## Passing Game Ratings

By Randy Moss, June 30, 2006 in Hacking Documentation


## Randy Moss

Starter


Members
$\oplus 1$
242 posts

Posted June 30, 2006
I've read the thread in hacking documentation where someone was trying to figure out what the ratings had to be to effect INTS, deflections, and coverage catches.
Obviously what complicates matters is we have 3 ratings to worry about: Pass Control, WR Catch, and DB Catch.
Much like how popcorn happens (where the RB is 50 points higher in HP than the DB), or how a pass rusher breaks a block ( 25 points higher than the blocker in HP), I'm betting that Tecmo determines INTs, catches, and pass deflections the same way.
I hopefully want to figure out exactly what the ratings scales are so I can say for sure when a catch, int, or deflection will occur. This would really help out in determine what kind of spread to use when rating the DBs, WRs, and QBs.

## + Quote

## Knobbe

Tecmo Godfather


Posted June 30, 2006
try this - record a video of a pass from a qb to a wr covered by one db.
vary the ratings and note any changes when the video is replayed.
I'm not quite sure how this will work because I don't know when the calculations are made for what will be successful and what will not.

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17,586 posts
Tecmo Titles: 1
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- © Youtube
"You fail all of the time. But you aren't a failure until you start blaming someone else" - Bum Phillips


## jstout

Tecmo Super Champion

537 posts

## Posted June 30, 2006

## Rod Woodson said:

try this - record a video of a pass from a qb to a wr covered by one db. Vary the ratings and note any changes when the video is replayed.
I would try like Rod said. From my looking so far, I have got as far as the game taking the probabilities for Pass Control + Receptions - Interceptions right when the ball upon the receiver but can't currently find what it is doing with that number once calculated.

## + Quote

## Randy Moss



Members © 1
242 posts

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I would try like Rod said. From my looking so far, I have got as far as the game taking the probabilities for Pass Control + Receptions - Interceptions right when the ball upon the receiver but can't currently find what it is doing with that number once calculated.
That sounds about right actually. My hunch is that if the PC + Rec is say 50 points more than the INT rating, it is a coverage catch. If it is 49 thru 25 points higher maybe it is a deflection, and if it is less than 25 points higher an INT.
I'll try to set up some tests in the next couple of days and hopefully come to a conclusion.

## + Quote



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Location: Ca

## Randy Moss

Starter


Members
242 posts
its a 3 nothc difference for whiff's and jump int's a 69int guy can jump pick a 50pc guy likewisel think a 50int guy can whiff on a 69pc pass. $J J ' s$ anc cc's can ocur no matter what the ratings.
$+\quad$ Quote

I don't think you'll figure out what you are trying to figure out. For instance, i don't think a 100int defnder will intercept a 06pc, 06 rec wr ALL of the time.

Moderators
© 3,074
11,466 posts
Location: Ca


## Randy Moss said:

(v) bruddog said:
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$J J ' s ~ a n c ~ c c ' s ~ c a n ~ o c u r ~ n o ~ m a t t e r ~ w h a t ~ t h e ~ r a t i n g s . ~$
Yeah I'm not even looking at jump picks or jumping/diving catches. I think those are more based on timing than ratings.
What I'm trying to do is to see what the ratings do when all things are equal.
The test I'm running is just passing at a single covered WR on a curl route after he is stopped. I want to find out when a coverage catch will happen, when an INT will happen, when a deflection will happen -- based on the ratings.

## Quote

## Posted July 1, 2006

$20 \$$ bet, shake?
$+\quad$ Quote
malferds.png
malferdsrushingrecordsar6.png
1,160 posts
Location: 43.601165, -90.056930
Tecmo Titles: Bo jackson award
JuuuuuustBleeeeed!!!!!!

## Quote

once again validating how dead on balls accurate I typically am.....
2 movies by me currently live on google video, just search for malferds i guess.

Randy Moss
Starter
-○○○


Posted July 2, 2006

## bruddog said:

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Randy Moss said:

Members

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Yeah I'm not even looking at jump picks or jumping/diving catches. I think those are more based on timing than ratings.
What I'm trying to do is to see what the ratings do when all things are equal.
The test I'm running is just passing at a single covered WR on a curl route after he is stopped. I want to find out when a coverage catch will happen, when an INT will happen, when a deflection will happen -- based on the ratings.
I've already ran a test with a 44 INT vs. a 6 PC and a 6 REC. He intercepted the ball about $95 \%$ of the time.

