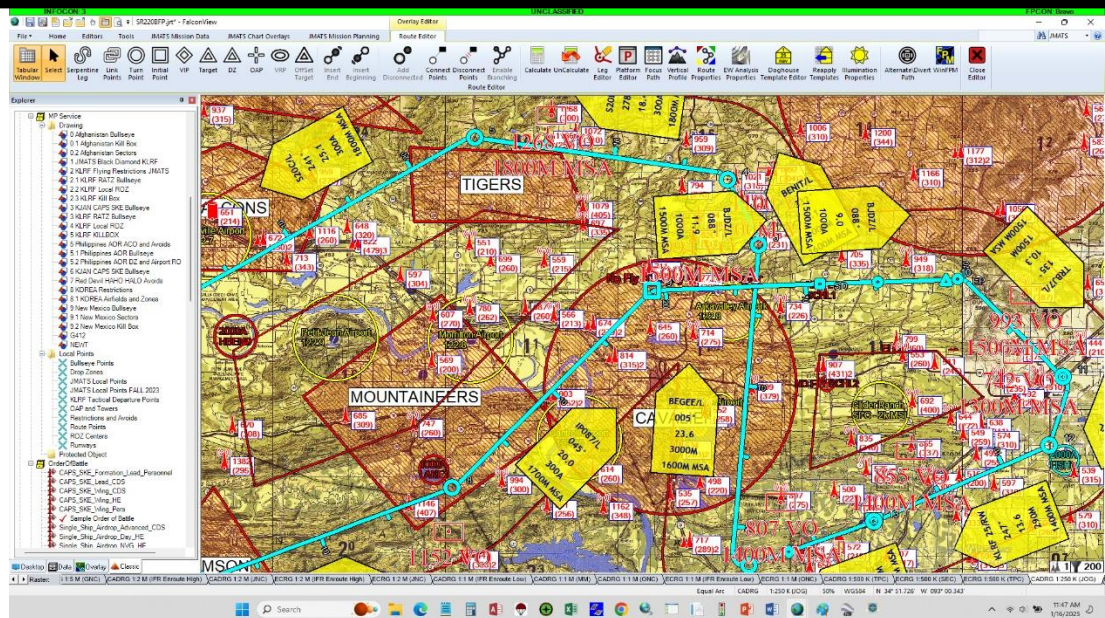


2025

HOW TO: JMPS Charts



Newton

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HOW TO: JMPS Charts in ForeFlight™

Chart Types

Some background: JMATS has used Target Graphic Printing for GoodReader, which mitigated the “paper” size limitations of Microsoft Print to PDF. However, this method had limitations:

