1. Appendix J: Checklists

This document is excerpted from SkyView System Installation Guide, Revision X, released January, 2016. This document (Revision B) will be withdrawn when Revision X is released.

Personalized Checklists can be displayed in SkyView as of firmware v14.0: TOOLS > CHECKLIST. Checklists cannot be displayed with earlier versions of SkyView firmware.



Until a Checklist file is loaded into your SkyView system, the CHECKLIST button will not appear in the TOOLS menu. A default / example Checklist is not installed in new SkyView displays, nor is a default / example Checklist automatically installed into a SkyView display as part of updating your SkyView system to firmware v14.0.

SkyView Checklists are composed on a computer and then transferred to SkyView with a USB flash drive. Checklists can be composed with any text editor such as the "Notepad" app included with Microsoft Windows PCs, or the "TextEdit" app included with Apple Macs, providing that the text editor can save the Checklist file using "UTF-8 character encoding". The "font" that your text editor application displays as you are composing your Checklist will not be used to display your Checklist on SkyView – your Checklist will be displayed in the standard "system font" used by SkyView to display text.



SkyView uses the "UTF-8 character encoding" standard to display text on the screen; thus Checklist files, to properly display on SkyView, must also be "UTF-8 Character Encoding".

Although Microsoft Word and Microsoft WordPad will also work to compose a Checklist file, the "character encoding" for a Checklist file must be "UTF-8 Character Encoding" and when saving a file from Word or WordPad, it is difficult to ensure that the file is saved using "UTF-8 Character Encoding". If you do use Word or WordPad, before using your Checklist file on SkyView, open it in Windows Notepad or Mac OS TextEdit and save it per the instructions below.

The filename of your Checklist file should end in .txt. The filename should be made solely of alphanumeric characters, with no space in the name. Mixed case in the filename is acceptable. Examples:

- The filename "checklist.txt" is acceptable.
- The filename "chklst.txt" is acceptable.
- The filename "checklist.text" is not acceptable (extension must be .txt).
- The filename "checklist" is not acceptable (there must be a .txt extension).
- The filename "check list.txt" is not acceptable (note the space between check and list).
- The filename "check%list" is not acceptable.

If you develop multiple Checklist files, it is recommended to begin a Checklist file with the word CHECKLIST, such as CHECKLIST01.txt, CHECKLIST02.txt, etc. This will allow all of your Checklist files to be grouped together and all Checklists easily seen on your USB flash drive when you are loading the Checklist into your SkyView display.





Although you can use mixed case in the Checklist filename, when selecting and loading your Checklist file onto SkyView, the Checklist filename will be displayed in UPPERCASE.

Saving Your Checklist with "UTF-8 Character Encoding"



The following characters are (incorrectly) displayed as a box symbol: $\mu \wedge V \beta$

If a Checklist file is saved using another "Character Encoding" standard, such as "ANSI" (the default for Windows Notepad), use of certain characters will cause SkyView to not allow the file to be loaded (see Figure 6 below).

Mac TextEdit

Before working on your Checklist file in Mac OS TextEdit, follow steps 1-4 as illustrated in Figure 180 at right:

- 1. Click on Preferences.
- 2. Click on New Document.
- 3. Ensure the button **Plain text** is selected.
- 4. Ensure the box **Wrap to page** is not checked.
- 5. Change other settings per your preference.

Proceed to edit your Checklist in Text Edit.

After you have completed your Checklist, to save a Checklist file in Mac TextEdit using "UTF-8 Character Encoding", follow steps 6-10 as illustrated in Figure 181 at right:

- 6. Click on Open and Save.
- 7. Ensure the box **Add ".txt" extension to plain text files** is checked.
- 8. **Under Plain Text File Encoding**, pull down the **Saving Files:** menu.
- 9. Click on Unicode (UTF-8).
- 10. Unicode (UTF-8) should now be checked.
- 11. Click on the Red button to close Preferences.