## Quote

## Randy Moss

Starter


Members
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242 posts

Posted July 2, 2006
Well I finished running some tests. Was going to post the results but it needs a lot more testing to be definitive.
$+\quad$ Quote


## jstout

Tecmo Super Champion


Members © 92
537 posts

Posted July 3, 2006
Here is the code (I removed anything useless in learning) of one player vs one player standing (no dives, jumping, no while running, etc). It is really too much to explain (I added notes where possible) but you can check it out and I can explain any ASM you don't get.
For those wondering, it basically is Pass Control + Reception - Interception and adjusting the number based upon random numbers. If the final number is 33 or less a INT happens, 34 to 50 then a deflection, else a reception.
Hopefully, I can figure out the other types of catches to see if it works the same or differently.

```
; Section to Grab Numbers
LDA $BF04,Y ; Load Pass Control Value
STA $DC
LDA $BF14,Y ; Load Reception Value
CLC
```

ADC \$DC ; Pass Control + Reception
SEC
SBC \$BF24,Y ; (Pass Control + Reception) - Load Interception Value
BCS \$9EA4
LDA \#\$00
TAX ; <- \$9EA4
LDA \$3B ; Random Number
CLC
ADC \#\$83
STA \$3B
LDA \$3C ; Random Number
ADC \#\$0D
STA \$3C
LDA \$3D ; Random Number
ADC \#\$11
STA \$3D
RTS
; Section to make usage of Random Numbers
LDA \$3B
AND \#\$03
BEQ \$D914 <- From AND = 0
CMP \#\$01
BEQ \$D90E <- From AND = 1
CMP \#\$02
BEQ \$D90B <- From AND = 2
LDA \$3D
RTS ; <- Get Out of this Loop
LDA \$3C ; <- \$D90B
RTS ; <- Get Out of this Loop
LDA \$3D ; <- \$D90E
CLC
ADC \$3C
RTS ; <- Get Out of this Loop
LDA \$3D ; <- \$D914
CLC
ADC \$3C
ADC \$3B
RTS ; <- Get Out of this Loop
; Section to create number for outcome
ORA \#\$80
STA \$45
LDA \#\$00
STA \$44
LDY \#\$08
ASL \$44 ; <- \$D7A8
ROL \$45

BCC \$D7BA
TXA
CLC
ADC \$44
STA \$44
LDA \$45
ADC \#\$00
STA \$45
DEY ; <- \$D7BA
BNE \$D7A8 ; When $Y=0$ then get out of loop
RTS
; Section to determine outcome
LDA \$45
SEC
BCC \$9D96
LDY \$E7
CMP \#\$33
BCC \$9DF1 ; Interception
CMP \#\$50
BCC \$9DEE ; Deflection
;Else it becomes a Reception:
LDX \$DD ; <- \$9D96
LDA \$E8
JSR \$9E76
$+\quad$ Quote

## ImFlo

Tecmo Legend


Members † 360
1,594 posts
Location: Near Chicago, IL

Posted July 3, 2006

How much can the random numbers sway the final number. So Montana to Rice on Carrier still equals 81 , so it would have to have the random number take it down 30 to get a deflection, and about 50 to get the INT?
$+\quad$ Quote

jstout
Tecmo Super Champion


Members © 92
537 posts

Posted July 3, 2006

## (v) ImFlo said:

How much can the random numbers sway the final number. So Montana to Rice on Carrier still equals 81 , so it would have to have the random number take it down 30 to get a deflection, and about 50 to get the INT?
Flo, you are thinking in terms of skill and not value.
Montana $=55$
Rice $=55$
Carrier $=4 \mathrm{~B}$
Total $=5 \mathrm{~F}$ (This is a lot closer to 50 and 33 )
Here is a 10 play example with those 3 players:

| Total: | 5 F | 5 F | 5 F | 5 F | 5 F |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \$3B | AA | D5 | 66 | 30 | 71 |
| \$3C | B2 | E9 | 33 | 97 | 07 |
| \$3D | A2 | 85 | D3 | A9 | 33 |
| Outcome | 5A | 55 | $3 C$ | 45 | $4 B$ |

Type Catch Catch Deflect Deflect Deflect

| Total: | 5 F | 5 F | 5 F | 5 F | 5 F |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\$ 3 \mathrm{~B}$ | 04 | F3 | 33 | A7 | 69 |
| $\$ 3 \mathrm{C}$ | 71 | 4 D | 0 C | C8 | 8 F |
| $\$ 3 \mathrm{D}$ | 71 | 3 A | 86 | B6 | 64 |
| Outcome | 30 | 51 | 38 | $4 F$ | 5 E |
| Type | INT | Catch | Deflect | Deflect Catch |  |

+ Quote

In the last example, Montana has 81 PC, Rice 81 CTH, Carrier 81 INT. (81 + 81) - $81=81$--- We see out of 10 outcomes, 5 Defl, 4 CC, 1 INT.
Based on the difference in ratings (in this example 81), can you give a range where no INTs will occur, or conversely where no CCs will occur.

