

## Getting Connected...


by Jeff Seidel (jeffs @shadow.net) JeffS on FIBS

The world is getting small...you can sit in your home and play backgammon with someone in Seattle or Miami or France or Japan.
FIBS stand for First Internet Backgammon Server.
What you need: First, you will need a computer. It can be pretty much any make, model or CPU type as long as it has a serial port (a parallel port can also be used but setting it up for telecommunications can be tricky). Next you need a modem, most brands will do the job and should be capable of at least 2400 baud (in general, the faster the better and one with error checking is preferable). You will also need a telecommunications program to provide the interface between you, the user, and the hardware involved. There are various types of telecommunications packages, some are free (Public Domain), some are shareware (usable for a modest fee) and commercial packages. Your selection of what telecommunications package to use is a matter of taste. Discussions on this issue border on religious fanaticism. Basically, find one that fits your immediate needs and then scout around for one that has the bells and whistles that you want. The telecommunications program should support what is called VT100 emulation and you will probably want it to have ZModem. If these terms sound mysterious, don't worry. The documentation will usually explain the fundamentals. The next thing a potential FIBS user will need is a method to access the Internet. This is where FIBS lives. Most universities have access to the Internet and may allow outside accounts. There are also a whole slew of Internet Providers popping up all over the country, most notably Portal Communications, Netcom, Delphi along with many others. You must make sure they allow you to access a feature called telnet, since this is how you access FIBS. (note...most of these providers use the aforementioned VT100 emulation as their default, that's why you want your telecommunications program to have it). Having assembled all of this, you're now ready to go.
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# Two Points From Victory by Jake Jacobs 

Two points away. No other score seems to stir up as much trouble as when the leader is two points away from victory. Cube handling is easy when the opponent is one point away. One need only remember to:

1) not double during the Crawford game;
2) always double after the Crawford game;
3) take any doubles offered.

When the opponent is zero points from victory, cube handling is even easier. When they are exactly two points away. cube handling is suddenly quite a bit trickier. I was lucky enough to witness a couple of gross cube errors at this score. I was both witness, and beneficiary.

I was White in each of these games, and led in the match. In both cases it is Black with the tricky decision.


Here is a common misconception. When the opponent is two away, always take and redouble. That is what my opponent did, but in this position it is pretty certainly wrong.

If White passes, he will trail $6-0$ with approximately $9 \%$ match equity. If he takes and redoubles, he may reach $5-4$ with $40 \%$ match equity. He risks $9 \%$ to gain $31 \%$ so his takepoint is $22.5 \%$. Black trails in this race 91-80, so if there were no contact, his cubeless chances of winning this race might very well be under $22.5 \%$. Trapped behind a five prime, with three builders trained on him, he will be lucky to win half of that.

Moving from the specific to the general, there may be no score in a match of ordinary length where this is a takeable 2 cube. The farther one trails, the less the risk by taking, but the less one gains from a four cube. In fact, if White trailed 5-1 instead of 5-0, his takepoint would drop to $20 \%$ and at $5-3$ his takepoint would be a mere $17 \%$.

In some instances, White must act more conservatively than for money. We tend, in evaluating positives, to have some sense of whether or not we could take for money. We say to ourselves: money take is equal to $25 \%$, then commutatively: not a money take
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| 1994 HOOSIER BACKGAMMON CLUB Gammon Point Standings. <br> HBC Player of the Month for July is Butch Meese with 174 gammon points HBC Player of the Month for June is Woody Woodworth with 134 gammon points. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1) | Chuck Stimming.......... 1542 | Bill Julian.................. 195 | Dr. Bob Hill................. 84 |  |
| 2) | Butch Meese.............. 1327 | Kevin McLeaster........ 192 | Scott Richardson......... 77 | John O'Hagan.......... 20 |
| 3) | Don Woods.................. 985 | Mick Dobratz............. 167 | Lara Simsic................ 72 | Jeff Baker................ 20 |
| 4) | Ellis Bray..................... 910 | Brian Neison.............. 160 | Ed Pavilonis................ 70 | Jim Dooling.............. 20 |
| 5) | Larry Strommen............ 636 | Richard Heinz............ 145 | Rick Bieniak................ 70 | Donna Susens.......... 20 |
| 6) | Jim Curtis..................... 625 | Jon Stephens............. 140 | Craig Hampton............. 68 | Gino Agresti.............. 20 |
| 7) | Woody Woodworth........ 564 | Sean Garber.............. 140 | David Smith................ 64 | Marta Hilworth.......... 16 |
| 8) | Jan Gurvitz.................. 484 | Al Faller.................... 128 | Gabe Stiasny.............. 60 | Angie Jones.............. 10 |
| 9) | Cyrus Mobed................ 480 | Jon Vietor................. 120 | Lance Jenkins.............. 60 | Peg Simsic.............. 10 |
| 10) | Mary Ann Meese.......... 478 | Chuck Bower............. 118 | Stu Sherman............... 60 | John Klotz................ 10 |
|  | Neil Ezell...................... 392 | Marilyn Faller............. 110 | Andy Palumbo............ 42 | Bob Cassell............. 10 |
|  | Alan Haas.................... 282 | Steve Perlman............. 98 | Frank Scott................. 32 | Jamie Curtis............. 10 |
|  | Dragan Stevanovic........ 217 | Rick Reahard............... 90 | Wendy Kaplan............. 30 | Krystal Shaffer.......... 10 |
|  | Bill Gheen.................... 209 | Bill Hodes................... 88 | Jill Ferdinand............... 30 |  |
|  | John Brussel................ 200 | Dave Cardwell............. 84 | Alan Tavel.................. 30 |  |

## Feedback from the MailBox

Dear Butch \& Mary Ann,
I've been meaning to write for some time to tell you how much I enjoy the changes you've made to your newsletter.

