TECMO PLAYBOOK HACKERS GUIDEBOOK for NES Tecmo Super Bowl VER 2.0

by bruddog (Dave Brude)

Foreward: This guidebook collects and organizes a lot of information found by a number of people that can also be found at www.knobbe.org/mx under the hacking documentation forum. This guide is missing a lot of graphical hack information. Since I am not as knowledgeable or as good at the graphical hacks I have left that information out.

General Hex information

Remember, hex is measured 1, 2, 3, 4, 5, 6, 7, 8, 9, A (as 10), B (11), C (12), D (13), E (14), F (15). The windows calculator (under accessories from the start menu) can be used to calculate hex. Also a byte refers to two hex digits. Thus AF, BB, 23 are all bytes.

*Important all offsets assume NES header bytes included. This should not be an issue unless you dump the ROM from an emulator in which case it might remove the header.

Tools you can use: Included with this zip file

TSBM version 0.71: Use this when you purely want to make changes to player names, team names and attributes

General Faq that can be applied to all verisons: http://www.knobbe.org/phpBB2/viewtopic.php?t=3960

*Make sure the rom is NOT set as read-only. Right-click it in windows, choose properties, and uncheck the read-only box.

TSBM version 1.3: Use this to make other changes such as schedule, team colors, player races, conference names,

This will also let you edit a teams default formation and playbook in the starters page. Example you could change Houston from A 1RB 4WR to a 2RB 1TE 2WR set.

TsbPBE.exe Beta 3 Use this for a automated way to swap or copy plays to different slots. This program by Konforce uses the majority of the information presented in this guidebook and turns it into a nice simple GUI program.

Hex editor: To make changes manually

See this thread for basic instructions: http://www.knobbe.org/phpBB2/viewtopic.php?t=4307

If you want to use the editor to swap plays around, use the *Safe Save* option. It only saves the play slot information. Doing a *Full Save* will damage the ROM in that all offensive CPU AI will be corrupted.

TSB simulations editor: To make changes to player and team simulation results

Check out this lengthy thread by SBLUEMAN http://www.knobbe.org/phpBB2/viewtopic.php?p=415&highlight= - 415

1 Modifying a team's default playbook displayed in Team Data Screen (Hex Offset 1D310) from Rod Woodson (a.k.a Mr.Knobbe)

*Note if you want to move plays to different slots this is not the recommended method. This is purely for setting up the default playbook based on what plays are currently in those slots The original Tecmo Super Bowl manager already has this feature built in. If you swap plays around make note of which play is in slot one if you want to update the teams default playbooks. Tecmo Super Bowl manager version 1.3 will do this for you but if you move plays to different slots the on screen graphics won't be updated so you will have to do it using a hex editor.

```
0001:D310 01 04 60 20 70 46 65 26 10 24 02 60 76 55 65 62 ..` pFe&.$.`vUeb 0001:D320 01 54 50 62 11 26 20 00 10 26 62 60 42 02 13 30 .TPb.& ..&b`B..0 0001:D330 35 54 44 36 20 27 21 27 37 25 74 16 11 24 27 62 5TD6 '!'7%t..$'b 0001:D340 23 63 11 45 06 24 64 20 64 73 36 45 35 56 47 56 #c.E.$d ds6E5VGV 0001:D350 10 41 14 70 53 63 47 43 12 27 04 21 70 25 25 26 .A.pScGC.'.!p%%& 0001:D360 42 10 13 31 53 66 47 27 13 64 52 23 00 34 64 24 B..1SfG'.dR#.4d$ 0001:D370 10 34 04 34 47 44 24 31 27 44 51 26 42 11 12 77 .4.4GD$1'DQ&B..w 0001:D380 04 0F 12 1D 20 2B 37 3E 00 09 13 1C 25 28 33 3C .... +7>....%(3<
```

The first seven lines are for the 28 NFL teams while the last line is for the Pro Bowl team. For the NFL teams, the each play book is made up of 4 bytes and thus each play is represented by 1 digit. You will notice that the first seven lines only use the eight values in 0-7 and don't contain any values from 8-15. This is because for each place you can change a play you have only 8 to choose from.

For example, the first team is the Buffalo Bills and their run plays are represented by 0 1 0 4. If you check out my plays link, you will see that I actually have the plays in order the same way Tecmo does. Thus, 0 should represent T Fake Sweep R, 1 should represent FB Offtackle L, 0 should represent Shotgun Draw, and the final 4 would represent Pro T Dive. You can look that up, but I can assure you that this is the default playbook.

Now what if you use a number higher than 7 for a play? Since the plays are all fairly relative to each other a number higher than 7 will represent a play from the next spot over. Thus, if you had 8 for the first running play, it would correspond to 0 from the second running play and put that play that normally could only be used in the second slot into the first slot. For example, taking our 0104 from the Buffalo Bills and changing it to 9104 would change the first play from T Fake Sweep R to FB Offtackle L.

The only side affects are:

3. If you pick a value above 7 from the last passing play slot, you will get gibberish to appear in the play select screen instead of a regular play and choosing that play will cause the game to misplay

Finally we get to the Pro Bowl plays. For some reason they've decided to use two digits per play for the pro bowl and like the Bills run and pass plays I've highlighted the running plays in red and passing in blue.

2. Modifying Formations

Have you ever wished you could implement completely new formations? Well then this next section is for you. There is currently no tool to do this.

Lets look at offset **004010**. It controls the player positioning for the different formations.

The first 22 bytes control the kickoff formation and go in the order somone listed in another post. So the last formation code would be oneback. Anyways here is the code listing starting with the PRO T formation.