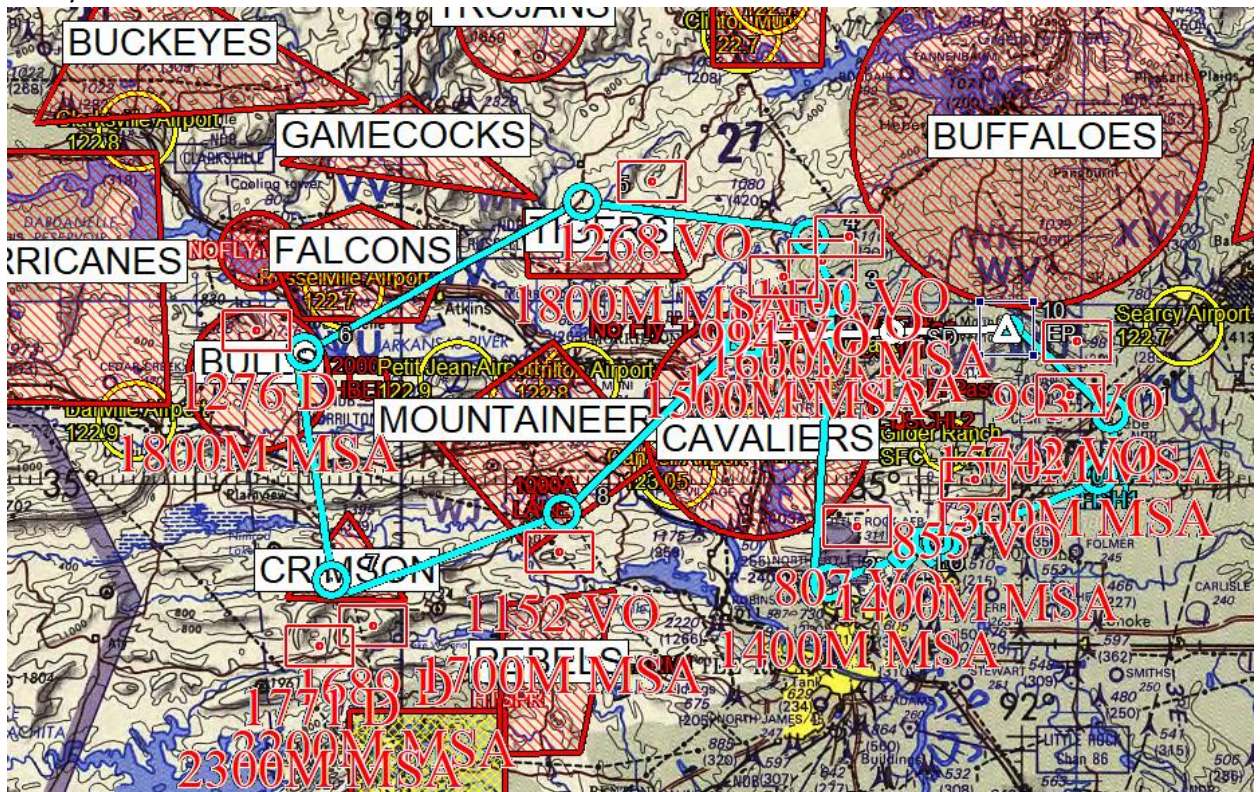
- It wouldn’t automatically apply the Vol 3 annotations.
- The available output was an image file, which opens in GoodReader, but doesn’t allow stylus markups. In other words, you can’t scribble on your chart when DARKSTAR updates the threat.
- The image file suffered from “jaggies,” where route lines and other graphics didn’t look good.

The JMPS version 240 master computer images now have Adobe Pro installed, which allows selection of Adobe PDF using the Page Layout Tool in JMPS. Adobe PDF supports large “paper” sizes, which lets you create charts without having to shrink the scale.

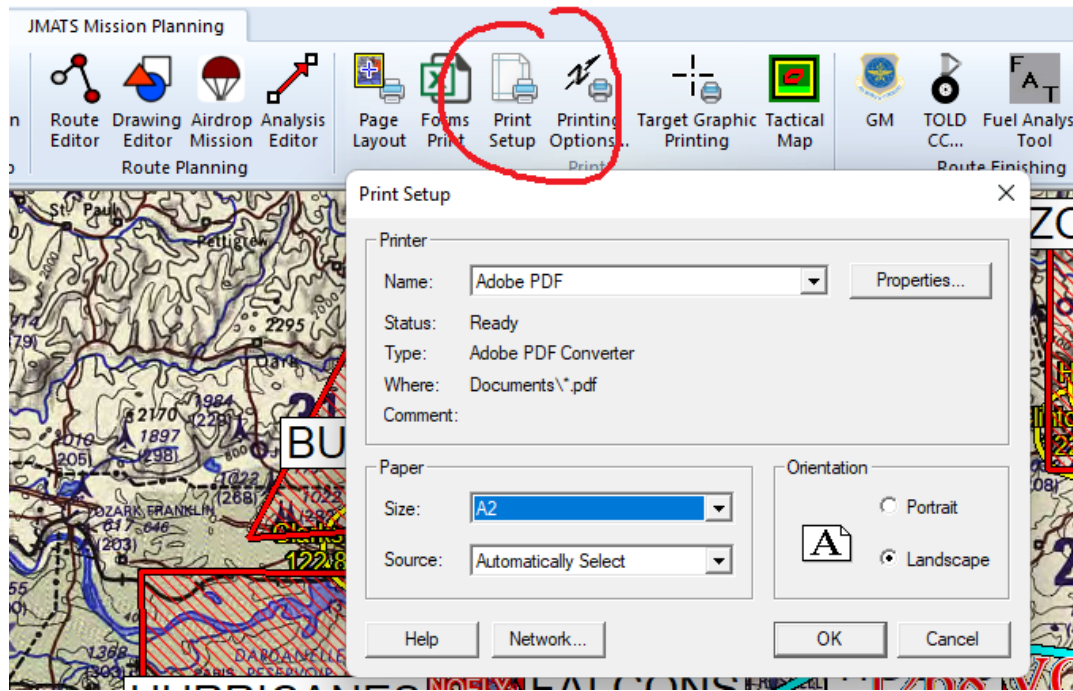
This guide will introduce the use of Adobe Acrobat Pro “printer” to create **GoodReader PDF charts**. We’ll also show how to generate charts for ForeFlight using two methods: 1) **Target Graphic Printing**; and 2) **Tactical Map Tool**.