I'm guessing that for no INTs to occur the PC+CTH - INT (using TSB ratings) will 100 or greater, with more CCs occuring the higher the difference. Also, for CCs to stop occuring, I think the difference will be less than 50 . The lower you go, the more INTs will occur. That would give us a range of between 50 and 100 where both CCs and INTs could occur if what I wrote is anywhere close to correct.

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jstout
Tecmo Super Champion

537 posts

Posted July 3, 2006
Let me run a bunch of tests to figure out how the values for always a catch and always an INT. Here is a brief scale of the current high and low:
100 PC + 100 REC - 6 INT $=83$
100 PC + 100 REC -100 INT $=65$
$100 \mathrm{PC}+6$ REC $-100 \mathrm{INT}=47$
6 PC + 6 REC - 100 INT = 29
NOTE: PC and REC have the same default values

## + Quote

Posted July 3, 2006
The random number is based on time.
I had a series of passes where I only varied the passing speed. Thus, if I had 6 passing speed it was deflected every time. If I had 56 passing speed it was always intercepted. If I had 75 passing speed it was deflected. If I had 94 passing speed, it was intercepted. Basically what this is telling you is that in the equation of a catch that pass control and receptions are equal in value. Thus an 81 pass control to 56 receptions pass would have the same chance of being caught, intercepted, or deflected as a 56 pass control wr to 81 receptions. Also, the higher the INTs on the db, the more of a chance there is to int or deflect.

This all is nothing new but now the question is what are the percentages to be picked off given a value of PC+REC-INT? Is this more complicated to figure out because of three random values? If the equation is negative, does this always equal an int?
"You fail all of the time. But you aren't a failure until you start blaming someone else" - Bum Phillips

## jstout

Tecmo Super Champion

537 posts

Posted July 3, 2006

## Rod Woodson said:

The random number is based on time.
This all is nothing new but now the question is what are the percentages to be picked off given a value of PC+REC-INT? Is this more complicated to figure out because of three random values? If the equation is negative, does this always equal an int?
Yeah, the random numbers are based upon time. You can actually view them in certain emulators. Just by watching them, they are so fast that it is unpredictable on what number you will get. In video playbacks, the random numbers will come out the same because it is time based and will have the exact starting and end point each time.
Right, the theory isn't new (PC+REC-INT was pretty much expected and known) but being able to pinpoint probabilites with exact numbers makes it easier. For testing, I'm basically bypassing the random numbers and just viewing outcomes to find high, low, and the average number given.

## + Quote



## Randy Moss

Starter


Members © 1
242 posts

Posted July 3, 2006

## jstout said:

100 PC + 100 REC - 6 INT $=83$
100 PC + 100 REC - 100 INT = 65
100 PC + 6 REC - 100 INT $=47$
6 PC + 6 REC -100 INT $=29$
I ran some tests yesterday with extreme ratings like this. I seem to have lost my sheet, but going off of memory I believe that
100+100-6 -- always a CC
100+ 100-100 -- a mix of CC, defl, INT
100+6-100 -- either an INT or a deflection (no CCs)
6+6-100 -- always an INT

Tecmo Super Champion



Members $\oplus 92$

537 posts

## Posted July 3, 2006

The calculation for 1 Receiver vs 1 Defender:
Total = Pass Control + Receptions - Interceptions
Outcome = Total / 2 to Total - 1
INT = Outcome of $x 32$ or less
Deflect $=$ Outcome of $x 33$ to $\times 4 F$
Reception $=x 50$ or higher

| Skill | PC/REC | INT |
| :---: | :---: | :---: |
| 6 | $3 D$ | 33 |
| 13 | $3 F$ | 35 |
| 19 | 41 | 37 |
| 25 | 43 | 39 |
| 31 | 45 | $3 B$ |
| 38 | 47 | $3 D$ |
| 44 | 49 | $3 F$ |
| 50 | $4 B$ | 41 |
| 56 | $4 D$ | 43 |
| 63 | $4 F$ | 45 |
| 69 | 51 | 47 |
| 75 | 53 | 49 |
| 81 | 55 | $4 B$ |
| 88 | 57 | $4 D$ |
| 94 | 59 | $4 F$ |
| 100 | $5 B$ | 51 |

My tests (100 passes each):
100 PC + 100 REC - 6 INT (Total x83): High x82, Low x41, Average x62
6 PC + 6 REC - 100 INT (Total x29): High x28, Low x14, Average x1D
I then did some random tests to make sure the calculation worked as expected and it did.