Specifically, I enjoyed comparing the results of Chuck Bower's opening roll survey with mine. I suspect most of the differences are due to his using Version 1.61 for most of his rollouts and the number of rollouts for each opening roll. I found that even with batches of 9000+ rollouts there could be fairly large differences with the equites. Since I wanted to be as accurate as possible this was one of the main reasons I went to $27,000+$ rollouts.

I think Chuck's article on the The Thorpe Count, Revisted doesn't give enough credit to himself. Actually, there is very little remaining of the Thorpe Count in Chuck's revision so I think he could easily name it after himself.

There is another pip counting technique that l've found very useful.

It's Danny Kleinman's, with his recommended adjustments. All these adjustments are not found in one article so $\mid$ put them together several years ago for an article in our monthly newsletter. The original article is attached but I'm planning to make some revisions for a future one. I particularly like the fact that in many positions you can use Danny's ratio to determine your cubeless chances in racing positions.

I would appreciate it very much if you would ask Chuck to apply Danny's formula and adjustments shown in the attached against his original 21 positions. I think the results would be very interesting. Incidentally, I think Danny's formula would quickly show that the 2 positions in the article are non-doubles.
Another guideline I find very useful and quite accurate is the $10 \%+2$ rule for determining point of last take. This is an easy formula to apply. If the results are close you can use other checks such as Danny's or Chuck's formula. However, if the results is more than the $10 \%+2$ rule you can almost be sure it's not worth further
consideration. Obviously, with stacks on the ace-point you would not use the $10 \%+2$ guideline. No matter how accurate a guideline may be there are always exceptions.

Your series on the match between Kit and Jeremy Bagai with TD-Gammon comparisons is one of the best l've seen. I like very much that TDGammon's three best plays are ranked in order. With Kit thinking TD-Gammon is the best backgammon player in the world I would like to see an article of opening roll results based on TDGammon. It is interesting that TDGammon agrees the split has a higher equity than the slot for the opening. What other openings does it prefer?

I'm looking forward to your next article on FIBS even though it's not available in Macau. Maybe someday.

Congratulations and keep up the good work.

Sincerely yours, signed Jerry Godsey.

|  | $\frac{\text { July } 7 \text { th }}{\text { Bill Julian }}$ | $\frac{\text { July 14th }}{\text { Butch Meese }}$ | $\frac{\text { July } 21 \mathrm{st}}{\text { Don Woods }}$ | $\frac{\text { July 28th }}{\text { John Brussel (IL) }}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1st | Chuck Stimming | Butch Meese Ellis Bray | Don Woods Butch Meese | John Brussel (IL) Al Faller (PA) |
| 2nd | Alan Haas | Jim Curtis | Brian Nelson | Larry Strommen |
| 2nd | --- | --- | --- | Dr. Bob Hill (NY) |
|  | Auqust 4th | Auqust 11th | August 18th | August 25th |
| 1st | Ellis Bray | Butch Meese | Woody Woodworth | Chuck Stimming |
| 2nd | Mary Ann Meese | Woody Woodworth | Butch Meese | Cyrus Mobed |
| 2nd | David Smith | --- | Ellis Bray | Steve Perlman |

## BACKGAMMON Tournament Schedule



# FIBS...Getting Connected <br> by Jeff Seidel (jeffs @shadow.net) 

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Getting on FIBS: Log-on to your Internet provider and get to the area that allows you to start the teinet program. The methods of doing this vary widely from provider to provider. You will have to consult your particular provider as to how this is accomplished. Once you have started telnet you will see a prompt like: telnet> on your screen. You now need to tell it to contact FIBS and open it for access. You must type at the prompt: open 129.16.235.153 4321 (note the periods and spaces) this is FIBS address and must be entered exactly as shown or you won't connect to FIBS.

If your telecommunications program supports macro keys, you will probably find it worthwhile to make this line one of them. If everything went well, you should now see the FIBS opening screen showing some FIBS information and asking you to $\log -\mathrm{in}$. At this point it is helpful to have thought up a user name (what you'll be called on FIBS) and a password. Unlike DOS, FIBS runs on a UNIX machine and therefore is what's called case-sensitive meaning it differentiates between upper and lower case letters. People are generally lazy so try not to make your name too long (4-6 characters should suffice) and try not to mix upper and lower cases in an extreme fashion. (i.e. bEiNgAjErK) You have to type someone's name to play against them and send messages to them, so you can be shunned to a degree because no one wants the hassle of typing your name. Your password should be something easy for you to remember and have a mix of letters and numbers for security.

Now you're ready to log-in. You'll see a prompt at the bottom of your screen asking you to log-in as guest, type guest (and remember-watch your case!). It will then ask you to enter your user name. Type name $\mathbf{x x x x x x x x x}$, where you replace the $\mathbf{x x x x x x x x ' s ~ w i t h ~ t h e ~}$ name you've selected in advance. You'll then be asked for your password, follow the instructions. There might be a few more questions, if so answer them. You should now be on FIBS!!! NOTE: You may be rejected with a message such as host not available. There are several reasons this might happen. You may have mistyped the FIBS address, the computer FIBS runs on might be down and not accepting attempts to connect to it, FIBS might be down, or FIBS might be full (it can only accommodate a certain number of users and when it fills up ...you're rejected). If this happens you can try again (you should still be at the telnet prompt) typing the open line from above. If it still rejects you, type quit at the telnet prompt to get you back to where you were on your provider.

What Now?: Okay, you've completed a whole ton of complicated stuff, dealt with techno-babble you don't understand, performed odd actions that seem to have very little meaning.... Now you want to get right in and make someone pay for all these hassles you've gone through just to play your favorite game. Predictably...NOT SO FAST. All you have is probably a
friendly greeting from FIBS and a prompt on your screen. Also stuff seems to happening...there's shouting (odd messages appearing on the screen). People logging-in and out and perhaps some friendly or not so friendly messages being directed at you. Relax...type toggle silent (you should see something like "** You will no longer hear players shout"), then type toggle notify (you should see something like "** You will no longer see people logging-in"). This should halt most of the odd stuff going on.