04 Pro T D6A1 22A2 73A2 9AA2 D3A2 F7A2 FFA2 03A3 07A3 0BA3 0FA3

05 Slot D6A1 13A2 73A2 96A2 CFA2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

06 Onesetback D6A1 0FA2 6FA2 96A2 CBA2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

07 2TE D6A1 0FA2 6BA2 96A2 CBA2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

08 Motiond D6A1 0FA2 6FA2 96A2 BCA2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

09 Shiftone D6A1 FFA1 5CA2 8DA2 B3A2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

0A Oneback D6A1 F6A1 53A2 84A2 AAA2 F7A2 FFA2 03A3 07A3 0BA3 0FA3

0B Offset I D6A1 F2A1 4FA2 96A2 CBA2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

OC R&S shoot D6A1 0FA2 4BA2 96A2 D3A2 EFA2 FFA2 03A3 07A3 0BA3 0FA3

0D R&S 3 wing D6A1 0FA2 47A2 96A2 A6A2 EBA2 FFA2 03A3 07A3 0BA3 0FA3

0E Shotguna D2A1 3BA2 43A2 96A2 E3A2 E7A2 FBA2 03A3 07A3 0BA3 0FA3

0F Shotgunb D2A1 3BA2 43A2 96A2 9EA2 E3A2 FBA2 03A3 07A3 0BA3 0FA3

10 shot 3wing D2A1 EEA1 3FA2 80A2 A6A2 DFA2 FBA2 03A3 07A3 0BA3 0FA3

11 Shotgunc D2A1 EAA1 3BA2 96A2 9EA2 DBA2 FBA2 03A3 07A3 0BA3 0FA3

12 Redgun D2A1 E6A1 37A2 77A2 9EA2 D7A2 FBA2 03A3 07A3 0BA3 0FA3

13 No back D6A1 DAA1 26A2 8DA2 B3A2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

14 Pro T(b) D6A1 73A2 22A2 9AA2 D3A2 F7A2 FFA2 03A3 07A3 0BA3 0FA3

15 Onebackb D6A1 6FA2 0FA2 96A2 CBA2 F3A2 FFA2 03A3 07A3 0BA3 0FA3

Each play is made up of 22 bytes. Only the first byte of every two byte string seems to be significant. This is almost without a doubt because these are porbably nothing more than pointers to the actual instructions that generate the sprites. Each two byte string represents one position in the following order

QB

RB1

RB2

WR1

WR2

TE OL1

OL2

OL3

OL4

OL5

One good formation hack is to make a lot of the motion plays into a onsetback formation so that more plays are usable out of that formation and the motion doesn't give things away. A key is to make sure the players still line up in roughly the same place so that the play will run more or less the same.

3. PLAYBOOK MODIFICATION

<u>TsbPBE.exe</u> automates this process but here is the nitty-gritty on how it works.

Have you ever wished you could use all 4 shotgun plays in your playbook or get rid of those worthless reverse and flea flicker plays. This next section tells you how.

4 steps needed to swap plays

- 1. Copy 24 byte code from one play into another plays slot
- 2. Copy defensive reaction code into the new slot
- 3. Swap blitz byte into the appropriate slot
- 4. Update pointers to play graphics and player names

A. Copying code from one play into another plays slot

Play locations (Offset 1D410-1DA10)

Play length 24 bytes

Bytes 1-15 always contain the name of the play and this is what is read when you are choosing plays. To make up for shorter names spaces (hex=20) are used to fill up the remaining space.

Byte 16 is the formation of the play. The value of this byte runs from 04-15 meaning there are 18 different formations coded into the game for plays. For example, 04 is the setting for "T" formation and used quite a bit while 12 is the formation for Redgun Z Slant and is used just once in the game.

Bytes 17-24 are the pointers to the actual plays

Example

T Fake Sweep R - 10 10 50 10 10 50 10 10 T Power Sweep R - 11 11 11 11 11 11 11 FB Offtackle R - 53 53 53 53 16 16 53 53 T Power Dive - 18 18 18 18 18 18 18

Some of the run plays and 1 of the pass plays have different numbers instead of the same number repeating for 8 bytes. The reason for this is that how the play executes varies slightly for those certain plays depending on what play the defense calls. Thus, if the defense calls the first run play, then the pointer to the first byte is used.

*Limitations-Pass plays can only be swapped with pass slots and run plays with run slots. If you put a pass play into a run slot the QB is unable to pass and the play runs like a qb keeper play. Putting a run play into a pass slot works sort of like and option as the is able to pass to the qb until he passes the line of scrimmage.

B. Updating the Defenses reaction

So you think you're ready to go because you've swapped the play bytes. All is well right? Wrong.

If you don't go to this section of code and swap the bytes the defense MAY or may not react Appropriately. Since no-one has taken the painstaking amount of time to document what each defensive code does the safest thing is to just swap the bytes. Also when swapping a play into a new slot you must move the blitz byte into the appropriate location.

C. Modyfing Play Graphics (Offset: 27506)

The first 64 bytes represent the pointer to the player's name displayed above the play.

00 = QB

02 = RB 1

04 = RB 2

06 = WR 1

08 = WR 2

Other values inserted here bring up other players in the rom but can cause it to freeze up. Also, I'm assuming the 2nd 32 bytes correspond to the pass plays. Since they don't display player names and I didn't mess with them I don't know that for sure.

Next come the play graphic data. The plays are made up of 6 tiles horizontally and 7 tiles vertically. One byte is used as a pointer to the location of the tile on the rom. Thus, 42 bytes make up each graphic.

MASTER PLAY LISTING

OFFSET:1D410 LENGTH:24 bytes per play

First line= Play name play formation play pointers Differing code that needs to be swapped if moved

OFFSET:1DC10 LENGTH:8 bytes per play

Second line= Defense reaction Blitz byte highlighted that needs to be swapped if moved

OFFSET: 27546 LENGTH:42 bytes per play

Third Line= Play graphics

T FAKE SWEEP R

54 20 46 41 4B 45 20 53 57 45 45 50 20 52 20 04 10 10 50 10 10 50 10 10

5B 5A 5A 58 58 59 59 59

0101019301010101019401010190019601010198999C0101019A0191010101C2B1B40101010101910101

T POWER SWEEP

53 52 52 51 50 51 50 51

0101019301010101019401010191E89601010101989C010101919A9101010101C2B40101010101910101

WTE OFFTACKLE R

57 54 45 20 4F 46 46 54 41 43 4B 4C 45 20 52 <mark>07 12 12 12 12 12 12 12 12</mark>