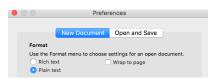


Figure 1 - Mac TextEdit New Document Setup



Figure 2 – Mac TextEdit Set UTF-8 Encoding



Then, follow steps 13-18 as illustrated in Figure 182 at right (step 12 and step 19 not shown):

- 12. On the TextEdit menu bar, click File, then Save.
- 13. Fill in **Save As:** with your checklist filename.
- 14. Ignore Tags:
- 15. Select the name of your USB flash drive (this is where you will save your Checklist file); example: **DYNON** or **KINGSTON**:

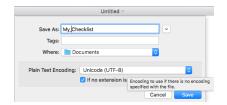


Figure 3 – Mac TextEdit Save As Settings

- o (older versions of Mac OS) Change **Where:** to the name of your USB flash drive.
- o (newer versions of Mac OS, **Where:** will not be shown) In the left column of the Finder, under **Devices**, click on (the name of) your USB flash drive.
- 16. Ensure Plain Text Encoding: is set to Unicode (UTF-8).
- 17. Ensure the box for **If no extension is provided, use ".txt"** is checked.
- 18. Click the **Save** button.
- 19. In the left column of the Finder, next to the name of your USB flash drive, click on the "Eject button" to close all files on your USB flash drive before physically removing the USB flash drive from your Mac.

Windows Notepad

To save a Checklist file in Windows Notepad using "UTF-8 Character Encoding, follow these steps:

- 1. Click on File.
- Click on Save As...
- 3. On the left side of the window, click on the drive letter of the USB flash drive. This will ensure that the Checklist file will be saved to the USB flash drive. Example: Drive F: (but your computer may assign a different drive letter).
- 4. File Name: (fill in your preferred filename for your Checklist file).
- 5. Save as type: Text Documents (*.txt).
- 6. Encoding: Pull down and select UTF-8.
- 7. Click the **Save** button.

Steps 4-7 are illustrated in Figure 4 below.

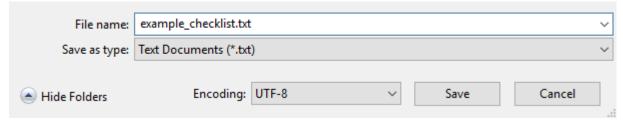


Figure 4 - Windows Notepad Save As with UTF-8 Encoding

There can only be one Checklist file loaded in a SkyView system at a time. It is not possible to have different Checklist files loaded onto different SkyView displays in a single SkyView system, such as a one Checklist file for the Pilot's SkyView display and another Checklist file for the Co-



Pilot's SkyView displays. If you desire to do so, create Checklist items for Pilot and Co-Pilot in a single Checklist and then work from different sections of that Checklist.

After you load a Checklist, it is stored in your SkyView display(s) non-volatile memory. As soon as a Checklist file is loaded onto a SkyView display, the Checklist is synchronized with all other SkyView displays in your SkyView system. After your Checklist is loaded, you can remove the USB flash drive from your SkyView display; the USB flash drive does not have to remain inserted in order to access your Checklist.

When you load a new Checklist file into a SkyView display, it will overwrite the Checklist that was previously stored (if any) in SkyView's memory; there is no way to retrieve an overwritten Checklist. If you have one of your SkyView displays powered off, the SkyView display that was powered up (that you loaded the Checklist into), will synchronize the Checklist file with the powered off SkyView display as soon as the display is powered up.

Checklists in a SkyView display are saved / exported (along with other files): SETUP MENU > EXPORT SETTINGS > (one more right click) The filename of your Checklist will be (tail number, version, etc.) CHECKLISTS.TXT

Example Checklist



This entire example Checklist (of which only a portion is shown here) can be downloaded from http://downloads.dynonavionics.com.

```
# LINES THAT BEGIN WITH # ARE COMMENT LINES AND WILL NOT BE
DISPLAYED IN THE CHECKLIST
# LINES ARE 31 CHARACTERS LONG ON A SKYVIEW 40 PERCENT PAGE
# LINES ARE 40 CHARACTERS LONG ON A SKYVIEW 50 PERCENT PAGE
# LINES WITH MORE CHARACTERS THAN ABOVE ARE NOT WRAPPED AND WILL
NOT SHOW
# SV Checklist Template Rev A.txt
CHKLSTO.TITLE, PRE-FLIGHT
CHKLSTO.LINE1,
CHKLSTO.LINE2, BUILD YOUR CHECKLIST HERE
CHKLST1.TITLE, BEFORE STARTING ENGINE
CHKLST1.LINE1,
CHKLST1.LINE2, BUILD YOUR CHECKLIST HERE
CHKLST2.TITLE, ENGINE START
CHKLST2.LINE1,
CHKLST2.LINE2, BUILD YOUR CHECKLIST HERE
CHKLST3.TITLE, PRE-TAXI & TAXI
CHKLST3.LINE1,
CHKLST3.LINE2, BUILD YOUR CHECKLIST HERE
```



```
CHKLST4.TITLE, RUN-UP & PRE-TAKEOFF
CHKLST4.LINE1,
CHKLST4.LINE2, BUILD YOUR CHECKLIST HERE

# ...
CHKLST21.TITLE, MISC: TRANSPONDER CODES
CHKLST21.LINE1,
CHKLST21.LINE2, VFR - 1200 (USA)
CHKLST21.LINE3, VFR - 7000 (Europe)
CHKLST21.LINE4, Hijack - 7500
CHKLST21.LINE5, Radio Fail - 7600
CHKLST21.LINE6, Emergency - 7700
```