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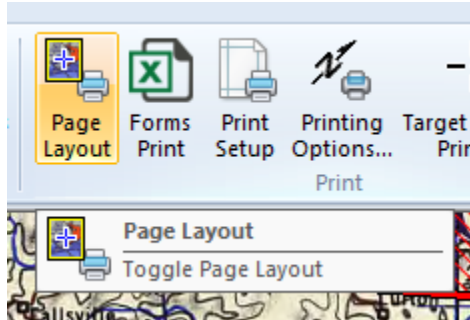
3. Select Print Setup and make it like this (see size list below for some recommendations):



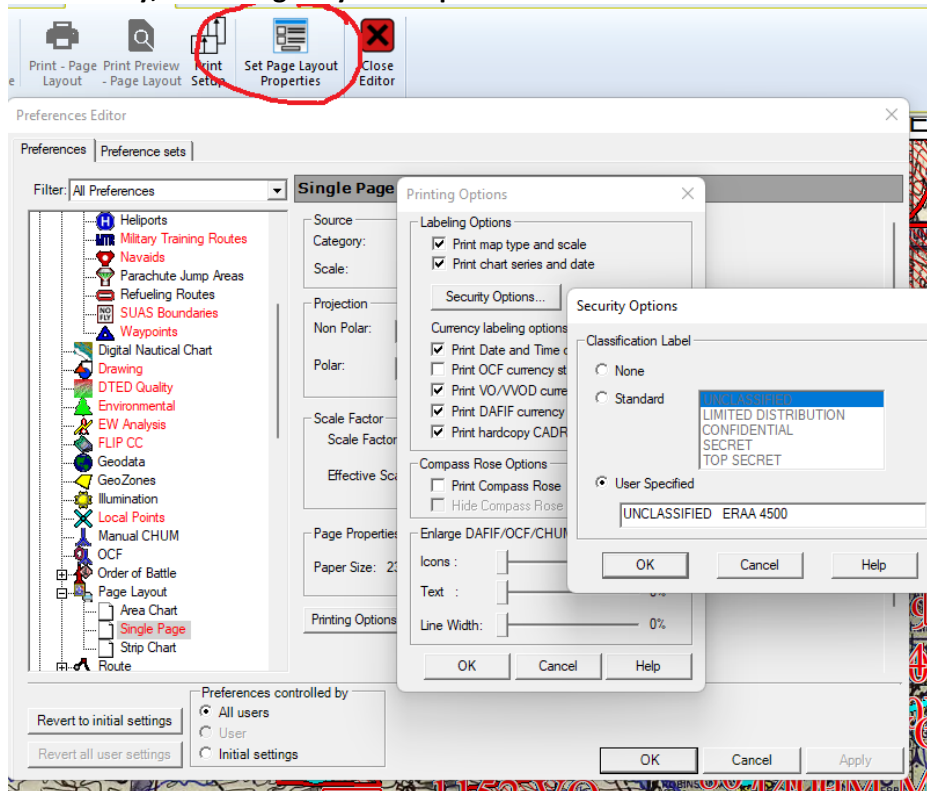
Select Paper Size as A0, A1, A2, or as desired. Size chart below assumes landscape.