57 56 56 55 54 54 55 55

0101019101010101010194010101010196010191AF8D9C01010101C29EB401010101010101010101010101010101

ONESETBACK L

20 4F 4E 45 53 45 54 42 41 43 4B 20 4C 20 20 06 13 13 13 13 13 13 13 13

5F 5E 5E 5D 5D 5C 5C

R AND S SWEEP L

52 20 41 4E 44 20 53 20 53 57 45 45 50 20 4C <mark>0C <mark>14</mark> 14 52 52 14 14 51 51</mark>

63 62 62 61 60 60 61 61

01A0A1910101018F019301010198929601010193019C0101010101910101010101930101010101940101

FB OFFTACKLE R

46 42 20 4F 46 46 54 41 43 4B 4C 45 20 52 20 08 53 53 53 53 16 16 53 53

67 66 66 65 64 64 65 65

01019491010101019F90010101019F960101918DB79C010101C2B79EB4010101BD010101010101010101

FB OPEN L

20 20 20 46 42 20 4F 50 45 4E 20 4C 20 20 20 <mark>09 54 54 54 54 17 17 17 17</mark>

67 6A 6A 69 68 68 69 69

01A0A1910101018F01900101018F01960101019BB19C0101010101960101010101010101010101940101

TOSS SWEEP R

20 54 4F 53 53 20 53 57 45 45 50 20 52 20 20 0B 55 55 55 55 15 15 15 15

67 6D 6D 6C 6B 6B 6C 6C

010101910101010101010101010101019601019198999C0101019A9396010101C2B4010101010101900101

RUN SLOT 2 PLAYS 9-16

T POWER DIVE

20 54 20 50 4F 57 45 52 20 44 49 56 45 20 20 <mark>14</mark> 18 18 18 18 18 18 18 18

70 <mark>5F</mark> 6F 70 6E 6E 6F 6F

0101019301010101019401010193019601010195 A3A6A10101930191010101010101010101010101940101

FB OFFTACKLE L

46 42 20 4F 46 46 54 41 43 4B 4C 45 20 4C 20 06 56 56 56 56 19 19 19 19

73 <mark>5F</mark> 72 73 71 71 72 72

010101910101010101019001010101959EB40191AF979C0101010101960101010101010101010101900101

R AND S DRAW

20 52 20 41 4E 44 20 53 20 44 52 41 57 20 20 <mark>0C 1A 1A 1A 1A 1A 1A 1A 1A 1A</mark>

76 <mark>5B</mark> 75 76 74 74 75 75

 $0101019101010101019301010101010196010191 ext{AFA3A6A101010101910101010101930101010101940101}$

PITCH L FAKE

20 50 49 54 43 48 20 4C 20 46 41 4B 45 20 20 <mark>06 1B 1B 1B 1B 1B 1B 1B 1B 1B</mark>

79 <mark>5B</mark> 77 78 78 79 78 77

01A0A1910101018F019001010198929601010193019C0101010101960101010101010101010101900101

ONEBACK SWEEP R

4F 4E 45 42 41 43 4B 20 53 57 45 45 50 20 52 <mark>09 01 <mark>01</mark> 1C 01 1C 01 00 00</mark>

7C <mark>5F</mark> 7A 7B 7A 7C 7B 7B

01010191010101010190010101010196010191AF989C010101019A9601010101C2B40101010101940101

WEAKSIDE OPEN

20 57 45 41 4B 53 49 44 45 20 4F 50 45 4E 20 08 02 02 02 02 1D 1D 1D 1D

7F <mark>5F</mark> 7E 7F 7D 7D 7E 7E

01019491010101019F90010101019F9601019198B79C0101018F9F960101019ABD01010101C2B4010101

T OFFTACKLE R

20 54 20 4F 46 46 54 41 43 4B 4C 45 20 52 20 <mark>04 03 03 03 03 1E 1E 1E 1E</mark>

82 <mark>5F</mark> 81 82 80 80 81 81

010101930101010101940101018E9296010101C2CB9C01010191D2C8A101010101010101010101940101

T SWEEP STRONG

20 54 20 53 57 45 45 50 20 53 54 52 4F 4E 47 04 1F 1F 1F 1F 1F 1F 1F 1F

52 <mark>53</mark> 51 52 50 51 50 51

 $010101930101010101019401010191 \\ E89601010101989 \\ C010101919 \\ A910101010101 \\ C2B1B401010101940101$

RUN SLOT 3 PLAYS 17-24

SHOTGUN DRAW

20 53 48 4F 54 47 55 4E 20 44 52 41 57 20 20 <mark>0F 04 04 04 04 04 04 20 20</mark>

84 85 <mark>5B</mark> 85 84 84 83 83

010101910101010101930101018EA0B3A10101B297BF01010101019101010101930101010101940101

R AND S SWEEP R

52 20 41 4E 44 20 53 20 53 57 45 45 50 20 52 <mark>0C 05 05 05 05 22 22 22 22</mark>

88 87 <mark>5F</mark> 88 87 87 86 86

0101019101010101019301010101019601019198999C0101019A9491010101C2B1B1B401010101940101

T CROSS RUN L

20 54 20 43 52 4F 53 53 20 52 55 4E 20 4C 20 <mark>04 <mark>07 07 07 07 21 06 06 21</mark></mark>

8A 8B <mark>5B</mark> 8B 89 8A 89 8A

01A0A1930101018F01940101918F019601010198B19C0101019301910101010101010101010101940101

SLOT OFFTACKLE

53 4C 4F 54 20 4F 46 46 54 41 43 4B 4C 45 20 <mark>05</mark> 08 08 08 08 24 24 24 24

8D 8E <mark>8F</mark> 8E 8D 8D 8C 8C

01010191010101F9B69301010195B79EB4010198B79C010101939F9601010101BD010101010101010101

CROSS OFFTACKLE

43 52 4F 53 53 20 4F 46 46 54 41 43 4B 4C 45 04 09 09 09 09 26 26 26 26

90 91 <mark>8F</mark> 92 91 92 90 91

0101019301010101019401010193959EB4010195979C0101019301910101010101010101010101940101

PITCH L OPEN

20 50 49 54 43 48 20 4C 20 4F 50 45 4E 20 20 <mark>15 0B 0B 0B 0B 27 0A 27 0A</mark>

