WORKING WITH EAW SCREENS v1.0 by Stephen O'Leary (Pilot Officer Prune)

General principles

Almost all the screens are edited using the same basic method, which may be outlined as follows:

1. Start EAW and go to the screen you want to work on.
2. Take a screen shot using the key specified in your eaw.ini file.
3. Close EAW.
4. The screen shot appears as scrn####.bmp in your EAW folder.
5. Open the screenshot in a good graphics editor (I prefer Paint Shop Pro 7 [PSP]) and save it in your working folder under a more meaningful name.
6. In PSP, save the screen palette using Colors|Save Palette.
7. Increase the colour depth to 16 million colours using Colors|Increase depth.
8. Save the work as a .psp file, which preserves layers etc.
9. Work on the screen. As far as possible, get your colours using the eyedropper rather than the colour palette, because this reduces the chances of getting strange colours later. Alternatively keep a 256-colour copy open and use its palette to select colours for the 16-million version.
10. When finished editing, save the .psp file in case of further editing. Then convert back to 256 colours using Colors|Decrease depth.
11. Apply the saved palette.
12. Save the result as a .pcx file.
13. It is a good idea at this stage to test for the presence of colour index 0, which can cause display problems. Open the palette using Colors |Edit palette, ensure it is set to "palette order" using the pull-down menu, and find colour 0 (top left-hand corner). Double-click this colour and choose a distinctive substitute (bright green works well). Click on OK until the dialog box closes. Examine your work. If there are any areas of colour 0, substitute another similar colour to avoid problems. Save the result.
14. Convert the screen using PicPac, and test it in EAW.

Squadron selection screens

Screen name:	pltcar.mpc
Squadron crests:	unit#.wsp (1 = GE 2 = UK 3 = US)
Air Force crest:	?? (could be fsmlogo.wsp)

To edit the squadron crests (and indeed sprites generally):

1. Take a screenshot of the squadron selection screen. Save the palette.
2. Use Campaign Editor (by RockHPI) to find out which number crest is used by the unit.
3. From the screenshot, copy a portion of the "notebook" near the crest.
4. Turn this copy into a file 85x85 and save it for use as a background.
5. Edit your crest picture to fit an 85x85 format. Convert to 256 colours if necessary. Apply the saved palette to it.
6. Paste the crest into the background file you made in step 3.
7. Test for black (0,0,0) which can cause problems. (Use the same method as when testing for colour index 0.)
8. Save the result as (a) a .psp file for later editing and (b) a .raw file.
9. Use PTCH_WSP to insert the .raw file into unit#.wsp. Test it.

Aircraft selection screens

Screen name:	Picpln*.pic	(* = a/b/g)
Text:	Picpln*.mnu	(* = a/b/g)

To edit the screens:

1. Take a screenshot of the screen you want to use as a basis.
2. Save its palette. Each nationality's screen seems to have its own.
3. Edit as usual.
4. Use PicPac to convert the .pcx file into picpln*.pic. Test it.
5. It is likely that there will be areas of false colour. This happens where the .pcx file used black (0,0,0), but it also affects some other dark colours. If this happens, follow the remaining steps below.
6. Take a screenshot of the new version.
7. DO NOT convert it to 24-bit. Work only in 256 colours from now on.
8. Using only colours which have not been affected, replace the false colours with similar shades. Colour replace, paintbrush, flood fill and others are all useful for this.
9. When it looks OK, save it as a .pcx file, run it through PicPac and test it again.

To edit the text:

You must use a hex editor. Overwrite existing names but do not make them any longer. Pad with 00 s. Note that EAW will only display the name as far as the first space which occurs, so if you start with a space, no name will be displayed. This enables you to "lose" aircraft slots that are not in use.

Mission Parameters screen

Screen name:	Fsm_back.pic
Air Force crest:	fsmlogo.wsp
Paper clips:	Fsmclip#.wsp (# = 1, 2, 3)
Aircraft photos:	Fsmplane.wsp
Text files:	sngltext.str – text for the clipboard
	altitude.str – cruising altitude
	dnames.str – campaign/mission years
	msnname.str – type of mission
	pnames.str – aircraft names

The screen is edited in the usual way. However, note that the sprites overlap areas of the screen other than the aircraft photos, and in particular the lower right-hand corner of the map. If this area is edited, it will be necessary to edit Fsmclip2.wsp as well.

Fsmlogo.wsp contains 3 sprites each 60 x 60: 0 = US 1 = GE 2 = UK
(There are two more but they are blank)

Fsmclip1.wsp contains sprites which mask the upper pair of aircraft photos. Each sprite is 161 x 210. 0 and 2 appear to be identical; 1 is blank.