+ Quote

Starter
-०००


Posted July 3, 2006
This is really useful Jstout. Much thanks.

BO FB Offtackle Left


Members † 253
3,135 posts
Location: New York

Posted July 3, 2006

## Quote

My tests (100 passes each):
100 PC + 100 REC - 6 INT (Total x83): High x82, Low x41, Average x62
6 PC + 6 REC - 100 INT (Total x29): High x28, Low x14, Average x1D
I'm sorry, I don't understand any of this. Could you just tell me for your 100 passes, how many were catches, deflections, and interceptions in each case?

## $+\quad$ Quote

"There's nothing wrong with reading the game plan by the light of a jukebox."

- Kenny Stabler


## Randy Moss



Members © 1
242 posts

Posted July 4, 2006
I did a little number crunching to find some good ranges. These numbers are all in regular TSB Ratings.
(PC+REC) - INT = +119 --- roughly 50\% CC's, 50\% deflections
If you go higher than +119 , all the way up to +194 , the ratio of CC's will steadily increase.
(PC+REC) - INT = +106 -- no chance of INT
(PC+REC) - INT = +56 -- roughly $66 \%$ deflections, $16 \%$ CC's, $16 \%$ INTs
(PC+REC) - INT = +31 -- no chance of CC
(PC+REC) - INT = $0-$ - 50\% INTs, $50 \%$ deflections
(PC+REC) - INT $=-56--100 \%$ INTs

## $+\quad$ Quote

Posted July 4, 2006
this came to mind while i was at work today...
The ghost arrow: in the formula pc+rec-int=X, where is the "rec" number drawn from (which wr) if you press the A button right after you throw it so that the ball is not thrown to the reciever with the arrow over him?
im thinking that it wont make much of a difference, but i've thought before and we all have seen what that can do.

Members
© 5

Tecmo Titles: Bo jackson award JuuuuuustBleeeeed!!!!!
malferds.png
malferdsrushingrecordsar6.png

## Quote

once again validating how dead on balls accurate I typically am.....
2 movies by me currently live on google video, just search for malferds i guess.

## BO FB Offtackle

 Left Tecmo Legend

Members © 253
3,135 posts
Location: New York

Posted July 4, 2006

## malferds said:

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im thinking that it wont make much of a difference, but i've thought before and we all have seen what that can do.
I didn't even know you could do that. But then, that's only useful for MAN games and I don't play many of those.
$+\quad$ Quote
"There's nothing wrong with reading the game plan by the light of a jukebox."

- Kenny Stabler

| 1 | 2 | 3 | NEXT 》 $\quad$ Page 1 of 3 - |
| :--- | :--- | :--- | :--- |

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SBlueman

## Passing Game Ratings

By Randy Moss，June 30， 2006 in Hacking Documentation

Posted July 4， 2006
（ malferds said：
The ghost arrow：in the formula pc＋rec－int＝X，where is the＂rec＂number drawn from （which wr）if you press the A button right after you throw it so that the ball is not thrown to the reciever with the arrow over him？

Malferds，I loaded up my rom and did the ghost arrow and the REC is the receiver the ball is being thrown to and not the receiver with the arrow．
It does appear the game is using a sprite hit function to determine who can catch the ball then grabbing the numbers．Basically，that is how it knows what defenders are there at the reception or if the pass was uncatchable from being errant．
＋Quote

A few interesting numbers from this finding：
A tecmo rating combination of PC and REC of 126 （Ex．63PC and 63REC）is th threshold for which a dropped pass will not occur if the WR is wide open．Every drop in REC or PC results in a $2 \%$ increase in the chance the ball will be dropped down to maximum of $30 \%$ the ball is dropped with 6PC 06 REC．
Another surpising stragegy that comes out of this is the following which is also useful with the 6363 threshold．A 63 pc 63rec combo is a good target for LB defenders with 19，25 int． You can pass without fear of INT and get a catch $42-44 \%$ of the time．

I worked up a spreadhseet i can share which will calculate the percantages of deflection \%, catch \%, and INT\% based on the tecmo rating.
HSTL based on average values: Deflect 66\% Catch 23\% INT 11\%
WTL based on average values: Defelect 70\% Catch 12\% INT 18\%
These numbers ring very true to me. We've seen about a 3\% increase in INT\% and about a 4$5 \%$ decrease in completion \%. Based on these theoretical values it looks like people throw into coverage on average about $50 \%$ of the time.