95 94 <mark>8F</mark> 95 93 94 93 94

01A0A1910101018F01900101018F01960101019B999C0101010101960101010101010101010101900101

WR REVERSE R

20 57 52 20 52 45 56 45 52 53 45 20 52 20 20 06 0C 0C 0C 0C 23 23 23 23

97 96 <mark>99</mark> 98 97 98 97 96

A0A8A9AC01018FBB019001018F8F019601018F9B999C01019A0101960101C2B401010101010101900101

WR REVERSE L

20 57 52 20 52 45 56 45 52 53 45 20 4C 20 20 09 0D 0D 0D 0D 25 25 25 25

9B 9A <mark>8F</mark> 9C 9B 9C 9A 9B

01A0A1910101018F01900101018F0196010191BE989C0101018F8F960101019ABB01010101C2AFBA0101

RUN SLOT 4 PLAYS 25-32

R AND S OB RUN

52 20 41 4E 44 20 53 20 20 51 42 20 52 55 4E OC 0E 0E 0E 0E 2A 2A 2A 2A

9E 9F 9F <mark>8F</mark> 9E 9E 9D 9D

01A0A1910101018F01930101019A0196010191C2B19C0101010101910101010101930101010101940101

SHOTGUN SWEEP L

53 48 4F 54 47 55 4E 20 53 57 45 45 50 20 4C 10 2D 0F 0F 0F 2D 2D 2D 2D

A1 A2 A2 <mark>8F</mark> A1 A1 A0 A0

01A0A1010101018F01940101018F01960101019B99BF010101939491010101019401010101010101940101

R AND S QB SNEAK

52 20 41 4E 44 20 53 20 51 42 53 4E 45 41 4B <mark>0C 2E 57 57 <mark>57</mark> 2E 2E 2E 2E</mark>

A4 A5 <mark>A5 8F</mark> A4 A4 A3 A3

0101019101010101019301010101019601010193AEA6A101010101910101010101930101010101940101

ONESETBACK DIVE

4F 4E 45 53 45 54 42 41 43 4B 20 44 49 56 45 <mark>09 29 29 29 29 29 29 29 29</mark>

A7 A8 <mark>A8 5F</mark> A7 A7 A7 A6

0101019101010101010190010101010196010191B1A3A6A101010101960101010101010101010101940101

PRO T DIVE

20 20 50 52 4F 20 54 20 44 49 56 45 20 20 20 <mark>04 28 28 28 28 28 28 28 28</mark>

A9 AA AB <mark>5F</mark> AB AA AA A9

0101019301010101019401010193019601010195 A3A6A10101930191010101010101010101010101940101

FB POWER DIVE

20 46 42 20 50 4F 57 45 52 20 44 49 56 45 20 <mark>0B 2B 2B 2B 2B 2B 2B 2B 2B 2B</mark>

AD AE AE <mark>5F</mark> AD AD AC AC

0101019101010101010101010101010196010191B1A3A6A101019101960101010101010101010101900101

SHOTGUN C DRAW

53 48 4F 54 47 55 4E 20 43 <u>20 44 52 41 57 20 <mark>11</mark> 58 58 58 58 58 58 2C 2C</u>

B0 B1 B1 <mark>5B</mark> B0 B0 AF AF

 $0101019101010101010193010101 {
m AAABB3A101019B99BF01010101019101010101930101010101940101}$

REVERSE PITCH R

52 45 56 45 52 53 45 20 50 49 54 43 48 20 52 <mark>04 59 59 2F <mark>59</mark> 2F 59 2F 2F</mark>

B3 B4 B2 99 B2 B4 B3 B3

B8A9AC0101019899B99401018F918F9601018F01989C01019A91BC910101C2B1B4010101010101940101

PASS SLOT 1 PLAYS 33-40

PRO T WAGGLE L

50 52 4F 20 54 20 57 41 47 47 4C 45 20 4C 20 <mark>04 30 30 30 30 30 30 30</mark> 30 30

B5 B5 B6 B6 <mark>5F</mark> B7 B7 B7

E201D8B1B1B4E80194CA0101EC959EBC0101EABE9C01010191BC910101CA01010101018F010191B1B1BC

R&S FLARE C

52 20 41 4E 44 20 53 20 46 4C 41 52 45 20 43 <mark>0C 31 31 31 31 31 31 31 31</mark>

B8 B8 B9 B9 <mark>BB</mark> BA BA BA

0194C8C1B1B4A0ABABC0A1018F0196C2C30193C99C01010101019101010191B1C4ABA10101E4C6B401

PRO T WAGGLE R

50 52 4F 20 54 20 57 41 47 47 4C 45 20 52 20 <mark>04 32 32 32 32 32 32 32 32</mark> 32 32 32

BD BD BC BC <mark>5F</mark> BE BE BE

0101D8B1B1C301019401010191CB96010101FAE19C010101ECE391010101E9C2C30195CC010191B1DC01

ROLLOUT R

20 20 52 4F 4C 4C 20 4F 55 54 20 52 20 20 20 <mark>09 33 33 33 33 33 33 33 33</mark>

BF BF C0 C0 <mark>5F</mark> C1 C1 C1

01E091B1CB01018F9001C2C3B8E696010101ECBC9C010101E80196EB0101E90101C2C3D3010191B1B1DC

ROLLOUT L

20 20 52 4F 4C 4C 20 4F 55 54 20 4C 20 20 20 08 34 34 34 34 34 34 34 34 34

C2 C2 C3 C3 5F C4 C4 C4

E29491B1B1B4E89FE4CE0101ED9F96010101EFB59C010101019F96ABCE01019F01010101019FABABABCE

PLAY ACTION D

54 20 50 4C 41 59 20 41 43 54 49 4F 4E 20 44 <mark>04 35 35 35 35 35 35 35 35</mark>

C5 C6 C6 C5 BB C7 C7 C7

0101D8B1CB0101019401C2C3959396010101C9E7A6ABEE018F93910101019A0101010101C2B494ABABA1

PRO T SCREEN

50 52 4F 20 54 20 53 43 52 45 45 4E 20 4C 20 <mark>04 36 36 36 36 5A</mark> 36 36 36 <mark>36</mark>