- A0 = 46.81" x 33.11"
- A1 = 33.11" x 23.39"
- A2 = 23.39" x 16.54" (fits SR220A/B with ~10nm space from centerline)

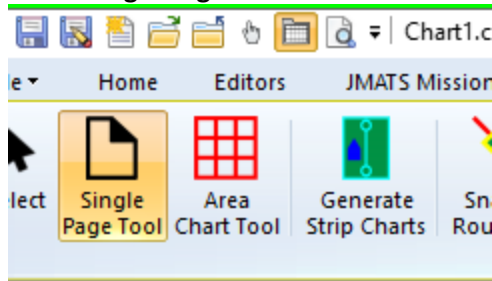
4. Select Page Layout.



5. If necessary, select Page Layout Properties and edit.

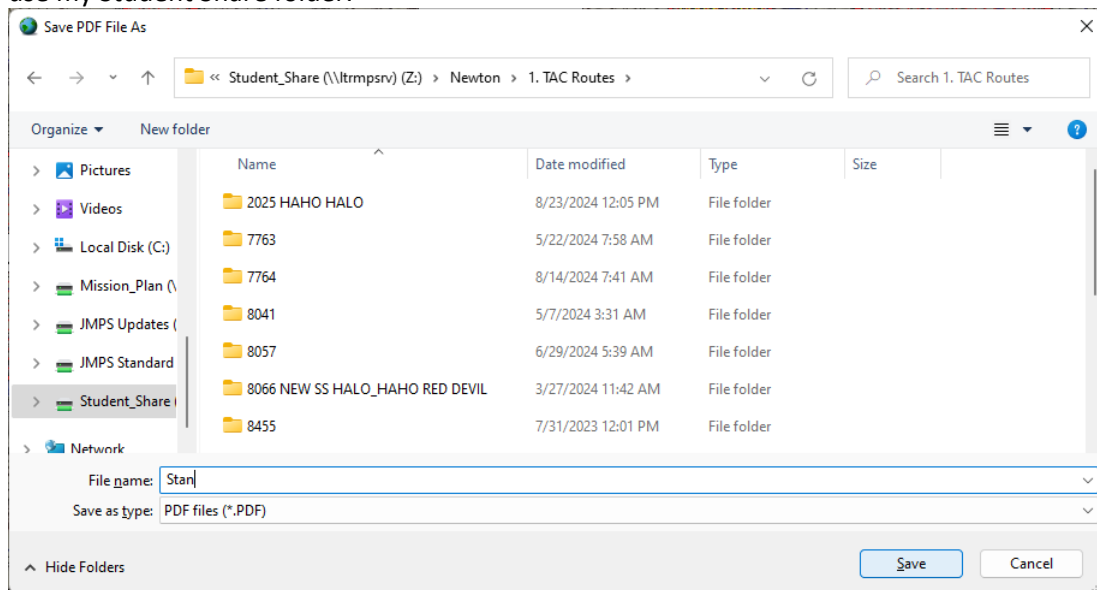


6. Select Single Page Tool.



7. Click to insert the single page in a central area of the route.

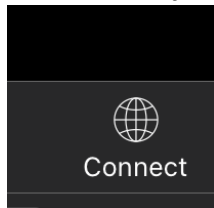
10. Name the chart and save it to desired location, something you can find later in GoodReader. I use my Student Share folder.



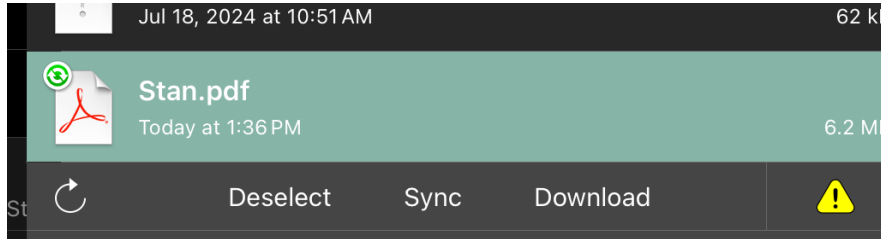
Send to ForeFlight

Now that you have a chart saved, switch to the EFB and GoodReader.