Now type who. You should see a list of the users on FIBS. The list may scroll by fairly fast but you should see your FIBS name near the bottom. If your name has a dash ('-') next to it, everything is okay. If your name has an $R$ next to it type toggle ready. If your telecommunications program has a capture mode now's the time to turn it on. Capture mode stores all the information that appears on the screen into a file on your PC.

Type help. A list will appear on your screen and one entry should be beginner. Type help beginner. Go through it and make sure you don't forget to turn off your capture mode when you're done. You might also want to get the rest of the commands not included in the beginner's section. Help on any command can be obtained by typing help command_name. Make sure you capture the information to review when you're off FIBS. Some commands are fairly complex and obscure, but don't worry, once you get the hang of things you can ask people about them and determine if you need to make any changes. It's probably best to get off FIBS by typing bye at this point and digest what you've captured, unless you want to wade right in and try things out. When you leave FIBS, you will return to the telnet prompt. Type quit and you'll be back to your provider.

Since you're there, find the Usenet area (ask your provider for information on newsgroups and how to subscribe to them and use the readers) and subscribe to an area named rec.games.backgammon (if your provider doesn't carry it ask them to add it). This is a general discussion area where backgammon issues are discussed and your questions about FIBS can be answered. A complete help listings is available, so you might want to put up a request for it to be posted to the newsgroup or emailed to your mailbox on the provider. There is also a FAQ (Frequently Asked Questions) list maintained by Mark Damish for backgammon that might be helpful to some, just ask and someone will tell you how to obtain it.

Playing on FIBS: This is a tough area to deal with because I'm sure to tromp on somebody's toes, so please remember that these are based on my experiences on FIBS (and l've been there awhile) and do not reflect on the operator of FIBS nor his policies. First, remember that FIBS deals with an international set of players. No one owns the Internet, there are no police, there really aren't a whole lot of rules, just a basic premise called Netiquette that is just a loose set of guidelines to help a new user avoid irritating everyone else. In other words, avoid being an Ugly American. On FIBS you'll see people shouting in several different languages and possibly having opinions that are based on a very different value system than yourself. Deal with it, you're now plugged into the entire world. That
being said, on to the good/bad stuff. A lot of players are on FIBS for fun. There are organized tournaments, a rating system, and the ability to configure a game/match to your specific needs/desires. This means you don't have to have the pressure of a money game and can play for the sheer joy of competition and ratings points. This doesn't mean there isn't money play. Usually money games are set up between two players privately (either via phone/email/private on-line agreement). Ive even seen attempts at chouettes on FIBS. I strongly advise that if you play for money on FIBS...know the person you're playing. It's very easy when logged-in under a made up name and losing, to forget to put that check in the mail. Also, since it's a global environment and assuming the person is actually going to pay you (generally a bad assumption), how are you going to deal with that check written in yen/lira/whatever?

The social atmosphere on FIBS is generally a congenial one with most of the players being regulars and interacting in this manner for awhile. It is a more tightly knit community than you might suppose, so if you screw up, word spreads rather fast. You're probably asking yourself now What does it take to 'screw up'?. You're a player who just busted into the 1800's in ratings points (you start at 1500) and you're playing a five point match against someone you think is a dweeb who has a high 1500 rating. You're a natural to win....all of a sudden you're down 0-3 and about to be gammoned. There goes your 1800 rating. What do you do? You cut your connection to FIBS and go steaming around your living room without completing the match. FIBS saves all in progress matches in case of abnormal termination or the need to resume the match at a later time. It cannot force you to resume that match however. So you duck the dweeb and refuse to resume the match. Viola! No points are deducted/awarded since the match wasn't completed, you've dodged a sure loss and no one can force you to finish it. You think you're on top of the world. What has actually happened though is...You have really screwed up! Word will get around about you and you'll be hard pressed to find a match. Unfortunately it happens all too often on FIBS. Be prepared, it will happen to you and the only thing you can do is keep bugging the player when you're on together and make a note of the players name so you can avoid them in the future (you can also flame them publicly both on FIBS and in rec.games.backgammon but that can be considered bad form) along with telling other players about the person. It is worth pointing out that not all dropped connections are attempts to duck a loss. Telecommunications is a dicey thing and a wide variety of things can cause an abrupt termination. Make sure you make an attempt to contact the player and resume the match before flying off the handle and making nasty accusations. Stuff like that gets around too. Aside from that, there's really only one other way to really cheat badly. Playing with yourself. I know your mother said it would make you go blind but people have done it. You need two accounts and you log-in with both of them as different players on FIBS (it has no idea both 'players' are actually the same person). You allow one 'player' to constantly beat the pants off the other and produce a meteoric rise in the ratings. There is
supposed to be an attempt to close this avenue on FIBS in the near future and it usually is fairly obvious when it happens. Since you're in the privacy of your own home, why not crank up Expert Backgammon and let it do the work? This happens to a much lesser degree but it does occur. It's fairly easy to spot due to a pronounced 'lag' (not all 'lags' are due to this though) between moves. There is no easy way to deal with this, since you can't prove it, so just play on and hope for the best.

FIBS is a great addition to the world of backgammon that provides an area to meet and vie against players from around the globe. It has players that range from rank amateurs to world class professionals. Where else can you bring the likes of Kit Woolsey, Kent Goulding, Bill Robertie, TD-Gammon, and a host of others into your living room to play against you just for the price of an Internet connection (as low as $\$ 15.50$ /month in some areas)? I highly recommend it to all players. Perhaps it isn't the style of play you prefer but you can always find a match and it can be a great learning experience.