## $+\quad$ Quote

tecmobo reacted to this

Randy Moss
Starter


Members
© 1

Posted July 5, 2006

## bruddog said:

I worked up a spreadhseet i can share which will calculate the percantages of deflection \%, catch \%, and INT\% based on the tecmo rating.
Please share.


## Knobbe

Tecmo Godfather


Founder
SIte faunder
© 3,242
17,586 posts
Tecmo Titles: 1
Founder of T-Borg

Posted July 5, 2006
The randomness of the game doesn't allow you to throw 100 passes and have it come out 6 ints, 44 deflections, 50 receptions. You can only give a percentage chance of what will happen. This means that you could throw 100 passes and have 100 ints.

## BO FB Offtackle Left said:

## Quote

My tests (100 passes each):
100 PC + 100 REC - 6 INT (Total x83): High x82, Low x41, Average x62
6 PC + 6 REC - 100 INT (Total x29): High x28, Low x14, Average x1D
I'm sorry, I don't understand any of this. Could you just tell me for your 100 passes, how many were catches, deflections, and interceptions in each case?


Elsewhere
"You fail all of the time. But you aren't a failure until you start blaming someone else" - Bum Phillips

## Knobbe

Tecmo Godfather

## -०००००००००००००००



Founder
site faunder
© 3,242
17,586 posts
Tecmo Titles: 1 Founder of T-Borg

Posted July 5, 2006
Given a $81 \mathrm{pc} q \mathrm{q}$ and 69 rec WR what is the lowest the int can be in order for there to be an int and also what are the completion numbers on 19,25 , and 31 ints?

## bruddog said:

A tecmo rating combination of PC and REC of 126 (Ex. 63PC and 63REC) is th threshold for which a dropped pass will not occur if the WR is wide open. Every drop in REC or PC results in a $2 \%$ increase in the chance the ball will be dropped down to maximum of $30 \%$ the ball is dropped with 6PC 06 REC.
Another surpising stragegy that comes out of this is the following which is also useful with the 6363 threshold. A 63 pc 63rec combo is a good target for LB defenders with 19,25 int. You can pass without fear of INT and get a catch 42-44\% of the time. I worked up a spreadhseet i can share which will calculate the percantages of deflection \%, catch \%, and INT\% based on the tecmo rating.

HSTL based on average values: Deflect 66\% Catch 23\% INT 11\% WTL based on average values: Defelect $70 \%$ Catch $12 \%$ INT 18\%

These numbers ring very true to me. We've seen about a 3\% increase in INT\% and about a $4-5 \%$ decrease in completion \%. Based on these theoretical values it looks like people throw into coverage on average about $50 \%$ of the time.

+ Quote

Elsewhere

- @Tecmogodfather
- f TecmoSuperBowl Facebook
- (a) Join us on Discord
- Tecmobowl Twitch
-     - Youtube
"You fail all of the time. But you aren't a failure until you start blaming someone else" - Bum Phillips

Moderators
© 3,074
11,466 posts
Location: Ca

## Knobbe

Tecmo Godfather
-००००००००००००००० -ー००००००००००००


Founder
site faunder
© 3,242
17,586 posts
Tecmo Titles: 1
Founder of T-Borg

Posted July 5, 2006
HELLO SHIRLEY!

## bruddog said:

56INT although I'm not sure if that applies to picked plays or not.

+ Quote

Elsewhere

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- $\mathbf{P}$ Tecmobowl Twitch
-     - Youtube
"You fail all of the time. But you aren't a failure until you start blaming someone else" - Bum Phillips
bruddog Posted July 5, 2006
Down with button mashing



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Location: Ca


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11,466 posts
Location: Ca

More info from jstout. Turns out I was wrong about double coverage. Granted both defenders have to be sufficiently close and deflection is still the most likely outcome.
Double coverage: Same equation as 1 defender. It checks the first defender it finds over the receiver (RE to SS order) and does the check. If INT or deflection than it does that. If not, then it checks the 2nd defender it finds (RE to SS order) and then does the check and the result is the final outcome. It doesn't check for more than 2.