1. Press the Connect globe in the main menu and open either Student Share or Instructor Share location that you saved your chart to.

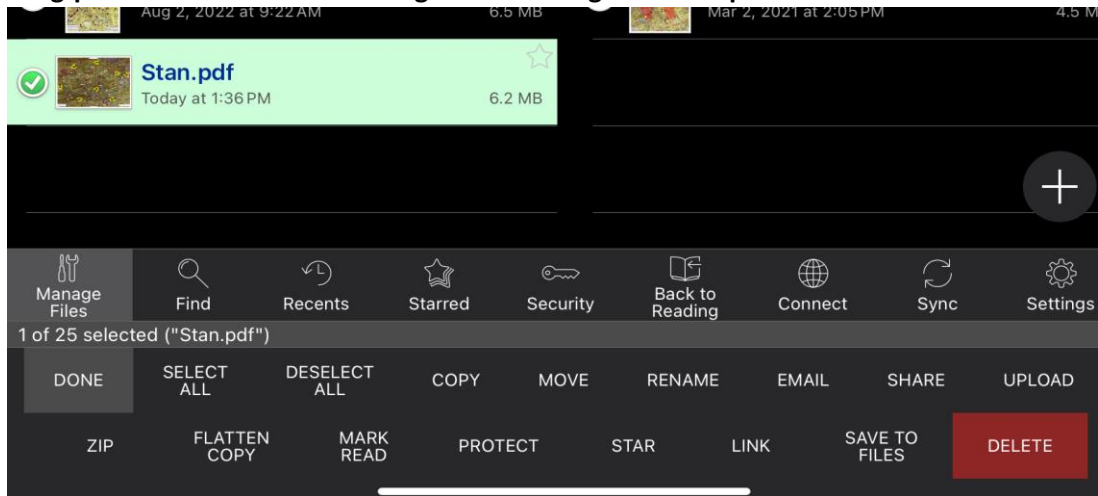


2. Browse to the file, select it, and press Download.

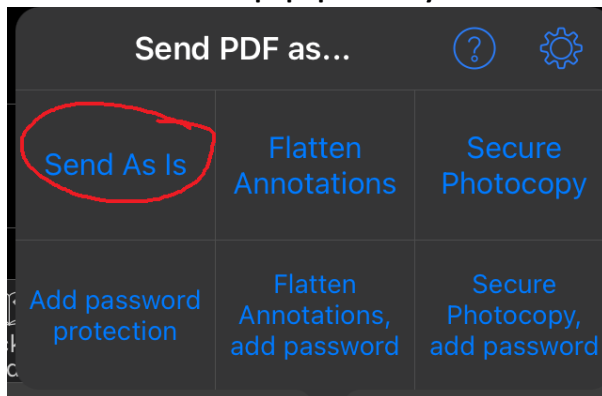


3. Select a location in GoodReader (Downloads, Home, etc.) and press Download Here. (If you just want to use in GoodReader, you're done. The chart file can be opened as a reader tab. For ForeFlight instructions, continue.)
4. Go to that location in GoodReader.

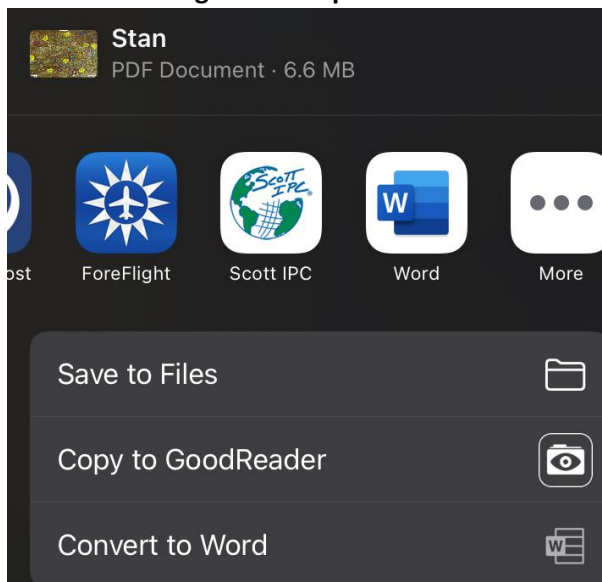
5. Long-press the chart file name to get the “manage” menu up.