Editors Notes: Tournaments are also conducted on FIBS. In the summer tournament, Michael Zehr defeated Phillip Nutting in an exciting come from behind 13-point match, 13 to 12 in 13 games.

Though the main purpose of this article is FIBS, there are many additional benefit for having Internet access i.e. email and readnews. Books are available that can give the detailed information needed to use the Internet effectively.

Butch Meese (butch@inuxs.att.com)
indianajones on FIBS

| Two Point From Victory |
| :---: |
| by Jake Jacobs |

...continues from page 1...
is less than $25 \%$, or: better than money take/drop is greater $25 \%$. In fact we unconsciously combine factors like gammon chances, game chances, and cube leverage when we make our money decisions.

Consider this position:

## 7-Point Match White-5 Black-4



Black trails by one pip. We sense this is probably a money take, and it is. Black's expectancy owning a 2 cube is -0.963892 points, less than the 1.0 he would lose by passing. If Black trails 3 -away 2 -away, his takepoint is $25 \%$ so one would suppose that Black should take this just as he would for money. However,
cubeless Black wins just $24.5 \%$ and should pass. More surprising is this next one.

7-Point Match White-5 Black-3


For money, Black wins over 30\% and has an easy take. At 4-away 2-away Black's takepoint is $17 \%$ so this would seem to be a ridiculously easy take. It is a big pass. Black never gets to redouble, so his takepoint is actually $37.5 \%$.

What madness is this? Will we never get to make the deep juicy takes that are our only reward for being stuck in the match? Consider the well timed ace-point game. Conventional wisdom informs us that the well timed acepoint game loses a third, gets gammoned a third and wins a third. Conventional wisdom has neglected to provide a diagram of a well timed ace-point game, but it should fall somewhere between these two positions which must be close to Black's worst and best ace-point games. In each, White is on the roll.


For money, the well timed ace-point game is a clear pass. Black gives up one point by passing, 1.33 by
taking. At 4 -away, 2 -away things are different. If doubled, Black can redouble and win the match $33 \%$. He has an easy take, and White would be foolish to double in the first place. Which brings us to my second specimen from this week.

## 7-Point Match White-5 Black-2



My opponent had read a book or two. The theory behind his double is this. If he gets gammoned, he loses the match, so a double risks nothing; if he hits, he loses his market. What's wrong with this picture? First, Black is only three rolls from saving the gammon, White five from bearing off. Even if his situation were worse, sometimes he will hit, saving the gammon but losing the game. Other times he will hit later, accomplishing the same thing. A hit is not a sure win, and a miss not necessarily a gammon. More important, suppose that Black hits. Leading 2 -away 5 -away, if White is doubled and passes, he has $68 \%$ match equity. If he takes and loses, he has $60 \%$. He risks $8 \%$ to gain $32 \%$. His takepoint is $20 \%$. With 6 checkers born off he very likely has enough equity to take even if closed out. Even if, closed out, White has a pass, he may not know this, and still take. I don't know, and I would. The situation is just the opposite of Black's original supposition. He risks the entire match when he doubles, saves the gammon, but loses the game. In return, he gains nothing by doubling since his opponent was taking anyway.

Summing up. When the opponent is 2-away, it is often right to pass if doubled. (This especially true since, you may have noticed, most players with such a lead never turn the cube if their opponent has a proper take.) It is important to recognize whether gammons or cube equity may have skewed your estimate of a position. Finally, it is never right to turn the cube if you cannot lose your market.

Hoosier Pips: HBC weekly play is moving to McGreevy's Hop on the north end of Woodland Bowl starting Monday October 3rd. We are also moving from Thursday evenings to Monday evenings. Play, as always, begins at 7:00 PM sharp... HBC welcomes back Alan Tavel, Lou Ramer and Dave Groner...Partial results from World Cup IV/U.S. Open: Billy Horan defeated Joe Sylvester to win his 2nd World Cup. Joe Sylvester has placed 1st, 2nd and 3rd in the three time he has played. Chuck Bower (Bloomington, IN) won the Advanced Division and Butch Meese won the Chipmunk Chase.

## Annotated match Kit Woolsey vs Jeremy Bagai FIBS - 9 Point Match

In February, Kit Woolsey and Jeremy Bagai played a match and then annotated it for FIBS* players so they could see the thought process of the more experienced players. They played a fairly interesting match, logged it, and then annotated it independently. You will see reasons for their plays and cube decisions, as well as their second thoughts upon later analysis which often came to a different conclusion than their original choices.

Gerry Tesauro also volunteered TD-Gammon's valuable help. TD analyzed the whole match and listed its top 3 choices for each play along with its estimated equities. These equities are always assuming a 1 -cube and they do not take into account cube ownership. Thus on a pass-take decision an equity of -0.50 would be a break-even decision (not taking cube ownership into account -- that would probably make it a little higher), since that would translate to an equity of 0.100 on a 2 -cube. TD was also nice enough to comment on the game, giving its reasons behind its choices as well as getting in a few snide remarks about their mistakes. Mark Damish (MA), first formatted the commentary for the Internet*.

Internet*: In short, the Internet is a network of computers. People login to an Internet server. Eacin server has a subset of features which may include email (electronic mail) and server-toserver connections. One of the servers provides a means for players to play each other - FIBS (First Internet Backgammon Server).

Editor's note: I fell that the material was too good to restrict it only to the Internet. I received permission from Kit, Jeremy, Gerry and Mark to reprint the match and I thank them. In the backgammon positions, Kit is the black checkers and Jeremy the white. The board numbers are shown from the player on-roll point of view.

## Game 2 Continues

BLACK (Kit) to play 21?


Moved: 23/21 6/5

Kit: I grab the most advanced anchor. Now that my defense is solid, there is every reason to slot the tive point. If I am hit the extra checker back may prove to be an asset; if I am not hit my game has started to develop.