Fsmclip2.wsp contains sprites which mask the lower pair of aircraft photos. Each sprite is 171 x 203. 0 and 2 appear to be identical; 1 is blank. The top LH corner is located at (400,235) on the background screen.

Fsmclip1.wsp contains sprites which mask the corner of the cigarette lighter. Each sprite is 215 x 221. 0 and 2 appear to be identical; 1 is blank.

When working with these sprites, always check for the presence of black (0,0,0) before you start, and do not over-write it.

Fsmplane.wsp contains 31 sprites, each 148 x 100. Sprites 0 to 29 follow the same order as *pnames.str* (thankfully!). Sprite 30 is blank (0,0,0).

In editing the string files, be sure to use “Invalid choice” rather than “none” if blanking anything out, to avoid confusion with the program’s use of “none”.

Career Nationality screen

Screen name:	Pltcar.mpc
Air force logos:	ntnpic##.wsp (# = gr, uk, us)
Text files:	careertp.mnu

The screen is a normal 640 x 480 , and the menu a normal .mnu file.

Each .wsp file contains two sprites (details below). Sprite 0 is displayed when another area is clicked, and sprite 1 is the "highlighted" version used when that area is clicked.

Editing the sprites

This is tricky. The best way to proceed is to make the background screen first, showing all three areas as unselected. Then proceed as follows:

1. Copy the area for each nationality (details below).
2. Open the corresponding original sprite, and apply the screen palette to it (this is essential)
3. Preserve any black (0,0,0) areas by copying them from the original sprite into the screen copy. This copy becomes the new sprite, and is saved as a .raw file.
4. Use ptch_wsp to insert the new sprite into the .wsp file. Check the size of the .wsp file (see below), and test it.

Once you have all three "unselected" sprites, you can make the "selected" ones either by airbrushing on the illumination (use a separate layer and low opacity), or by copying areas from the unselected versions into the original selected ones.

Sprite details:

German Natpicgr.wsp must be exactly 104,786 bytes.
The sprites are 272 x 213
The screen area runs from (367, 108) to (639, 321).

British Natpicuk.wsp must be exactly 113,537 bytes.
The sprites are 350 x 182
The screen area runs from (289, 1) to (639, 183).

US Natpicus.wsp must be exactly 152,543 bytes.
The sprites are 327 x 205
The screen area runs from (312, 250) to (639, 455).

Briefing screens

Screen name: Brief**.mpc (** = ge/uk/us)
Text files: Briefing.str

To edit the briefing screen map:

1. Take a screen shot and convert it to 16-million colours.
2. Fit your new map onto it. The map area is 510 x 424, and its top LH corner is at (64,24). IMPORTANT: make the map into a separate layer.
3. Copy the background (the whole screen). Paste it in three times, each time as a new layer, all of them above of the map.
4. Working on each of these three layers in turn, add the shadows on the map edges. Use the rounded rectangle setting to select an area starting at (57,16) and covering the whole map including its frame. Apply the Cutout effect, with the following settings:

   First two layers: V25 H20 (or –20) Op66 Blur 15
   Third layer: V-15 H0 Op66 Blur 15

5. Flatten all the layers. Use the Push tool to fill in the corners of the map with shadow (usually only the bottom left and top right will need work).
6. From the original screen shot, "lassoo" the blackboard, amend it if necessary, then paste it into the new screen and give it a drop shadow using each of these settings in turn:

   (a) V5 H-5 Op61 Blur 9.9
   (b) V-2 H-5 Op61 Blur 9.9

7. To make a new flag, try applying the Texture-blinds effect to your flag graphic, and then using triangular selections from the existing flag as masks or guides to selecting suitably shaded regions of the new one to use instead.
8. The flag shadow is made by "lassooing" the flag and applying the following drop shadow: V56 H78 Op50 Blur14.8.

The map

Screen name: Europe1.mpc
Text files: Tarnames.str

The map is 1536 x 1280 pixels. However, the area with actual targets on it is only about 1140 x 620, so you can get away with a smaller map graphic as long as you don't mind there being some blank areas around it.

To make a basic map screen, open the map in EAW and take screenshots of the various areas. You will need about 9 to cover the whole map. In PSP, open a new file 1536 x 1280 and paste the screen shots into it, using a montage to make the whole map.

Of course if you want a completely new map, just start with the blank 1536 x 1280 file.

Although laborious, it is a good idea to remove all target symbols from the map in case they don't quite match the ones that EAW lays over it.

When editing the target names, JWC's map package is invaluable. It contains maps showing the name of every location in the game.