C8 C8 C9 C9 BB CA CA CA

0101D8B1B1B401E094ABEB0101939601C2C301C99C010101019391010101010101010101010194ABABEE

PLAY ACTION

20 20 50 4C 41 59 20 41 43 54 49 4F 4E 20 20 <mark>0B 37 37 37 37 37 37 37</mark> 37

CB CC CC CB BB CD CD CD

010191B1B1B401010101010101019601010191C7A6ABA1010193960101010101010101D40101D8B1B1DC

PASS SLOT 2 PLAYS 41-50

PWR FAKE Z POST

50 57 52 20 46 41 4B 45 20 5A 20 50 4F 53 54 <mark>06 38 38 38 38 38 38 38 38</mark>

CF CF CE CE D0 BB D0 D0

010191B1CC0101019001010101959EB4010191CD9C010101010196010101010101010101010194ABABCE

WTE F-FLICKER

20 57 54 45 20 46 3B 46 4C 49 43 4B 45 52 20 07 39 39 39 39 39 39 39 39 39

D1 D1 D2 D2 D3 <mark>5F</mark> D3 D3

010191B1B1B4010194010101B8CF96010101ECA3D5010101E999D7010101010101010101010194ABABCE

SHOTGUN X CURL

53 48 4F 54 47 55 4E 20 58 20 43 55 52 4C 20 <mark>0F 3A 3A 3A 3A 3A 5B 3A 3A</mark>

D4 D4 D5 D5 D6 DA D6 D6

A0A191B1B1C58F01D8B1C5019301960101019B99BF01010101010101010101D8B1C501010194ABABEE

R AND S Z FLY

20 52 20 41 4E 44 20 53 20 5A 20 46 4C 59 20 0C 3B 3B 3B 3B 3B 3B 3B 3B 3B

D7 D7 D8 D8 D9 DA D9 D9

010191B1CC010101E4ABABA101019601010191C99C0101010101010101010101D8B1CC01010194ABABA1

PRO T FLARE D

20 50 52 4F 20 54 20 46 4C 41 52 45 20 44 20 <mark>04 3C 3C 3C 3C 3C 3C 3C 3C</mark>

DB DB DC DC DD <mark>DA</mark> DD DD

E091B1B1B1C38F0194EB0101930196C2C30101C99C0101019001910101019A0101A0EB01C2C391DCC2C3

OFFSET FLARE E

4F 46 46 53 45 54 20 46 4C 41 52 45 20 45 20 <mark>0B 3D 3D 3D 3D 3D 3D 3D 3D</mark> 3D

DE DE DF DF E0 DA E0 E0

010191B1B1C5010101010101010101960101018EC99C010101E39496010101E3C2F7CE0101C2C3E4ABABA1

ONEBACK Z CROSS

4F 4E 45 42 41 43 4B 20 5A 20 43 52 4F 53 53 0A 3E 3E 3E 3E 3E 3E 3E 3E 3E

E1 E1 E2 E2 E3 <mark>DA</mark> E3 E3

0101E4ABCE0101019401010101019601010101C99C01CA0191F7B3FEBC01019FFBC0ABA1019F90C2C301

ONEBACK FLARE A

4F 4E 45 42 41 43 4B 20 46 4C 41 52 45 20 41 <mark>06 3F 3F 3F 3F 3F 3F 3F 3F</mark>

E4 E4 E5 E5 E6 <mark>DA</mark> E6 E6

010191B1B1C50101E4EB0101010196C2C30191C99C0101010101960101010101010101010101E4ABABCE

PASS SLOT 3 PLAYS 51-58

T FLEA FLICKER

54 20 46 4C 45 41 20 46 4C 49 43 4B 45 52 20 <mark>04 40 40 40 40 40 40 40</mark>

E7 E8 E7 E8 E9 E9 <mark>BB</mark> E9

010101D8B1C394D0E0940101B8A28F960101E9A4BE9C010194ABD19101010101010101CA01010191B1BC

PWR FAKE X FLY

50 57 52 20 46 41 4B 45 20 58 20 46 4C 59 20 <mark>06 41 41 41 41 41 41 41 41</mark>

EA EB EA EB EC EC <mark>DA</mark> EC

010191B1B1B401019001010101959EB4010191CD9C010101010196ABCE010101010101010101E4ABABA1

SHOTGUN X DRIVE

53 48 4F 54 47 55 4E 20 58 20 44 52 49 56 45 <mark>0E 42 42 42 42 42 42 42 42</mark>

EE EE ED ED EF EF <mark>BB</mark> EF

A0A191B1FFB48F01D8B1BC019301960101019B99BF01010101019101D3010101D8B1DC01010194ABABA1

R AND S 3WING

52 20 41 4E 44 20 53 20 33 3B 57 49 4E 47 20 0D 43 43 43 43 43 43 43 43

F1 F1 F0 F0 F2 F2 DA F2

010191B1B1B40101010101010101019601A0A191C99C018F010101DAABD1CA0101D8B1B1BC010194ABABA1

PLAYACTION Z IN

50 4C 41 59 41 43 54 49 4F 4E 20 5A 20 49 4E 09 <mark>44 44 44 44 44 44 44 44</mark>

F4 F4 F3 F3 F5 F5 BB F5

010191B1B1B40101E4ABEE01010196010101F3F2A6A101010101960101010101010101CA010194ABABD1

FLEA FLICKER

20 46 4C 45 41 20 46 4C 49 43 4B 45 52 20 20 08 45 45 45 45 45 45 45 45 45

F7 F6 F6 F7 F8 F8 <mark>BB</mark> F8

019491B1B1CC019FE4CE0101B8A59601010193B09C010101019F96010101019FABABABCE010101010101

PRO T FLARE C

20 50 52 4F 20 54 20 46 4C 41 52 45 20 43 20 <mark>04 46 46 46 46 46 46 46 46</mark>