Jeremy: Kit shows that he reads the same books I do: Two anchors, five checkers back against one -- time to start slotting.

TD-Gammon: Back to good thematic backgammon. Well done, Kit.

| $23 / 21,6 / 5 \ldots \ldots \ldots \ldots-0.303$ |
| ---: |
| $24 / 21 \ldots \ldots \ldots \ldots \ldots . .0 .362$ |
| $23 / 21,8 / 7 \ldots \ldots \ldots . .0 .369$ |

WHITE (Jeremy) to play 54 ?


Moved: 23/14
Jeremy: No alternative is close.
TD-Gammon: Jeremy also follows the theme of the position. He properly runs and makes the safest play rather than trying to stir things up since he is well ahead in the race.

| $23 / 14 \ldots \ldots \ldots \ldots+0.288$ |
| ---: |
| $13 / 9,6 / 1 \times \ldots \ldots \ldots+0.212$ |
| $23 / 18,13 / 9 \ldots \ldots \ldots+0.195$ |

BLACK (Kit) to play 21?


Moved: $13 / 11 \times 6 / 5$
WHITE (Jeremy) to play 65?
Moved: DANCES

BLACK (Kit) to play 54 ?


Moved: 13/4
Kit: I am short on ammunition, so I just put the checker where it belongs. If Jeremy hits, I might be able to make another anchor in his board. If he doesn't hit, I have a chance to improve. More passive plays such as 13/9, 11/6 and $13 / 8,11 / 7$ are possible, but I don't think they go to the heart of the position.

Jeremy: Of course Kit will play bold: now his board is as strong as mine and he still has five checkers back and two anchors. But which bold play should he make? $13 / 4$ starts the point that Kit wants most, but gives up hope of reestablishing his midpoint and also leaves the blot on his 11-point where it isn't doing much good since his five point is already made. There are other plays. 18/13, 11/7 re-establishes the midpoint which prevents his army from getting too divided, and starts his bar point, bringing the checker on the 11 point more into play. The cost is releasing the anchor on my bar point. $11 / 7,8 / 3$ is the ultra-aggressive play. It starts the three point (almost as good as the four point), starts the bar point -bringing the checker on the 11-point into play, and retains both anchors. The downside is that it leaves four blots. But should Kit care? He still has two anchors. This is my play, although any of the three could be correct.

TD-Gammon: Just when it looked like you guys were getting a handle on the position you got confused. Well I guess I can't blame you too much -- it's a pretty complex position which only an excellent program like myself could be expected to solve. The proper play is $18 / 14,18 / 13$, a play you never even considered. Jeremy at least suggested $18 / 13,11 / 7$, which is the right idea but carries it out the wrong way. The key here is to see that Kit's main problem is that his checkers aren't communicating and that he has lost outtield control. He obviously had to give up his midpoint last roll in order to hit Jeremy's fleeing blot, but now he has a chance to recover it. Kit no longer needs two anchors, since he is not restricted to playing detensively. He needs to bring all the checkers he can muster to cover
his outer board in order to prevent Jeremy's back checker from fleeing again. This isn't immediately obvious, but if you look at what Kit's primary goal right now is, the move should stand out.

| $18 / 14,18 / 13 \ldots \ldots \ldots . .-0.119$ |
| ---: |
| $21 / 16,13 / 9 \ldots \ldots \ldots . .-0.142$ |
| $18 / 13,11 / 7 \ldots \ldots \ldots \ldots \ldots .-0.145$ |
| $13 / 4 \ldots \ldots \ldots \ldots$ |

WHITE (Jeremy) to play 33?


Moved: B/22 13/10 13/10 13/10
Kit: The ten point is a very big blocking point when I am camped on Jeremy's four point. This is better than $B / 22,8 / 5$, 6/3(2).

Jeremy: The obvious alternative is $\mathrm{B} / 22,8 / 5,6 / 3(2)$. This makes the three point which is clearly a good thing, but I like my play better. The ten point will be a valuable landing spot for clearing the midpoint, which may end up being my biggest obstacle once my back checker escapes. I thilsk the key here is that making the three point, while nice, leads to a static position which may not play very smoothly. The stack on the midpoint has only one place to go, and I will have only one other spare checker to play with up front. My play gives me lots of spares which creates important flexibility. Also note that I'm not interested in attacking any more checkers, so making inner board points is not as high a priority as it would be otherwise. I'm pretty sure my play is correct.

TD-Gammon: That's the idea. Put your checkers in front of his anchors, not behind them. Jeremy's play is by far the best, and making the three point is so bad it doesn't even get on my top three list.
$B / 22,13 / 10(3) \ldots \ldots \ldots+0.210$
$B / 22,13 / 10(2), 8 / 5 \ldots \ldots+0.180$
$B / 22,13 / 10(2), 6 / 3 \ldots \ldots+0.156$

BLACK (Kit) to play 31?


Moved: $6 / 3 \times 4 / 3$
Kit: It is easily worth the slight impurity to put Jeremy on the bar. 8/4 allows him to escape with a five or a six.

Jeremy: Better than $8 / 4$ which would allow me my whole roll to escape.

TD-Gammon: | agree. Making the three point on Jeremy's head is clearly stronger.

| $6 / 3 x, 4 / 3 \ldots \ldots \ldots \ldots . .0 .155$ |
| ---: |
| $8 / 4 \ldots \ldots \ldots \ldots \ldots-0.313$ |
| $8 / 5,4 / 3 x \ldots \ldots \ldots$ |

WHITE (Jeremy) to play 42?


Moved: B/21 10/8
Jeremy: B/23, 10/6 might be better because it doesn't leave a blot on the point which Kit most wants to make. Still he only has one builder to attack there, and I like the builder distribution on my side better with my play. I'd make my play again, but could easily be wrong.

