Gamblers Shuffle **Blackiack Rules** Back to Old Deal

Las Vegas casino owners generally don't make very many mistakes when it comes to gambling, but a 31-year-old professor of mathematics has forced them to admit one.

to admit one.

The professor is Dr. Edward O. Thorp of New Mexico State at Las Cruces, whose system for winning at blacklack (also called "2!") was widely publicized this spring. It rightened the gamblers into taking an unprecedented action. In April they revised the rules of play for the card game. The announced changes by the Resort Hotel Association, made up of casino owners, were designed specifically to combat Dr. Thorp's system.

The system worked out on a computer.

The system, worked out on a computer, provides the player with rules of thumb on when to vary the size of his bets, when to draw additional cards, and when to stand pat against the "house." The object of blackjack is to score as close to 21 points as possible without exceeding 21.

Dr. Thorp contended that careful, me-chanical use of his system gave the play-ers a 3 per cent advantage over the house. If you started with \$10 and tried for \$20, the system would get you there three times out of four, but on the fourth you would lose your stake.

would lose your stake. By starting with a stake of \$200 and varying bets between \$2 and \$20, Dr. Thorp's computer estimates an hourly income of about \$6. Of course, Dr. Thorp has devised much more complicated systems of defeating the house. When he first played in Las Vegas, he used a highly complicated system, which requires an exceptional memory and an ability to calculate quickly, and won \$11,000 in 24 bours.

Leading Best-Seller List

Yet when his book Beat the Dealer was first released in the fall of 1962, few gamblers bothered to read it; most scoffed at it. But by the summer of 1963, the book was No. 1 on the best-seller list in Las Vegas, and many casinos made it required reading for their dealers.

Because it requires so many hours of Because it requires so many nours of practice and better than an average memory (you have to remember many of the cards as they are played out of the deck), the system limits the number of people who could come to Las Vegas and immediately begin winning \$\$ an hour.

But the summer of 1963 convinced the downtown Las Vegas casino owners (where a minimum bet is 50 cents) that hundreds of "local residents and touring college students were putting the system to good

They weren't concerned so much that these 50-cent bettors would break the bank, but that they were taking up space. While not winning any appreciable amounts, they were not losing either, and the high-overhead casinos cannot break even with the bettors and still stay in business.

Dr. Thorp in Disguise

Dr. Thorp in Disguise
Players who had acquired the necessary skills in playing the system then began to increase their bets, some coming in with bank rolls of over \$1,000. Some casions refused to deal to them; Dr. Thorp himself has to wear disguises in order to be admitted to play because so many casinos have lost heavily to him. Other casinos began shuffling the deck after every deal to thwart the system.

every ceal to tawart the system.
This was no solution though. Almost \$2 billion has to be wagered on the state's biackject tables or the casinos to gross the system of the \$30,000,000. Dealers are stored and earlies rapidly as possible, and if the deck has to be shuffled after every deal the casinos would lose too much "action."

"action."

The casino owners endured this thorn in their side until this spring. Then a national magazine published a spread on Professor Thorp and his system, terrifying the gamblers with a vision of thousands of system players converging on the city to harass them. So the rules were changed and the news of this received even more national attention than the magazine article. Newspapers across the land pointed out that it would be more difficult than ever for a player to win in Las Vegas.

Then casino owners in Reno immediately followed with an announcement that they saw no reason to change their rules, hoping to take the play away from Las Vegas. Dr. Thorp said that he had predicted the rule changes in his book, insisting that his system still gave the player a 1 per cent advantage over the house.

Overnight, play at the Las Vegas black-jack tables fell off. In fact, play at all the gaming tables declined as the flow of tourists into the city diminished. Casino employes, whose income depends in large part on the number of tips they receive, began screaming that the new blackjack rules were a bane to the industry.

First one casino, then another, quietly scuttled the new rules. By last week, Las Vegas gamblers threw in the towel. They admitted they'd rather have all their business back, even if it meant putting up with the system players.

of course, they can expect the system siege to get worse. Dr. Thorp recently amounced he has opened a mail-order business, offering miniature computers for \$14.95. Blackjack players can hold the computer in the palm of their hands to insure the accurate use of his system.

-JUDE WANNISKI

'Odds Against The House Were Shrinking' BLACKJACK RULE CHANGE

Fringe Benefits Tossed Out

By COLIN MCKINLAY

Computers have hurt the fringe benefits at Las Vegas casinos and two significant changes in the rules of "21" have been invoked to "put the game back in proper perspec-tive," it was learned Wednes-

PLAYERS CAN now go dow for double on eleven only, and players cannot split aces any-

"Somebody found out the odds were shrinking," commented one hotel official.

one hotel official.

Another said that the move was designed to minimize the efforts of card counters who would play the odds on the cards remaining in the deck.

ONE HIGH LEVEL industry spokesman failty predicted that "this is the beginning of a trend which will introduce the shoe."

The shoe, already in use at

The shoe, already in use at most casinos throughout the world and here in Las Vegas at the New Frontier and Hackenda, is a box which holds four decks of cards for the 21 dealer. It makes card counting almost an impossibility to be of any value to the players. AGREEMENT WAS reached only this week at a meeting of industry officials. All major hotel-casinos, with the exception of some of the smaller downtown clubs, were representatived and agreed to go along with ed and agreed to go along with the rule changes.

Months ago, during a Las Ve-convention of computer Continued on Page 2)

Nevada Gaming Chief Disputes Professor's 'All-Win' System

CARSON CITY, Nev.—(UPI)—Edward A. Olsen, chairman of the State Gaming Control Board, called the gambling system of a 31-year-old New Mexico State University profes-

Olsen objected to a story in a national mag-azine which described a system employed by Edward O. Thorp, who claims he can beat the blackjack tables in Nevada casinos using an involved system of mathematics. He said statements that gambling halls cheated Thorp are untrue and the professor doesn't have "one whit of evidence to substantiate such state-

Olsen said he discussed with Thorp the al-leged cheating instances but "these suspicions ... were predicated upon a vivid imagination more characteristic of a fiction writer than of

more characterism.

"Dr. Thorp was accompanied during the interview by an independent, recognized card detective whom he had employed to be with him at Nevada gaming tables during the preceding eight days," Olsen said.

ceding eight days," Olsen said.

"At no time did the detective corroberate

Dr. Thorp's suspicions with factural knowledge, and, furthermore, has since told this board he advised the professor against translating his imagination into assertions of fact in his book.

"Dr. Thorp may be qualified at mathematics but he is sophomoric in gambling," Olsen

Thorp has written a book on his system en-titled "Beat the Dealer" which has sold 35,000 copies in 15 months. The story claims that once the owners of the gambling halls recognize Thorp, he is cheated and piled with liquor in attempts to get him to lose. Thorp claims has been thrown out of several casinos solely because of his winning.

The professor calculates he could average \$300,000 a month if he could play eight hours a day in a casino under his own conditions. He says he still visits Las Vagas and Reno several times a year using false names and

Thorp developed his "count-down" system with the help of a computer.

Denver Post Mar. 30, 1964