).

Our Calgary tournaments are enriched by the extra competition generated by this very handsome trophy and to those of us who hope to win it in the future, may we do so in the true Edna Lougheed manner - with skill, competence, and dignity.

---

## Federal Sales Tax Exemption

Most unit newsletters would qualify for exemption from tax as a newspaper under Section 3 of Part III of Schedule III of the Excise Tax Act. Applications should be made to the Regional Customs and Excise Office, Department of National Revenue.

This office may also allow refunds for tax paid on some earlier issues from your printer who would then take an equivalent tax deduction from his current tax return. Rhoda Warke, Edmonton Unit, made this excellent suggestion several years ago.

## FINANCIAL REPORT 1973

Aaron Goodman

It is my pleasure once more, as treasurer, to submit my report covering financial operations of the Canadian Bridge Federation for the year ending December 31st 1973.

As in previous years I have prepared and attach hereto statements as follows:

1. A Financial Statement which list RECEIPTS and DISBURSEMENTS during the year both on Membership account and on Olympiad Fund account (maintained separately) showing in each case the year end cash position.
2. A complete list of payments, contributions etc. made during 1973 by Units of the C.B.F. and by associated Clubs, as well as other earnings, listed separately for Membership and for Olympiad Fund a/c.

For analysis and to better assess performance comparative figures are shown for 1971 and 1972.

In my report covering 1972 operations I expressed the opinion that we had reached near maximum attainable performance, having collected that year on Membership account, \$9444.35, with some additional payments expected to follow. 1973 returns seem to bear me out. Including \$1077.00 paid in 1973 towards 1972 assessment, the 1972 total comes to \$10,521.35. On 1973 Membership account we have collected so far, \$10,149.20. On the face of it the 1973 take lags a bit behind that of 1972, but if one or two Units which have so far omitted to pay 1973 assessment will do so, the figures for the two years will closely match. Nevertheless, in my estimation, it will be difficult in this and subsequent years to improve on the current and

last year's performance, so our aim should be, indeed we should strive, to maintain support for the C.B.F. at this level, and budget ourselves accordingly. Our current surplus now leaves some room for flexibility in operation.

Exercising care in management, and economy in operation, we were able to add a fair sum to the surplus already in hand. Against aggregate receipts of \$11,989.45, disbursements totalled \$7,854.83 (made up largely of \$2,400.00 paid to our Executive Secretary \$2,722.69, the cost of publishing two C.B.F. Digests (Bulletin Inserts), and \$2,410.00, expenses of Directors attending the one Membership and Directors' meeting held during the year) leaving an excess of \$4,134.62. This added to \$7,418.25 with which we started the year left us with a cash balance at year end of \$11,552.87 and all bills paid.

Our Olympiad Fund in 1973 received substantially more support than ever before. We grossed in 1973, \$8,583.23 as against \$4,664.94 in 1972 and \$4,303.20 in 1971. The fund was greatly aided by 25 Units or Clubs which provided 321 Tables to participate in Games held in conjunction with the A.C.B.L. Summer Nationals, realizing thereby approximately \$2,500.00, and by 43 Units or Clubs which provided 453 Tables to participate in the first held C.B.F. National Olympiad Fund Game, realizing approximately \$3,700.00. Details of Units and Clubs taking part, and amounts realized, are given in my attached comprehensive analysis. The results emphasize that given proper publicity, encouragement and impetus, fine support for our C.B.F. Olympiad Fund can be generated.

We started 1973 with \$3,249.82 to the credit of our Olympiad Fund. We ended 1973 with \$10,875.25. This gives us a good start indeed towards financing Canadian participation in International Bridge events for which it is intended. But as you well know, cost of such participation runs very high, and efforts to further bolster the fund must not be permitted to lag. An early start should be made to publicize playing opportunities for the Fund's benefit, and to encourage Units and Clubs not only to participate in the two major events above mentioned, but as well to hold allowable sanction free Olympiad Fund Games.

So we start 1974 with \$11,552.87 in Membership Account, and \$10,875.25 in Olympiad Fund Account. A good start. But let us not be too complacent about it. Our member Units and members have

supported us generously. I ask are we doing all necessary to maintain their interest and support. The Digests (Bulletin Inserts) have provided, and can provide, at comparatively modest cost a means of communicating with, and disseminating information to our members. A mere dollar and cents report is fine, and necessary, but not too informative. May we not ask ourselves have we fully availed ourselves of the opportunities provided of informing our members of our activities and of making clear what are the aims and objects of the Canadian Bridge Federation, and the reasons for its existence. The need for a governing body for Bridge in Canada, such as the C.B.F., is unquestionably there, but only when our Units and Members know and recognize this fact can we expect unqualified support.