For a reciever with no defender: It does Pass Control + Reception=total. Then a random number adjust. Possible outcomes Total-1 to (Total/2) and then if 4F or more a catch and if not then dropped.
Note: any combination that adds up to 126 in tecmo skill points (ex 63 pc 63 rec) will mean your WR should never drop a wide open pass that isn't overthrown or errant. For a 06 pc to 06 rec you would expect a $30 \%$ drop rate.
A jumping defender with no receiver near him: does Pass Control - Interception=total. Then random number adjust. Possible range $=$ total- 1 to total/2. If $0 F$ or more than nothing, if 03 to OE than a deflection, else an INT Interesting note: this means a db 3 notches higher has a $50 \%$ chance of jump picking the qb with no WR nearby. And $4+$ notches higher $=100 \%$ chance of jump picking with no Wr nearby. A DB 2 notches higher will only be able to deflect. This comfrims a lot of observed theories.


## bruddog

Down with button mashing

## -ー००००००००००००००



Moderators
$\boldsymbol{\oplus} \mathbf{3 , 0 7 4}$
11,466 posts
Location: Ca

Posted November 11, 2006

Here are the locations for the hex compares

QB vs DB only:

DB whiff threshold: x29C9A default: x0F
DB INT threshold: x29C9E default: x03

Standing still reception comparison: x29D7A DEFAULT:4F

QB+WR vs DB comparison:
*Note all of these must be changed at the same time.

INT threshold 29D8C,29D9F,29DB2 DEFAULT: x33

CATCH threhold 29D90, 29DA4, 29DB6 DEFAULT: x50

OVERTHROW INT THRESHOLD (triple check)
0x29DD5, 0x29DE4, 0x29DEF
Default 0x0E

Down with button mashing

## -०००००००००००००००

## -०००००००००००००



Moderators
© 3,074
11,466 posts
Location: Ca

Posted April 7, 2008

CAn we move this to the hacking section?
I have a hard time finding this thread every time someone asks a question about it. Plus it really belongs there anyway.

+ Quote



## bgboud2

Tecmo Legend -०००००

2.0 © 577
3,579 posts
Location: Irving, TX

Posted December 29, 2010

Is it possible to do a simple hack that uses Avoid Pass Block for the JJ INTs while still using PC (or AP with hack) for the completion/incompletion/interception on other plays?

+ Quote

AIM = bgboud2
sigs.php?player=bgboud2

## bruddog Posted December 29, 2010



Moderators

11,466 posts
Location: Ca

Starter

- ○○


Members ⑮
151 posts Bruddog,

In your spread sheet is the value in cell J 11 (79) 4F in hex ( $=79$, for Standing still reception comparison: x29D7A) or 50 (= 80-1, for CC CATCH threhold 29D90, 29DA4, 29DB6)?

I think it's 50 for the CC value, but I'm not sure. Also, why is cell J9 set to 50 ? 33 in hex = 51. H10 also has the same 'issue', where 03 should be 3 , but the spreadsheet reads 2 . This is not the case for H 11 , however. Is there a reason for this?
$+\quad$ Quote


## bruddog

Down with button mashing
 Added the overthow int threshold locations.


Moderators
© 3,074
11,466 posts
Location: Ca
Posted June 26, 2013
$+\quad$ Quote
buck
DARRELL GREEN

## -•••••••••••••・ー




Posted June 27, 2013

On 6/26/2013 at 10:15 PM, bruddog said:
Added the overthow int threshold locations.
to what and where?


Quote

Location: Tecmo Super

Tecmo Titles: Lincoln V (2015)
"The right to speak and the right to refrain from speaking are complementary components of ... 'individual freedom of mind."'

## bruddog

Down with button mashing

## -०००००००००००००००

-०००००००००००००


Moderators
© 3,074
11,466 posts
Location: Ca

## kamphuna8

Tecmo Fanatic


PureTecmo Administrators


14,517 posts
Location: Tacoma
Tecmo Titles: Overrated Overstated

Posted June 5, 2014
bump
$+\quad$ Quote

tecmo gods, über alles

Starter

- 0 -


Members © 15
151 posts

## On 7/5/2006 at 3:05 PM, bruddog said:

More info from jstout. Turns out I was wrong about double coverage. Granted both defenders have to be sufficiently close and deflection is still the most likely outcome. Double coverage: Same equation as 1 defender. It checks the first defender it finds over the receiver (RE to SS order) and does the check. If INT or deflection than it does that. If not, then it checks the 2nd defender it finds (RE to SS order) and then does the check and the result is the final outcome. It doesn't check for more than 2.