TD-Gammon: Coming in on the 21point is much better. Jeremy's play is correct.

| $\mathrm{B} / 21,10 / 8 \ldots \ldots \ldots \ldots+0.183$ |
| :---: |
| $\mathrm{~B} / 21,8 / 6 \ldots \ldots \ldots \ldots+0.178$ |
| $\mathrm{~B} / 23,10 / 6 \ldots \ldots \ldots+0.131$ |

BLACK (Kit) to play 65 ?


Moved: 24/13
Kit: The idea behind this play is to cover the outtield so Jeremy can't bring his blot around too easily. Reasonable, but I am leaving several shots and it's not clear the gains are all that great. $24 / 18,11 / 6$ is comfortable and puts more pressure on Jeremy's back checker if he is unable to move it. I now prefer that play.

Jeremy: Very tough play. We can quickly eliminate any play which breaks either of the anchors. That leaves us with xonlyx $24 / 13 ; 24 / 18,11 / 6 ; 24 / 18$, $8 / 3 ; 11 / 5,8 / 3$; and $11 / 6,8 / 2$. 24/13 keeps all the checkers in play in front of my straggler and provides three builders for the bar. However, it releases coverage of my inner board which allows me to play behind his anchor in safety, doesn't bring another builder to attack the more important four point, and leaves a direct shot in the outfield. 24/18, 11/6 keeps all checkers in play, adds a builder for the four point, and leaves no shots. It also releases coverage of my inner board, and by moving from the 11-point releases coverage of Kit's outer board making it easier for my blot to survive if it escapes. $24 / 18,8 / 3$ keeps outtield coverage, but releases coverage of my inner board and takes a checker out of play on the three point. 11/5, $8 / 3$ keeps coverage of my inner board, brings a second checker to attack the four point (remember the eight point still attacks even if stripped), but takes a checker out of play on the three point. 11/6, 8/2 does the same thing, but starts the two point instead of putting a "builder" on the three point.

I think we can eliminate $24 / 18,8 / 3$. It looks wrong, and seems to have fewer advantages than any other play. 11/6, $8 / 2$ seems to dominate $11 / 5,8 / 3$ (meaning it's better in all ways), so we can eliminate $11 / 5,8 / 3$. After that I'm not really sure. I have a feeling that the extra builder for the four point is the most important factor so I would play either $24 / 18,11 / 6$ or $11 / 6,8 / 2$, but 1 might be very wrong.

An interesting point is that there is not a computer in the world that I would trust xat allx in rolling out this position (Sorry TD-Gammon). Come to think of it, I don't think I'd give that much faith to any human either. Not that rolling it out would be a waste of time; anyone who did it might learn a lot about what's important in this position. But I certainly wouldn't trust any numbers.

TD-Gammon: You don't have to apologize to me, but if you can't trust my rollouts, whose can you trust? Anyway you won't get them here; you'll have to settle for my opinions. On this one the two logical candidates, Kit's actual play and $24 / 18,11 / 6$ were in a near dead heat, with $24 / 18,11 / 6$ a slight winner.

| $24 / 18,11 / 6 \ldots \ldots \ldots . .0-0.263$ |
| ---: |
| $24 / 13 \ldots \ldots \ldots \ldots . .0 .265$ |
| $21 / 10 \ldots \ldots \ldots . .0 .310$ |

WHITE (Jeremy) to play 31?


Moved: 13/12x 13/10
Kit: Not much choice. If Jeremy quietly plays $8 / 5,6 / 5$ I will just go after his back checker. Sending me back rips away one of my builders, and I don't have too many return shots. He can live without the midpoint; it would be a point he would have to clear eventually.

Jeremy: $6 / 5,6 / 3$ is wrong because there may be an exchange of hits immediately so I don't want blots in my inner board. If you were thinking about the position last game where I advocated not being afraid of this kind of partay, recognize that the difference is that building my board is not even a priority for me here -- escaping is -- whereas in that position building my board was essential. 8/5, 6/5 might be right -- it gives me better distribution up front and leaves only fours to attack with plenty of return shots most likely. My play tries to do more. It clears the midpoint and puts Kit on the bar, preventing him from using his full roll to develop. But at some cost -- eight shots hit the blot on the 12 -point and nine shots hit the blot on the 21-point. Granted hitting on the 12 -point would give up my bar point, and hitting loose on the inside leaves returns. I guess I'd make my play again, but I really have no
clue which is better.
TD-Gammon: I agree. Hitting here is very valuable. Sometimes you just have to duke it out.
$13 / 12 x, 13 / 10 \ldots \ldots \ldots+0.161$
$8 / 5,6 / 5 \ldots \ldots \ldots \ldots+0.123$
$6 / 5,6 / 3 \ldots \ldots \ldots \ldots+0.059$


Moved: B/24 8/5
Kit: No reason to step up with $B / 21$. Keeping the checker back will make it harder for Jeremy to bear in safely. In addition, moving the spare on the eight point to the five point gives me another attacker for his blot since I am willing to give up the eight point if necessary but not give up the five point.

Jeremy: Best. Covers my inner board and deploys the new builder. If you don't see that $8 / 5$ creates a new builder (because Kit is willing to give up the eight point to attack on the four point), go reread Magriel's section 2: Using Men Effectively. No other play is close.

TD-Gammon: Kit makes a fine play. The checker back on the 24 -point is a definite asset. Note that $\mathrm{B} / 21$ isn't even on my top three list.

| $B / 24,8 / 5 \ldots \ldots \ldots \ldots .0 .254$ |
| ---: |
| $B / 22,8 / 7 \ldots \ldots \ldots .0 .280$ |
| $B / 22,11 / 10 \ldots \ldots \ldots-0.290$ |

WHITE (Jeremy) to play $65 ?$


Moved: 21/10
Jeremy: This leaves fewer shots than 21/16, $12 / 6$ (15 vs. 16), forces Kit to break an anchor to hit, and will be easier to safety if missed.