FA FA F9 F9 FB FB <mark>DA</mark> FB

0101D8B1B1B4010194ABEB0191019601C2C301C99C0101018E0191010101C2F7ABABCE01010194ABABEE

SHOTGUN 3 WING

53 48 4F 54 47 55 4E 20 33 3B 57 49 4E 47 20 10 47 47 47 47 47 47 47 47 47

FD FD FC FC FE FE BB FE

010101010101010194ABCE010101960101019B99BF01010191FDF6ABCE010194FCABEE01010194ABABCE

PASS SLOT 4 PLAYS 59-64

SHOTGUN XY BOMB

53 48 4F 54 47 55 4E 20 58 59 20 42 4F 4D 42 11 48 48 48 48 48 48 48 48

14 14 13 13 15 15 15 DA

010191B1B1B40101D8B1B1B491B19EB1CC019B99BF01010101019101010101D8F7ABCE010194ABABA1

R AND S Y UP

20 52 20 41 4E 44 20 53 20 20 59 20 55 50 20 0C 49 49 49 49 49 49 49 49

17 17 16 16 18 18 18 <mark>DA</mark>

A0A191B1B1C38F01D8B1C3018F019601010193C99C0101010101910101010101D8B1B1B4010191B1B1C3

X OUT AND FLY

20 58 20 4F 55 54 20 41 4E 44 20 46 4C 59 20 06 4A 4A 4A 4A 4A 4A 4A 4A 4A

1A 1A 19 19 1B 1B 1B <mark>BB</mark>

010191B1F7CE0101E4CE01010101960101018EC99C010101D2EB96F1ABCE01C2B1BC01010101E4ABABCE

SLOT L Z DRIVE

52 45 56 3B 46 41 4B 45 20 5A 20 50 4F 53 54 06 4B 4B 4B 4B 4B 4B 4B 4B

1A 1A 19 19 1B 1B 1B BB

0101E00101010195D6BA010195DC8F900101BBDFDD960101C9BAAF9C0101010101960101010101E4ABCE

REV FAKE Z POST

53 4C 4F 54 20 4C 20 5A 20 44 52 49 56 45 20 05 4C 4C 4C 4C 4C 4C 4C 4C

20 20 1F 1F 21 21 21 <mark>22</mark>

010191B1B1B494B6D8B1C301019F9601010101C99C010101909F96EB01019A9FABF5ABCEC2F7A1010101

BACK X DEEP

4E 4F 20 42 41 43 4B 20 20 58 20 44 45 45 50 13 4D 4D 4D 4D 4D 4D 4D 4D 4D

24 24 23 23 25 25 25 <mark>22</mark>

019491B1B1C501F8ABEBD301019F96C2BC0101C99C01A0A1019F96018F01019FABABD101010194ABABA1

SHOTGUN Z S IN

53 48 4F 54 47 55 4E 20 5A 20 53 3B 49 4E 20 <mark>0E 4E 4E 4E 4E 4E 4E 4E 4E</mark>

27 27 26 26 28 28 28 <mark>22</mark>

01DB91B1B1B4018FD8B1B1C3019396010101019BBF01010101019101CA010101D8B1BC01010191B1B1B4

REDGUN Z SLANT

52 45 44 47 55 4E 20 5A 20 53 4C 41 4E 54 20 <mark>12 4F 4F 4F 4F 4F 4F 4F 4F</mark>

2A 2A 29 29 2B 2B 2B <mark>22</mark>

01019001010101D3E5B1B1B4018FF0DEB1C3018F96E3010196D9BFE30101010191C2C301010194ABABA1

D) Changing WR routes, blocking, QB dropback, etc

I wouldn't advise changing much with offensive plays since it is unkown how to change the defense reacts to the play as well as correct offensive logic. However it can be useful to make minor changes. For instance, I used this information to get rid of the play action in certain plays by copying the QB byte from another play so that the qb would drop straight back. You must play test any changes.

The play information starts at offest: 4410

To Use onebacksweep as an example. If we go back to the play master list we see that

Play name Formation byte Play Pointer

Oneback sweep has 3 possible offensive plays depending on what the defense picks it will be run slightly differently If we look at play pointers 00 and 01 and compare their differences forgetting about the third alternate play pointer 1C for now.

QB=6AAA for both versions

RB1=87AA for both versions

RB2= C6AA for both versions

WR1= CCAA for both versions

WR2=8EB7 for both versions

TE1=4EBE for both versions

OL1= 30BE for both versions

OL2=2EB8 for both versions

OL3= 93B7 for one play and 9CB7 for another play

So there is a slight difference in how one of the OL blocks depending on what the defense calls. By copying

and pasting certain bytes into other bytes you can create new plays. I would do a lot of testing to make sure any changed plays are ok.

Here is the corrected list:

ONEBACK SWEEP R 6AAA 87AA C6AA CCAA 8EB7 4EBE 30BE 2EB8 9CB7 2ABE 36BE WEAKSIDE OPEN 3EAB 87AA 55AB CCAA 66BE 5BAB 9CB7 30BE 36BE 2ABE 4EBE T OFFTACKLE R 16AC 21AC 58AC 9DA3 66BE 3CBE 30BE 42BE 9CB7 2ABE 36BE SHOTGUN DRAW 7EAC 81AC A5B7 B4B7 B9B7 BEB7 99BE DBAC BBBE E8AC EEAC R AND S SWEEP R FFAD 0AAE 44AE 9DA3 4AAE 53AE 9CB7 C3B7 77AE 89AE 8FAE T CROSS RUN L (ALT) F4AC 0BAD 17AD 59AD 01A9 5FAD 30BE 67AD 76AD 2ABE 9CB7 T CROSS RUN L F4AC 0BAD 17AD 59AD 01A9 E8B7 30BE 67AD 2EB8 2ABE 9CB7 SLOT OFFTACKLE 95AE A3AE B5AE 54BE 5FA6 36BE 7EA6 83A6 89A6 3CBE 9CB7 CROSS OFFTACKLE F4AC OBAD F1AE 59AD 01A9 5FA6 7EA6 83A6 89A6 3CBE 9CB7 PITCH L OPEN (ALT) 26B8 66AF 2AAF 59AD 01A9 6CAF 42BE 67AD 76AD 2ABE 9CB7 PITCH L OPEN 26B8 66AF 2AAF 59AD 01A9 6CAF 42BE 67AD 2EB8 2ABE 9CB7 WR REVERSE R 30A9 9EA9 B0A9 BBA9 00AA D1B7 99BE ACBE BBBE CABE D7B7 WR REVERSE L 6AAA D4AA EEAA 60BE F6AA 4EBE 30BE 42BE 9CB7 2ABE 36BE R AND S QB RUN 08B0 4FB0 3CBE 59AD 76B0 61B0 30BE C8A3 67B0 2ABE 9CB7 SHOTGUN SWEEP L (ALT) 7BB1 B9B1 E2B7 DDB7 76B0 C6B1 30BE 67AD CEB1 2ABE F2B1 T FAKE SWEEP R 3AA3 4CA3 86A3 9DA3 AEA3 B7A3 BFA3 C8A3 CEA3 D7A3 DDA3 T POWER SWEEP 3DA4 4BA4 87A4 9DA4 A0A4 ABA4 B4A4 BDA4 CFA4 E4A4 4EBE WTE OFFTACKLE R 5CA5 67A5 9DA5 9DA4 ACA5 B7A5 30BE 42BE 48BE 2ABE CAA5 ONESETBACK L 15A6 26A6 5FA6 9DA4 6DA6 78A6 7EA6 83A6 89A6 3CBE CAA5 R AND S SWEEP L CDA6 D8A6 3CBE 81B7 14A7 20A7 7EA6 83A6 89A6 26A7 36BE TOSS SWEEP R (Alt) 2FA7 39A7 4DA7 9DA3 8EB7 4EBE 86A7 30BE CFA4 D7A3 36BE FB OFFTACKLE R (Alt) 3EAB C9AB 55AB CCAA 2ABF 05AC 86A7 30BE 36BE 2ABE 10AC FB OPEN L (Alt) 8BA7 9FA7 E1A7 86B7 F9A7 E7A7 30BE 83A6 BBBE F0A7 D9BE T POWER DIVE 49A8 5AA8 8EA8 9DA3 AEA3 B7A3 BFA3 C8A3 CEA3 D7A3 DDA3 FB OFFTACKLE L 15A6 26A6 5FA6 86B7 A2A8 36BE 7EA6 83A6 89A6 3CBE 48BE R AND S DRAW B4A8 BFA8 F5A8 FBA8 01A9 07A9 99BE ACBE 0DA9 CABE 1DA9 PITCH L FAKE 30A9 3BA9 78A9 84A9 98A9 8ABE 99BE ACBE BBBE CABE D9BE ONEBACK SWEEP R (Alt) 6AAA 87AA C6AA CCAA 8EB7 4EBE 30BE 42BE 48BE 2ABE 36BE WEAKSIDE OPEN (ALT) 3EAB 87AA 55AB CCAA 2ABF 5BAB 86A7 30BE 36BE 2ABE 4EBE T OFFTACKLE R (ALT) 16AC 21AC 58AC 9DA3 64AC 3CBE 30BE 42BE 48BE 2ABE 36BE T SWEEP STRONG 3DA4 4BA4 6DAC 9DA4 AOA4 ABA4 B4A4 BDA4 CFA4 E4A4 4EBE SHOTGUN DRAW (ALT) 7EAC 81AC C3AC C9AC CFAC D5AC 99BE DBAC BBBE E8AC EEAC T CROSS RUN L (ALT) F4AC 0BAD 17AD C9B7 01A9 5FAD 30BE 67AD 76AD 2ABE 9AAD R AND S SWEEP R (ALT) FFAD OAAE 44AE 9DA3 4AAE 53AE 86A7 5CAE 77AE 89AE 8FAE WR REVERSE R (ALT) 30A9 9EA9 BOA9 BBA9 00AA 0EAA 99BE ACBE BBBE CABE 1AAA SLOT OFFTACKLE (ALT) 95AE A3AE B5AE 86B7 5FA6 36BE 7EA6 83A6 89A6 3CBE 48BE WR REVERSE L (ALT) 6AAA D4AA EEAA CCAA F6AA 4EBE 30BE 42BE 48BE 2ABE 36BE CROSS OFFTACKLE (ALT) F4AC 0BAD F1AE C9B7 01A9 5FA6 7EA6 83A6 89A6 3CBE 48BE PITCH L OPEN (ALT) 26B8 66AF 2AAF C9B7 01A9 6CAF 42BE 67AD 76AD 2ABE 9AAD PRO T DIVE E6A3 F7A3 09A4 9DA3 AEA3 B7A3 BFA3 C8A3 CEA3 D7A3 DDA3 ONESETBACK DIVE 78AF 86AF BAAF 9DA3 CCAF D8AF BFA3 C8A3 CEA3 D7A3 DDA3 R AND S QB RUN (ALT) 08B0 4FB0 3CBE C9B7 76B0 61B0 30BE C8A3 67B0 2ABE 48BE FB POWER DIVE B4B0 8DB0 86AF 9DA3 A2B0 D8AF BFA3 C8A3 CEA3 D7A3 DDA3 SHOTGUN C DRAW (ALT) EBBO C3AC F2BO C9AC CFAC D5AC 99BE DBAC BBBE CABE D9BE SHOTGUN SWEEP L 7BB1 B9B1 4EBE DDB7 76B0 C6B1 30BE 67AD CEB1 2ABE F2B1 R AND S QB SNEAK 28B1 32B8 5DB1 54BE 5ABE 63B1 30BE 42BE 6FB1 2ABE 48BE REVERSE PITCH R (ALT) FBB1 1BB2 2DB2 45B2 01A9 5FAD 30BE 67AD 76AD 2ABE 9AAD PRO T WAGGLE L EDA4 31A5 42A5 3CB8 52A5 ABA4 B4A4 BDA4 CFA4 E4A4 4EBE R AND S FLARE 87B2 62B9 7BB9 87B9 96B9 A6B9 99BE DBAC BBBE CABE D9BE PRO T WAGGLE R AOAD E9B8 EAAD 72B8 F6B8 5FAD 30BE 67AD 76AD 2ABE 9AAD ROLLOUT R 08A8 5AB8 E1A7 92BD 7CB8 8FB8 30BE 83A6 BBBE F0A7 D9BE ROLLOUT L 6EAB B4AB C8B8 9CBD DCB8 D2B8 86A7 30BE 36BE 2ABE 4EBE PLAY ACTION D BFB2 D7B9 BBB9 DEBD A0BD B7A3 BFA3 C8A3 CEA3 D7A3 DDA3 PRO T SCREEN EFB2 F3B9 7BBE A4BD 0BBA 21BA 99BE ACBE BBBE CABE D9BE PLAY ACTION C2B0 8DB0 36B9 A0BD 4FB9 D8AF BFA3 C8A3 CEA3 D7A3 DDA3 PWR FAKE Z POST FFB7 B8A6 5FA6 9BB8 7CB8 36BE 7EA6 83A6 89A6 3CBE 48BE WTE F-FLICKER DEA5 FEA5 9DA5 AOBD 46B8 B7A5 30BE 42BE 48BE 2ABE CAA5 SHOTGUN X CURL 2BB3 A8BD 2BBA 51BA 67BA 3EBA 99BE ACBE BBBE CABE D9BE R AND S Z FLY 63B3 6CBE 3CB8 B8BD A0BD 7DBA 99BE ACBE BBBE CABE D9BE