---

## STATEMENT OF RECEIPTS AND DISBURSEMENTS

January 1 - December 31 - 1973

<u>RECEIPTS</u>	<u>GENERAL &amp; MEMBERSHIP ACCOUNT</u>	<u>OLYMPIAD FUND ACCOUNT</u>
Dues, assessments & donations from Units for 1973	10,149.20	
Dues, assessments & donations from Units for 1972	1,077.00	
Interest earned on Bank Certificates of Deposit	613.25	
Revenue from Digest advertising	150.00	
Proceeds realized from Olympiad Fund Games		7,743.50
Amount realized from B.C. (Zone 6) Trials and remitted		390.00
Share of A.C.B.L. Olympiad Fund Game, 1972 Summer Nationals		136.41
Share of A.C.B.L. Olympiad Fund Game, 1973 Summer Nationals		313.32
	-----	-----
TOTAL RECEIPTS	<u>\$11,989.45</u>	<u>\$8,583.23</u>

<u>DISBURSEMENTS</u>	<u>GENERAL &amp; MEMBERSHIP ACCOUNT</u>	<u>OLYMPIAD FUND ACCOUNT</u>
Doug Drew, Executive Sec'y, 12 Months at \$200.00	2,400.00	
Photostats	87.80	
Expenses of Directors attending Membership and Directors' Meetings, Halifax Regional, July: D. J. Cannell \$332.00; J. T. Murphy \$402.00; S. Maltin \$218.00; H. Smilie \$389.25; K. Hicks \$176.00; W. A. Robinson \$255.00; Doug Drew \$246.00; A. Goodman \$218.00; Nova Scotia Hotel \$174.04	2,410.29	
Cost of producing C.B.F. Insert in A.C.B.L. Bulletin:		
July issue: A.C.B.L. 1141.27		
S. Maltin, Editor 217.40		
Canadian Press 10.00	1,368.67	
Oct. issue: A.C.B.L. 1051.79		
S. Maltin, Editor 302.23	1,354.02	
Printing and Stationery	233.69	
Bank Exchange	.36	
Montreal Unit - omitted expense 1971 Trials		183.80
A.C.B.L. Fee of \$1.00 per table for:		
321 Tables in conjunction with 1973 Summer Nationals		321.00
453 Tables C.B.F. National Olympiad Fund Game		453.00
	-----	-----
TOTAL DISBURSEMENTS	<u>\$7,854.83</u>	<u>\$957.80</u>
EXCESS of Receipts over Expenditures	\$4,134.62	7,625.43
ADD: Balance carried forward Dec. 31-1972	<u>7,418.25</u>	<u>3,249.82</u>
BALANCE ON HAND, Dec. 31-1973	<u>\$11,552.87</u>	<u>\$10,875.25</u>
Represented by: Bank Certificates of Deposit \$18,000.00		
Bank balance \$5942.60		
LESS O/S		
cheques 1514.48	<u>4,428.12</u>	
	<u>\$22,428.12</u>	

# What are the Odds ?

by Robert M. May of Sydney,  
Australia

## 1: The No-Trump Hand

How often do you expect to hold a 12-14 point 1 NT opening bid? A 15-18 point 1 NT? A 16-18 point 1 NT?

As any reader of a bridge magazine will agree, contract bridge is one of the most fascinating games ever devised. It can be played equally for pleasure or for blood, by people whose temperaments range from the gambler to the mathematician: it would even appear to provide a (more or less) socially acceptable outlet for the sadist and the masochist.

It is the statistical aspect of the game which gives it especial charm to the analytically minded; on any one hand there are strong elements of chance (unlike Chess or Go), but over a sufficiently large number of hands the odds for a particular thing to happen are precisely calculable (unlike horse racing).

We are most of us familiar with the results of some such calculations of "the odds". For example, the probability that a suit in which the defenders hold six cards will break 3-3 is (in the absence of any other information) 36%, compared with 48% for the 4-2 break, 15% for 5-1, and 1% for 6-0. This kind of knowledge is of obvious relevance to the play of certain hands. Another simple statistical result concerns the likelihood of holding a hand with, for example, 4-4-3-2 shape, (i.e. any two 4 card suits, along with any 3 card suit and a 2 card suit) 21.6% of all hands have this shape. Similarly, the other "no trump shape", the 4-3-3-3 shape,

pops up 10.5% of the time. Once one has been initiated into the arcane rites of "combinational analysis", the above results, along with their friends and relatives, can be worked out on the back of a bus ticket. They are standard entries in any bridge encyclopaedia.

In this article we deal with a different question, namely given that you hold a hand of no-trump shape, what are the odds to have 12 high-card points? 14 points? 16 points?