TD-Gammon: You think | can't see all these things?
$21 / 10 \ldots \ldots \ldots \ldots \ldots+0.269$
$21 / 16,12 / 6 \ldots \ldots \ldots+0.248$
$21 / 15,6 / 1 \times \ldots \ldots \ldots+0.178$

BLACK (Kit) to play 66 ?


Moved: 24/6 8/2
Kit: I guess this is best. The alternative is $18 / 6(2)$, which keeps the back checker in place but loses the valuable defensive bar point. Since that bar point puts double pressure on Jeremy's checkers on the ten point I think holding it is a better idea. Since I must have my four point in all variations, my play gives me the best distribution to make it in the future.

Jeremy: Kit is forced to play at least one checker from my side of the board, and he decides that the dual anchors will generate more shots than 18/6, 18/12, $8 / 2$. I'm pretty sure he is right.

TD-Gammon: Yep. Holding both anchors is much better than playing from just the 21-point and keeping the back checker back. The increased pressure on Jeremy's outfield points makes the difference.

$$
\begin{array}{r}
24 / 6,8 / 2 \ldots \ldots . . . . . . .0 .435 \\
24 / 12,8 / 2(2) \ldots \ldots . .0 .439 \\
24 / 12,11 / 5,8 / 2 \ldots \ldots . .0 .474 \\
\hline
\end{array}
$$

WHITE (Jeremy) to play 21?


Moved: 12/10 6/5
Kit: I think Jeremy should double. 20 pips is a pretty hefty lead in what is likely to become a race. I have a pretty easy take of course with the combined racing and shot-hitting chances, but if he gains
much on the next exchange he could easily lose his market.

Jeremy: I should certainly glance at the cube. I'm 20 pips up in a race of 118 pips, a double/pass in a straight race -which this, of course, is not. First I have to safety that blot. Then I have to bear in against two anchors. It looks to me as though Kit may well be taking until I clear my ten point, so there's no reason to double until I'm threatening to do just that.

TD-Gammon: I agree with Kit. Equity up to +0.435 means you don't need a whole lot of volatility to send the cube over. This is just barely good enough.

BLACK (Kit) to play 21?


Moved: 6/4 5/4
Jeremy: Much, much better than making the two point which would only be correct if Kit's only hope was getting a shot on the very next roll.

TD-Gammon: Of course. Making the four point is clear.
$6 / 4,5 / 4 \ldots \ldots \ldots \ldots . .0 .423$
$11 / 10,6 / 4 \ldots \ldots \ldots \ldots . .0 .448$
$11 / 9,5 / 4 \ldots \ldots \ldots . .0 .456$

## WHITE (Jeremy) Doubles?

Kit: This is basically the same position as last turn. Now Jeremy wakes up and properly turns the cube.

Jeremy: What about now? I safetied my blot, but Kit did great things to his board. One important point is that xno rollx clears my ten point, so unless this position is already a pass I probably don't need to double. But is the position a pass? I have no idea!

In the second issue of Inside Backgammon (March/April 1991), Kit Woolsey has an excellent article on the double/no double decision in which he states his fundamental law: "If there is ANY doubt in your mind as to whether a position is a take or a pass, then it is ALWAYS correct to double. To put it another way: Suppose Magriel or Sylvester or even God came up to you
and said: I think this position is a pass, and I am willing to pay a point and the cube for the highest stakes you can afford. If you would not instantly say 'sit down', then you are not $100 \%$ sure, which means you must automatically double". This is a great law, and a good double.

TD-Gammon: Sorry, I don't agree. In fact, I think Jeremy is very inconsistent. His equity is down a tad (from 0.435 to 0.423 ) since Kit made the four point), and the volatility also dropped a bit. How can it not be a double last turn yet be a double now? In fact, I think this is just short of a double. Of course playing agains frail human beings who might get confused and pass trivial takes such as this maybe you are supposed to double, but I'm not programmed to think that way. I only do what is right.

## BLACK (Kit) Takes

Kit: Looks like a solid take. I have some shot hitting chances which double anchors often bring, and the race is not totally out of sight. The combined chances should give me the necessary equity to justify the take.

Jeremy: Hmmm. This is not a very familiar position. Kit's dual anchors are strong, but how long will he be able to hold them? He only has two checkers in the outfield to soak up his next few rolls, and then either an anchor goes or his board crunches. This is a timing consideration -- one of the more elusive of backgammon concepts.

I think I would take this as well. Even if the forward anchor goes, the checkers on my ten point may become very isolated if funny things happen. Most important is that Kit's board is perfect.

1 gave the position to Expert Backgammon and had it roll it out 1296 times. It says that Kit loses 0.54 points per game, which translates to 1.08 points per game when doubled, compared with the 1 point per game Kit loses if he drops. However, EXBG plays the game to conclusion with no cube -- which is a big disadvantage to Kit who will actually be able to double me out when he hits a shot in our game. This factor, coupled with the fact that any data from EXBG must be taken very generally because it often play badly in complex positions, indicates that it's a tough decision and a good double. I take.

TD-Gammon: Get serious, Jeremy. Equity of -0.423 is EASY take. Not a tough decision at all. Sometimes you humans make mountains out of molehills. As for trusting absolute
equities on EXBG rollouts, don't make me laugh. I'll admit the program plays pretty good for a non-neural network program whose parameter weightings were crafted by fallible humans rather than generated from vast experience as mine are, but while for play vs. play decisions it will usually give you a decent answer you just can't trust its absolute equities for cube decisions. Only I can do that job properly.

WHITE (Jeremy) to play 32?


Moved: 10/5
Kit: The right idea. Jeremy's goal is to clear his ten point as fast as possible, keeping spares on the other points in order to handle bad rolls. 6/3, 5/3 would definitely be wrong.