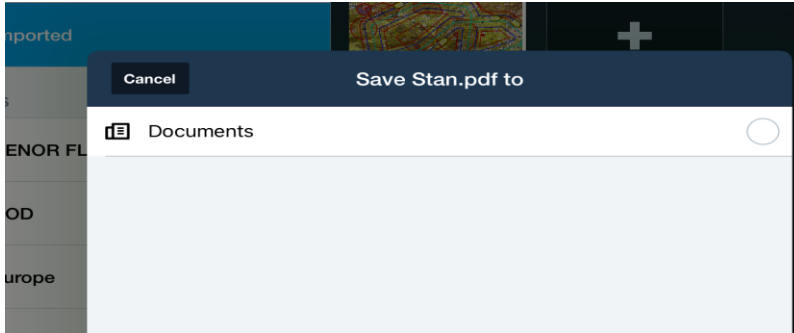
6. Select Share. In the popup that says “Send PDF as...” select “Send As Is.”



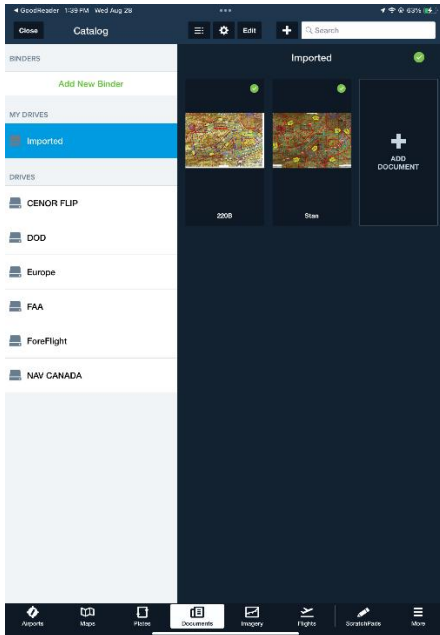
7. Find the ForeFlight icon or press the 3 dots to add it to the share list.



8. Select the ForeFlight icon and it will switch to ForeFlight.
9. Your option is “Documents,” so select the radio button next to that and it will immediately import your chart.



10. Tap the Documents tab in ForeFlight to see the list of imported PDFs. Realize that these are just static pictures, not on the maps.



Use Target Graphic Printing (ForeFlight)

Pros

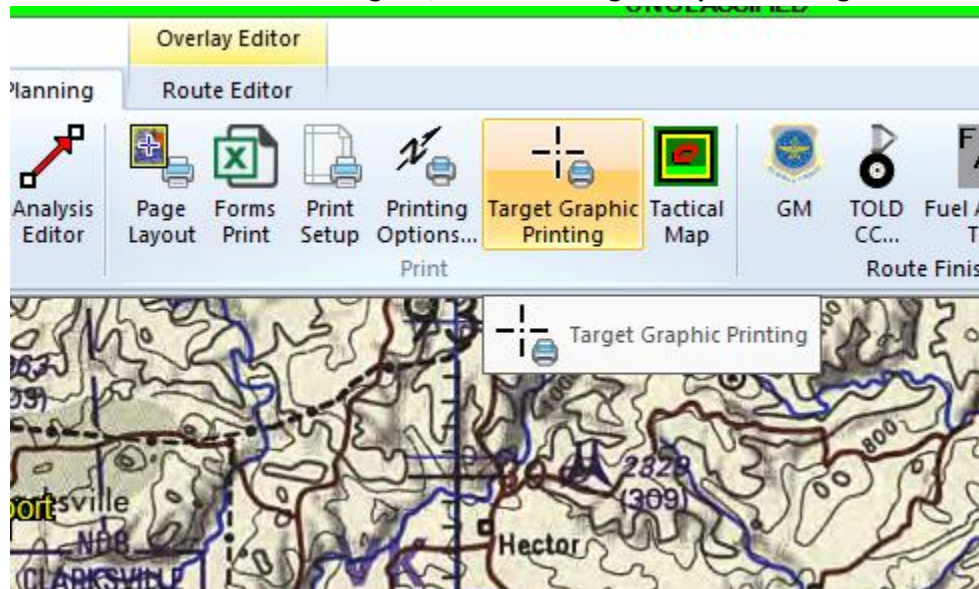
- Is georectified. Selection as a ForeFlight overlay allows it to function like a moving map (if you have GPS feed).
- Not constrained by size or scaling; draw as big a square as you want.
- Brings in all JMPS overlays, and way quicker than generating a file for the digimap.