ONEBACK SWEEP R (Alt) 6AAA 87AA C6AA CCAA 8EB7 4EBE 30BE 2EB8 93B7 2ABE 36BE

PRO T FLARE D 9FB3 C2BD 87BA A8BA B5BA C6BD 99BE ACBE BBBE CABE D9BE OFFSET FLARE E C1B3 C4BA DABA CABD A0BD 8ABE 99BE ACBE BBBE CABE D9BE EONEBACK Z CROSS F5B3 ECBA 08BB 11BB 1EBB 29B4 99BE ACBE BBBE CABE D9BE FONEBACK FLARE A 36B4 6CBE 2BBB CABD 35BB 8ABE 99BE ACBE BBBE CABE D9BE T FLEA FLICKER 71B4 98B4 3FBB A8BA 2CB9 ABA4 B4A4 BDA4 CFA4 E4A4 4EBE PWR FAKE X FLY 8FA6 B8A6 5FA6 A4BD A0BD 50B8 7EA6 83A6 89A6 3CBE CAA5 SHOTGUN X DRIVE ACB4 54BB 69BB 3CB8 73BB A4BD 99BE ACBE BBBE CABE D9BE R AND S WING F5B4 31B5 7DBB A0BD 9CBD 9BBB 99BE ACBE BBBE CABE D9BE PLAYACTION Z IN E1AF 0FB9 19B9 A0BD CEBD D8AF BFA3 C8A3 CEA3 D7A3 DDA3 FLEA FLICKER 3CB5 6EB5 A5BB AFBB B9BB 5BAB 86A7 30BE 36BE 2ABE 4EBE PRO T FLARE C 82B5 6CBE C6BB A0BD 67BA DCBB 99BE ACBE BBBE CABE D9BE SHOTGUN WING BDB5 E6BB F9BB 0FBC 19BC 23BC 99BE ACBE BBBE CABE D9BE SHOTGUN XY BOMB EFB5 3CB8 2DBC A4BD A0BD 3ABC 99BE ACBE BBBE CABE D9BE R AND S Y UP 29B6 52BC 6DBC D6BD 77BC D2BD 99BE ACBE BBBE CABE D9BE X OUT AND FLY 66B6 81BC DABD 9ABC 7CB8 AABC 99BE ACBE BBBE CABE D9BE REV FAKE Z POST 26AA A5B8 78A9 52AA 7CB8 8ABE 99BE ACBE BBBE CABE D9BE SLOT L Z DRIVE 9BB6 B4BC C4BC CEBC D8BC E8BC 99BE ACBE BBBE CABE D9BE BACK X DEEP DFB6 F2BC 08BD CABD A0BD 8ABE 99BE ACBE BBBE CABE D9BE SHOTGUN Z S IN 15B7 15BD 28BD 32BD 47BD A4BD 99BE ACBE BBBE CABE D9BE REDGUN Z SLANT 43B7 51BD 6CBD 7FBD A4BD 3CB8 99BE ACBE BBBE CABE D9BE T FAKE SWEEP R (Alt Variation) 3AA3 4CA3 86A3 9DA3 AEA3 2EB8 BFA3 C8A3 75B7 D7A3 DDA3 R AND S SWEEP L (Alt) CDA6 D8A6 3CBE 81B7 14A7 7BB7 7EA6 83A6 89A6 26A7 36BE R AND S SWEEP L (Alt) CDA6 D8A6 3CBE 54BE 14A7 7BB7 7EA6 83A6 89A6 26A7 36BE FB OFFTACKLE R 3EAB C9AB 7BB7 CCAA 66BE 05AC 32B8 30BE 36BE 2ABE 10AC FB OPEN L 8BA7 9FA7 E1A7 54BE F9A7 E7A7 30BE 83A6 BBBE F0A7 D9BE TOSS SWEEP R 2FA7 39A7 4DA7 9DA3 5ABE 4EBE 86A7 30BE CFA4 D7A3 36BE FB OFFTACKLE L (Alt) 15A6 26A6 5FA6 54BE A2A8 36BE 7EA6 83A6 89A6 3CBE 32B8 R AND S QB SNEAK (ALT) 28B1 32B8 5DB1 54BE 5ABE 63B1 30BE 69B1 6FB1 2ABE 75B1 SHOTGUN C DRAW EBBO A5B7 F2BO B4B7 B9B7 BEB7 99BE DBAC BBBE CABE D9BE REVERSE PITCH R FBB1 1BB2 2DB2 45B2 01A9 E8B7 30BE 67AD 2EB8 2ABE 9CB7 PRO T SCREEN (ALT) EEB7 F3B9 7BBE A4BD 0BBA 21BA 99BE ACBE BBBE CABE D9BE SHOTGUN X CURL (ALT) F4B7 A8BD 2BBA 51BA 67BA 3EBA 99BE ACBE BBBE CABE D9BE