Jeremy: Making the three point is the wrong idea. That play removes a flexible checker from the six point and does nothing to clear my ten point. I don't care about inside points because I'm not planning on hitting any more shots -- I just want to disengage. 10/8, 5/2 might be just as good.

TD-Gammon: My algorithm came up with $8 / 3$. Admittedly this is not my strong area (maybe I should work on it some -my boss, Gerry Tesauro, says I lose too many won games), but end games just aren't as much fun as middle games. If they like $10 / 5$, they are probably right. At least I didn't think that making the three point was a serious contender.

$$
\begin{aligned}
& \text { 8/3.............. }+0.441 \\
& 10 / 5 \ldots \ldots \ldots . . . . . .+0.427 \\
& 10 / 8,6 / 3 \ldots \ldots \ldots \ldots+0.426
\end{aligned}
$$

BLACK (Kit) to play 33 ?


Moved: 11/2 8/5

Jeremy: There goes the timing. Kit is correct not to play $8 / 2,4 / 1(2)$ which would keep the five point board while preserving a six to play next roll so that his dual anchors might be able to stick around. I'm not leaving shots next roll, so Kit would be forced off an anchor soon anyway and would have lost his four point in the process. Naturally he doesn't leave his rear anchor which is the strength of his game.

TD-Gammon: Of course it is proper to hold everything. Anything else would be esthetically displeasing as well as just plain wrong.

| $11 / 2,8 / 5 \ldots \ldots \ldots \ldots .0 .433$ |
| ---: |
| $21 / 18,11 / 2 \ldots \ldots \ldots .0 .472$ |
| $11 / 2,4 / 1 \ldots \ldots \ldots .0 .488$ |

WHITE (Jeremy) to play 51?


Moved: 8/2
Kit: Looks right. In order to move from the ten point Jeremy would have to play $10 / 5,6 / 5$, leaving a very awkward position. Jeremy: The only play which keeps a builder on the six point. Flexibility is all.

TD-Gammon: I agree, though I have it pretty close. Maybe the spare on the six point isn't as important as they think, although admittedly it does look valuable.

| $8 / 2 \ldots \ldots \ldots \ldots+\ldots .409$ |
| ---: |
| $8 / 3,6 / 5 \ldots \ldots \ldots \ldots+0.406$ |
| $10 / 5,6 / 5 \ldots \ldots \ldots+0.400$ |

BLACK (Kit) to play 11 ?


Moved: 5/1

Jeremy: Not $5 / 3,2 / 1(2)$ or $3 / 1(2)$. Kit knows that he's leaving my bar point next roll, so he starts the next point that he wants, intending to cover it with the checkers coming around.

TD-Gammon: Anything else would be just plain stupid.

|  |
| :---: |
|  |  |
|  |  |

WHITE (Jeremy) to play 52?


Moved: 8/35/3
Kit: Jeremy chooses to make the three point in case he gets a shot. However, this is not consistent with what his game plan should be. He is stripping his eight point and making sixes potentially very awkward. I think he should stick to the clear from the back policy and play 10/8, 10/5.

Jeremy: I see that Kit may be leaving a shot on my bar point next roll so I make an inner board point for offensive purposes. This has some merit, but I now think it is clearly wrong. My goal is to clear the ten point, not to hit blots. Stripping the eight point early opens up all sorts of scenarios where I'm forced to clear it first, leaving my ten point stranded in the outfield. 6-6, 3-3, 6-5, and $6-3$ do this to me on the very next roll, while 6-4 actually leaves a double shot. Much better is $10 / 8,10 / 5$.

TD-Gammon: So call me a simpleton. I believe in making points when I can. I like $8 / 3,5 / 3$. Kit and Jeremy obviously see some obscure dangers in the position. I don't. Simple plays for simple minds and computers. Of course, I wouldn't exactly bet my entire circuitry on this one.

| $8 / 3,5 / 3 \ldots \ldots \ldots \ldots+0.543$ |
| ---: |
| $10 / 3 \ldots \ldots \ldots \ldots+0.486$ |
| $10 / 5,8 / 6 \ldots \ldots \ldots+0.460$ |

BLACK (Kit) to play 62?


Moved: 18/12 18/16
Kit: This is not a matter of duplicating his threes to cover. It is simply leaving fewer shots.

Jeremy: Is $18 / 16$ the right deuce? Doesn't Kit want as much contact as possible? Don't I have a blot in my board? My instinct first told me that Kit should stay back with 18/10. The general principle is that he wants an exchange of hits, not to disengage. In other words, the extra shots that he leaves by staying back don't hurt him much because he is already behind in the race, while the prospect of extra return shots should be very welcome. On closer inspection, however, those return shots just don't come up because no roll forces me to leave them. In fact, the only bad roll | have is $6-4$, in which case staying back will garner Kit an extra seven shots at the blot on the eight point. Given that upside staying back would be correct -- if there were no downside. But what about Kit's subsequent 3-3? Say goodbye to a board or an anchor. Kit's play ensures no disaster on that roll. How do you compare these two very remote sequences? Let's look at a cross-section of 1296 games. I roll a 6-4 twice in 36 games (6-4 and 4-6), and 7 times out of 36 in each of those games Kit is happy he stayed back: $7 \times 2=14$ games. On the other hand, Kit will be unhappy in all of the games in which he rolls 3-3 assuming I still own my ten point (I'll have cleared it if I rolled double 5 's, 4's, 2's, or 1's) so that's 32 games. But don't stop there -- who's to say that crashing is as bad as hitting is good? I'll guess that hitting is twice as good as crashing is bad, so that leaves us with 28 on the upsode and 32 on the downside...which is too close to mean anything whatsoever. Oh well. l've probably missed some crucial aspect of the position anyway. Kit? TD?