Cons

- May take a lot longer to generate.
- Some jaggies in ForeFlight (won't matter much if you overlay a ForeFlight flight plan over it.)
- Does not generate Vol 3 annotations of chart series/date or VO currency.
- Quite large file sizes.

Create the Chart Using Target Graphic Printing

1. **Ensure the route is complete, calculated, and required/desired overlays are enabled.**
2. **Select a chart scale that allows you to see the whole route or zoom out on the current scale.**
In this example, I used ONC scale with VO and doghouses not shown above 1:500K just for clarity.
3. **In the JMATS Mission Planning tab, select the Target Graphic Printing button.**



4. **The Target Graphics Printing dialog will open.**

Select:

- GeoTIFF as Output Format
- Appropriate Raster scale under Source
- Select Geographic Bounds as Output Size
- Confirm or change desired Output Path

Click:

- Get Geographic Bounds From Map (press the crosshair)
- Draw a box of desired size around route (click and drag upper left to lower right)

Target Graphics Printing

Output Format

- ☐ Web Page
- ☐ JPG
- ☒ GeoTIFF
- ☐ PNG
- ☐ Printer
- ☐ Clipboard

Output Size

- ☐ Pixels
- ☒ Geographic Bounds (Northwest / Southeast)

Image Width: Image Height:

Datum: Location...:

Datum: Location...:

Get Geographic Bounds From Map

Source

- ☐ GeoTIFF 100 meter (Color)
- ☐ CADRG 1:500 K (TPC)
- ☐ ECRG 1:500 K (LFC Day)
- ☐ ECRG 1:500 K (SEC)
- ☐ ECRG 1:500 K (TPC)
- ☐ GeoTIFF 50 meter (Color)
- ☐ CADRG 1:250 K (JOG)
- ☒ ECRG 1:250 K (JOG)
- ☐ ECRG 1:250 K (MM)

Unselect All

Scale Factor - ECRG 1:250 K (JOG)