By no-trump shape, we mean the balanced hand with no 5 card suit and no singleton or void; such hands, namely 4-4-3-2 and 4-3-3-3, happen roughly once in three hands (32.1% in fact). Many systems allow the 5-3-3-2 shape as balanced, or no-trumpish, if the 5 card suit be a minor. Including such hands bumps the probability of holding "no-trump shape" up to 40% of all bridge hands. However, given that the hand is balanced, the inclusion or exclusion of the 5-3-3-2 shape does not significantly affect the probability of holding a given number of high-card points. For example, not counting 5-3-3-2 as "no-trump shape", the probability for a 16 point hand is 3.39% of no-trump hands, and including 5-3-3-2 as "no-trump shape", this probability is now 3.38% of no-trump hands. Thus, the numerical results given in the article do not depend on this detail. Assuming that you do have one of these balanced hands we ask what is the probability that it contains a specific number of high-card points (on the usual basis of A=4, K=3, Q=2, J=1).

Why bother with these odds? Firstly, they can be relevant to the construction of, or choice among, bidding systems; it can be interesting to know (see Table 2) that the 15-18 1 NT bid occurs 60% more often than the 16-18 1 NT, while the 12-14 1 NT opening bid occurs almost three times more frequently than the 16-18 one. Secondly, and less significantly, knowledge of the odds can be relevant in defence; if declarer has opened a 16-18 1 NT, you have odds of 2:1 that he has 16 rather than 18 points.

In Table 1, we assume the hand to be of no-trump shape and then show the relative frequencies of occurrence of various numbers of high-card points.

Table 1

High Card Points	Percentage Probability
More than 20	0.9
20	0.7
19	1.1
18	1.7
17	2.4
16	3.4
15	4.5
14	5.6
13	6.8
12	7.9
11	8.7
10	9.2
9	9.2
8	8.8
7	8.0
6	6.6
less than 6	14.5

From Table 1 we can work out the probabilities for various point ranges in balanced (NT) hands. The more interesting of such percentage probabilities are listed in Table 2.

Table 2

NO TRUMP OPENING BIDS	
Point Range	Percentage Probability
12-14	20.3
13-15	16.9
15-17	10.3
16-18	7.5
15-18	12.0
16-19	8.6

If one is to draw a moral from these numbers, it is that the "standard American" 16-18 1 NT is a comparatively inefficient bid; the descriptive and relaxing 1 NT (remember how relaxing it is to hear partner open 1 NT) is relegated to use in 7-1/2% of all balanced hands, while the 13-15 point range (described by a suit bid followed by 1 NT if possible) occurs 17% of the time for no-trump shape. It would really seem more sensible to use a N.S.W. System type 1 NT, with the ranges 13-14 (12-1/2% of NT hands) and 15-18 (12% of NT hands) instead of the superficially more "equal" 13-15 and 16-18 ranges.

I might add that the calculation of the probabilities tabulated above is a much more tedious job than the calculation of the more familiar percentages mentioned in the opening paragraphs of this article. In fact some 20,000 individual probabilities were evaluated to arrive at Table 1: fortunately this only took the computer about one minute. (Colonel Roy L. Telfer of Plymouth, England computed a similar table in 1958. It took him 2 weeks of hard labour. Ed.)

In conclusion, one should make contact with the real (non-mathematical) world and add the caution that all such bridge probability calculations rest on the assumption of perfect shuffling, i.e. the assumption that every hand is equally likely.

Actually, there is evidence to suggest that imperfect shuffling, particularly of new packs of plastic cards, distorts this assumption somewhat; this distortion tends to affect very improbable events, but will not alter the more "ordinary" probabilities, such as those listed in Tables 1 and 2. It may be interesting to note that this problem of the assumption of "perfect shuffling" is exactly analogous to a basic scientific problem, not fully solved after more than a century's effort, in the field of "statistical mechanics", a

subject which deals amongst other things with transistors, nuclear reactors and stars. Who said bridge was only a game?

(Doctor May was Reader in Physics at the University of Sydney when this article first appeared in 1970, and was soon after appointed to a chair. He has served as a Visiting Professor at Harvard University, to name but one distinction in a brilliant career.

We are indebted to Doctor May and Australian Bridge for permission to republish this series. Ed.)

---

## *ALL THIS FOR \$3?*



During 1973, new ACBL members in Vancouver were entitled to receive 12 ACBL BULLETINS, 12 Newspapers, 8 Newsletters, 2 Bridge Digests, a Club Directory, and "Easy Guide to Duplicate Bridge", plus membership in the ACBL and the CBF. Is that worth \$3.00?