For a reciever with no defender: It does Pass Control + Reception=total. Then a random number adjust. Possible outcomes Total-1 to (Total/2) and then if 4F or more a catch and if not then dropped.
Note: any combination that adds up to 126 in tecmo skill points (ex 63 pc 63 rec) will mean your WR should never drop a wide open pass that isn't overthrown or errant. For a 06 pc to 06 rec you would expect a $30 \%$ drop rate.
A jumping defender with no receiver near him: does Pass Control - Interception=total. Then random number adjust. Possible range $=$ total -1 to total/2. If 0 F or more than nothing, if 03 to 0 E than a deflection, else an INT Interesting note: this means a db 3 notches higher has a $50 \%$ chance of jump picking the qb with no WR nearby. And $4+$ notches higher $=100 \%$ chance of jump picking with no Wr nearby. A DB 2 notches higher will only be able to deflect. This comfrims a lot of observed theories.

I'm trying to calculate drop rates (offensive and defensive) by editing the spreadsheet from another link, and I have the Total+1 and Total/2 functions down. What do I need to do to get these to compare to the 4 f and $03-0 \mathrm{E}$ ranges?

I don't know the function to be used or how to get the randoms in.

## Edit:

I'm posting what I was able to get so far, which is calculating the drop rates (I haven't seen this posted on the site) and a very basic percentage function for leaping INTs. What I can't calculate right now is the "overthrow INT" threshold because is appears that there's a random number being added, and I don't know what the range would be or what other math to do. Hoping for verification on this. (Again, I can't calculate how often an "open"/unmolested defender will intercept a poorly thrown ball).
original 2D (3-4 4-3) PC worksheet by Bruddog.xls
Edited August 9, 2014 by quince 3800

Members

# OVERTHROW INT THRESHOLD (triple check) 

0x29DD5, 0x29DE4, 0x29DF3* (see edits 2 and 3)
Default 0x0E

My issue is that l've edited the underlying hex for the INT table in order to get coverage percentages that I think are appropriate; however, this meant changing the INT max (100 skill) to hex 69 instead of 81 . (I also changed the coefficient--the hex space between skill 6 to 13 , etc.--to 3 instead of 2). That then means that I had to deal with the INT differential for CC situations and for leaping INTs. I got what I want for those two, but I know that this negatively affects the free defender INT percentage; however, I don't know to what extent.

From what I'm looking at something like the "=ROUNDUP(114-1,0)" and "=ROUNDUP(114/2,0)" equations might need to be used in order to pull out the appropriate percentage, but I don't know.

I want to set up a column what will tell me X INT skill defender will intercept a poorly thrown (simply overthrown?) ball against Y PC QB Z\% of the time. Can you help me with this?
*Edit: The issue here may be what to divide by, which might just be the distance between the high and low PC values (i.e., 30). If could be that between the INT values though also.
*Edit 2: Also, there's an error in one of the posts. The DB only (standing) threshold is at 29DD5, 29DE4, 29DF3. If you enter the value at 29DEF, it breaks the game; look at the similarity in the surrounding string (C9 OE 90 repeated three times--at each location).
*Edit 3: The final location is 29dfus. I'd originally edited it to 29de3 from the posted 29def. You can verify this both in the code and the fact that the game will "break" if you go to 29def.

Edited September 1, 2014 by quince 3800

+ Quote


## buck

DARRELL GREEN

## -०००००००००००००००



Members
© 2,060
6,332 posts
Location: Tecmo Super Street
Tecmo Titles: Lincoln V (2015)

Posted September 8, 2014
So, what is up with JJ'ing defenders? Can the actual jumping or the jumping defender success rate be varied?

## $+\quad$ Quote

"The right to speak and the right to refrain from speaking are complementary components of ... 'individual freedom of mind.'"
link to change one's signature

## Knobbe

Tecmo Godfather


Founder
site faunder
© 3,242
17,586 posts
Tecmo Titles: 1
Founder of T-Borg

Posted November 6, 2014

## On 7/5/2006 at 3:05 PM, bruddog said:

A jumping defender with no receiver near him: does Pass Control - Interception=total. Then random number adjust. Possible range $=$ total -1 to total/2. If $0 F$ or more than nothing, if 03 to 0 E than a deflection, else an INT
Interesting note: this means a db 3 notches higher has a $50 \%$ chance of jump picking the qb with no WR nearby. And $4+$ notches higher $=100 \%$ chance of jump picking with no Wr nearby. A DB 2 notches higher will only be able to deflect. This comfrims a lot of observed theories.