Example Checklist Formatting Notes:

Comment lines (not displayed as a Checklist item) begin with #. Example:

```
# This line in a checklist file will not be displayed in a checklist.
```

Checklist numbering starts with 0; the first Checklist displayed is CHKLSTO.

For additional Checklists, increment the name CHKLIST in each section from 0. Example:

- CHKLST0
- CHKLST1
- ...
- CHKLST10
- CHKLIST11
- (etc.)

Each Checklist requires a title line in this format:

```
CHKLST(section number).TITLE, (title). Example: CHKLSTO.TITLE, PRE-FLIGHT
```

Each Checklist can have any number of Checklist items (including none), but each item must be sequentially numbered, beginning from 1, in this format:

```
CHKLST(section number).LINE(checklist item), (title). Example: CHKLSTO.LINE1, CHKLSTO.LINE2, BUILD YOUR CHECKLIST HERE
```

Each Checklist Name and Checklist Item will only display 31 characters for a 40% Page, and 40 characters on a 50% page. Characters in excess of these lengths will not be wrapped and will simply not appear.

```
# LINES ARE 31 CHARACTERS LONG ON A SKYVIEW 40 PERCENT PAGE
# LINES WITH MORE CHARACTERS THAN ABOVE ARE NOT WRAPPED AND WILL
NOT SHOW
CHKLSTO.TITLE, 1234567890123456789012345678901
CHKLSTO.LINE1, 1234567890123456789012345678901
```



```
# LINES ARE 40 CHARACTERS LONG ON A SKYVIEW 50 PERCENT PAGE
# LINES WITH MORE CHARACTERS THAN ABOVE ARE NOT WRAPPED AND WILL
NOT SHOW
CHKLSTO.TITLE, 1234567890123456789012345678901234567890
CHKLSTO.LINE1, 1234567890123456789012345678901234567890
```

If you wish to keep track of the version of Checklist that you develop, this is easily done by making the title of your last Checklist a version number (with no Checklist items), such as:

```
CHKLST23.TITLE, CHECKLIST INFO
CHKLST23.LINE1,
CHKLST23.LINE2, LAST UPDATED 2016-01-12
CHKLST23.LINE3, (DATE MUST BE MANUALLY UPDATED)
```

This will appear on the last line of the Checklist as:

CHECKLIST INFO >

When you click the arrow:

LAST UPDATED 2016-01-12 (DATE MUST BE MANUALLY UPDATED)

Excel Checklist Generation Tool

Dynon Avionics has developed a SkyView Checklist Generation Tool based on Excel for Mac or PC; this tool will not work in the versions of Excel accessible online or in versions of Excel on tablet devices (these versions do not have "macro" capability. Using this tool is easier than creating a Checklist manually in a text editor, allowing you to focus on the contents of your particular Checklist. The tool ensures that the formatting of the Checklist is correct. The tool requires that your computer have Microsoft Excel installed as it uses Excel's macro capability to perform the formatting.



The tool is called "Excel-based Checklist Creator" and can be downloaded from http://downloads.dynonavionics.com. Dynon Avionics has also released a video tutorial for this tool, available on the Dynon Channel section of YouTube – https://www.youtube.com/user/DynonAvionics.

Loading a Checklist

After you have saved your Checklist file from your computer to your USB flash drive, take the USB flash drive to your aircraft. After your SkyView display is powered up, push buttons 7+8 to access the SETUP MENU. Then:

SETUP MENU > SYSTEM SOFTWARE > LOAD FILES > (select your Checklist file) > LOAD (button) > YES (button) >

If your Checklist file did not have any errors, you will see the following screen:





Figure 5 – Checklist File Loaded Successfully

If your Checklist file had a formatting or other error, you will see the following screen:



Figure 6 - Checklist File Has an Error and Could Not be Loaded

Once loaded onto one SkyView display, a Checklist is synchronized to all other SkyView displays and the Checklist can be displayed on any, or all, of the SkyView displays.