A spreadsheet that works through all the Jump Defender scenarios and probability of Whiff, Deflection, or INT
JumpINT.xls
－${ }^{\text {－}}$＠Tecmogodfather
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－－Youtube
＂You fail all of the time．But you aren＇t a failure until you start blaming someone else＂－Bum Phillips

## buck

DARRELL GREEN


Members
© 2，060
6，332 posts
Location：Tecmo Super Street
Tecmo Titles：Lincoln V
（2015）

Posted November 6， 2014

## On 11／6／2014 at 6：59 AM，Knobbe said：

A spreadsheet that works through all the Jump Defender scenarios and probability of Whiff，Deflection，or INT
where in the hex is this stuff located if I wanted to change stuff？I am interested in tweaking：A jumping defender with no receiver near him：does Pass Control－Interception＝total． Then random number adjust．Possible range $=$ total -1 to total／2．If 0 F or more than nothing，if 03 to 0 E than a deflection，else an INT

$$
+\quad \text { Quote }
$$


＂The right to speak and the right to refrain from speaking are complementary components of ．．． ＇individual freedom of mind．＇＂
link to change one＇s signature

Knobbe
Tecmo Godfather


Founder
site faunder
${ }_{(+3,242}$
17，586 posts

Posted November 6， 2014

## On 11／6／2014 at 7：07 AM，buck said：

where in the hex is this stuff located if I wanted to change stuff？I am interested in tweaking：A jumping defender with no receiver near him：does Pass Control－

Interception＝total．Then random number adjust．Possible range $=$ total－ 1 to total／2．If 0 OF or more than nothing，if 03 to $0 E$ than a deflection，else an INT

Page 2 of this thread

Tecmo Titles： 1
Founder of T－Borg
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－－Youtube
＂You fail all of the time．But you aren＇t a failure until you start blaming someone else＂－Bum Phillips

Down with button mashing
－○○○○○○○○○○○○○ Bingo

## －०००००००००००००


$+\quad$ Quote

Moderators
© 3，074
11，466 posts
Location：Ca

| 《 | PREV | 1 | 2 | 3 | NEXT | 》 |
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> Reply to this topic...

SBlueman

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## Passing Game Ratings

By Randy Moss, June 30, 2006 in Hacking Documentation

DARRELL GREEN


Members
© 2,060
6,332 posts
Location: Tecmo Super Street
Tecmo Titles: Lincoln V (2015)
ok, I was under the impression (and was also hoping) that there was a different location regarding Defender JJ. But you are saying that the "QB vs DB only" handles everything regarding JJ and standing still and diving and etc?

## Quote

Here are the locations for the hex compares

QB vs DB only:

DB whiff threshold: x29C9A default: x0F
DB INT threshold: x29C9E default: x03

Standing still reception comparison: x29D7A DEFAULT:4F

QB+WR vs DB comparison:
*Note all of these must be changed at the same time.

INT threshold 29D8C,29D9F,29DB2 DEFAULT: x33

CATCH threhold 29D90, 29DA4, 29DB6 DEFAULT: x50

OVERTHROW INT THRESHOLD (triple check)
0x29DD5, 0x29DE4, 0x29DEF

## $+\quad$ Quote

"The right to speak and the right to refrain from speaking are complementary components of ... 'individual freedom of mind.'"
link to change one's signature
bruddog
Down with button mashing

## 



Moderators
© 3,074
11,466 posts
Location: Ca

Posted November 7, 2014

The whiff and int threshold are for the db going for a jj int.
$+\quad$ Quote
buck reacted to this

## Martin



Members

92 posts

Posted March 16, 2015

## On 11/7/2014 at 8:42 AM, bruddog said:

The whiff and int threshold are for the db going for a jj int.
So if I - in an attempt to make PA (assuming PC/PA-hack is applied) more important - would like to make an off target pass to a standing DB a guaranteed (or at least very likely) INT, this is not where to make changes?

```
+ Quote
```

Posted March 16, 2015

You would want to make these locations higher value. Example 0xFF would make every throw where an off target pass goes to the DB only an INT.

## SBlueman

Tecmo Legend


Members † 289
1,048 posts
Location: San Jose, CA

Posted November 19, 2017

On 3/16/2015 at 3:05 PM, bruddog said:
You would want to make these locations higher value. Example 0xFF would make every throw where an off target pass goes to the DB only an INT.

OVERTHROW INT THRESHOLD (triple check)
0x29DD5, 0x29DE4, 0x29DEF Default 0x0E
Will this affect COM vs COM as well?

```
+ Quote Edit Options -
```



Check out my latest release: Tecmo Super Bowl 2020 - SBlueman

## Edition

Check out my other releases: SBlueman's Downloads
Have any SET commands to share? Post 'em up in this thread: SET Command List (Use with NES TSB \& TSBTool).

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