Troubleshooting Your Checklist File

Ensure that your SkyView system has been updated to firmware v14.0 (or later); support for Checklists was added in firmware v14.0.

The most common problem with Checklist files not loading correctly onto a SkyView display is that the Checklist file was not saved using "UTF-8 Character Encoding". If your Checklist file will not load, try opening it and re-saving it in Windows Notepad or Mac OS TextEdit using the procedure shown above – Saving Your Checklist with "UTF-8 Character Encoding", and see Figure 4 – Windows Notepad Save As with UTF-8 Encoding, or Figure 180, Figure 181, and Figure 182 above for Mac OS TextEdit.

If your Checklist will still not load, then, check that each section (each individual Checklist) begins with the same CHECKLIST(number). Example:

```
CHKLSTO.TITLE, PRE-FLIGHT
CHKLSTO.LINE1,
CHKLSTO.LINE2, BUILD YOUR CHECKLIST HERE
is correct.
CHKLSTO.TITLE, PRE-FLIGHT
CHKLSTO.LINE1,
CHKLSTI.LINE2, a BUILD YOUR CHECKLIST HERE
is not correct (Checklist numbers do not match).
```

Also, check that each Checklist item) has a correct, sequential number. Example:

```
CHKLSTO.TITLE, PRE-FLIGHT
CHKLSTO.LINE1
CHKLSTO.LINE2, BUILD YOUR CHECKLIST HERE
is correct.
CHKLSTO.TITLE, PRE-FLIGHT
CHKLSTO.LINE1,
CHKLSTO.LINE1, BUILD YOUR CHECKLIST HERE
is not correct (there are two CHKLSTO.LINE1 lines; second should be CHKLSTO.LINE2).
```

If you cannot get your Checklist file to load ("FILE HAS ERROR" screen), you can isolate where the problem is in your Checklist file by "commenting out" individual lines, or entire sections, by prepending the line with a # and a space character. Example:

```
# CHKLSTO.TITLE, PRE-FLIGHT
```

A future version of SkyView firmware will enhance the error message shown in Figure 6 above to display the line number where an error is encountered.

Lines that begin with # will not be processed / checked when the Checklist file is loaded. Admittedly this will be tedious if your SkyView display is in your aircraft and your computer is at home, so this is best done using a laptop computer in the aircraft, so you can edit, export, and test rapidly on your SkyView display.

Once a Checklist is loaded, there is no way to delete the current Checklist. The closest thing to a "delete Checklists" function is to load an empty file (no text in it) with a filename such as blankchecklist.txt. This will have the effect of displaying a blank page when the CHECKLIST button is pressed.



Displaying Your Checklist on your SkyView Display



Until a Checklist file is loaded into your SkyView system, the CHECKLIST button will not appear in the TOOLS menu. A default / example Checklist is not installed in new SkyView displays, nor is a default / example Checklist automatically installed into a SkyView display as part of updating your SkyView system to firmware v14.0.

To access your Checklist on a SkyView display, from the main menu, go to the TOOLS menu and push the CHECKLIST button. The Checklist will continue to be displayed until the CHECKLIST button is pressed again (the CHECKLIST button "toggles" the display of your Checklist On and Off).

Your Checklist will be displayed on the SkyView display in a 40% window or 50% window per the following conditions:

- The Checklist will not obscure the PFD
- If the display is set to display 100% PFD, MAP, or EMS, the original page will be resized to 50% and the Checklist will be displayed at 50%.
 - If the Checklist displays at 40% on a 100% page, temporarily enable another page, select the 50% / 50% layout, then disable the temporary page. The Checklist should now correctly display at 50%.
- If the display is set to display 60% PFD / 40% MAP or EMS, the MAP or PFD (40% page) will be replaced with the Checklist (displayed at 40%).
- If the display is set to display MAP and EMS (any % of either), the EMS page will be resized to 50% and the Checklist will be displayed at 50%.



Figure 7 - List of Checklists Available





Figure 8 – Example PRE-FLIGHT Checklist

The Checklist will continue to be displayed until the CHECKLIST button is pressed again (the CHECKLIST button "toggles" the display of your Checklist On and Off).