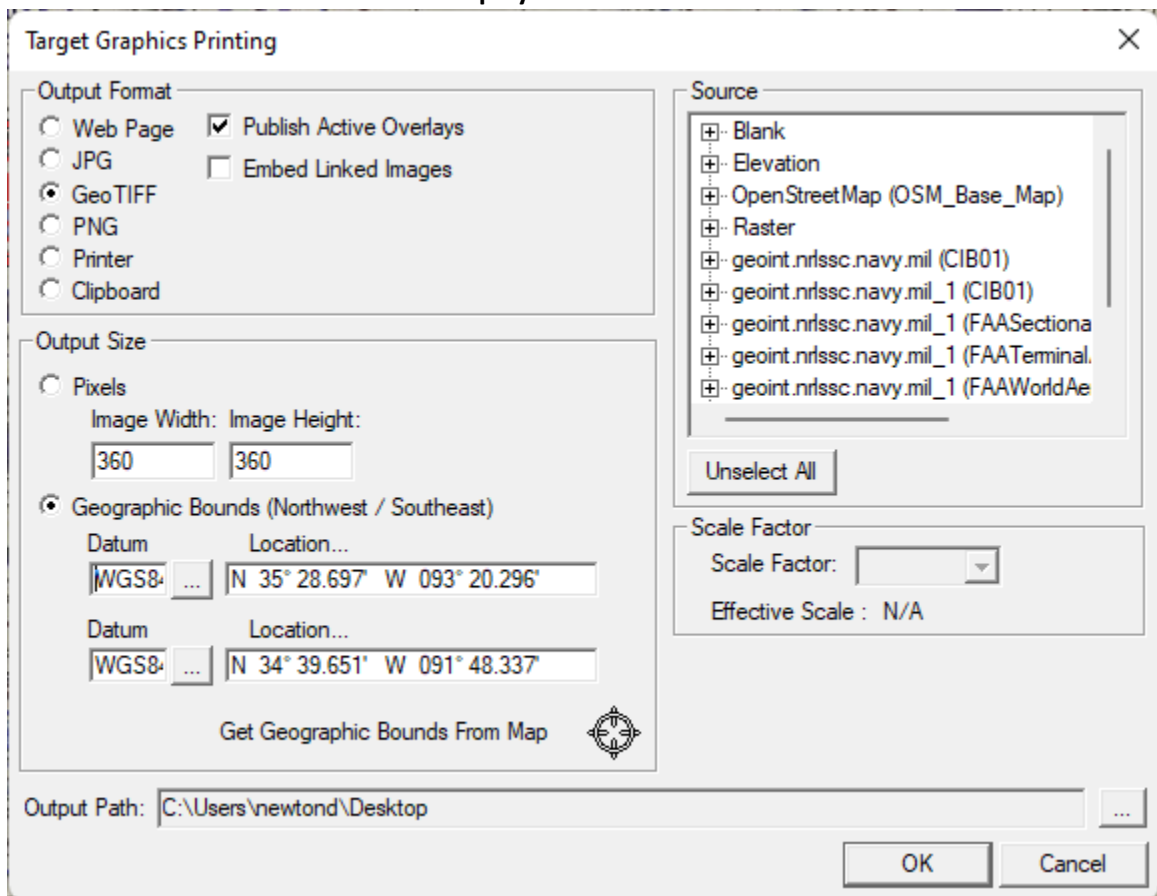
Scale Factor:

Effective Scale : 1:250,000

Output Path: ...

OK Cancel

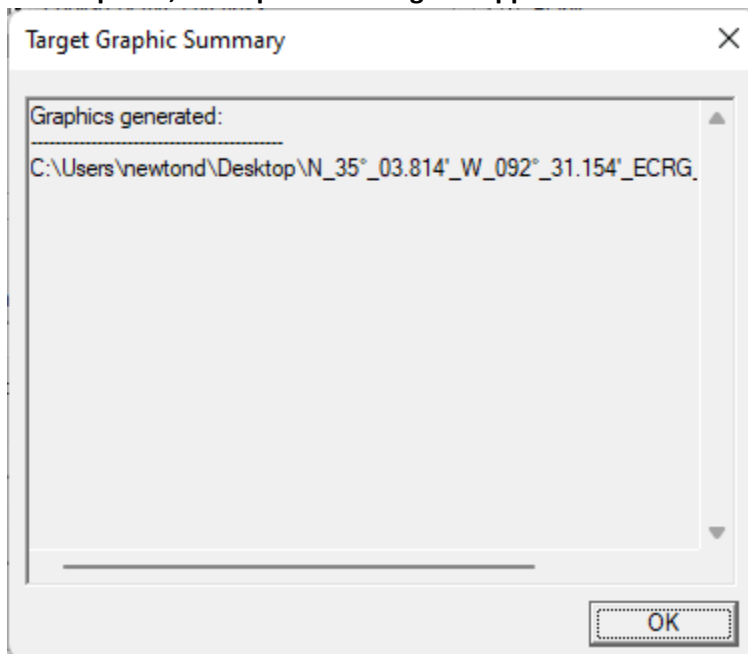
5. **Observe the coordinate bounds are displayed.** Press OK.



The 'Target Graphics Printing' dialog box is shown. It has a title bar with a close button (X). The dialog is divided into several sections:

- Output Format:** A group box containing radio buttons for 'Web Page', 'JPG', 'GeoTIFF' (selected), 'PNG', 'Printer', and 'Clipboard'. To the right are checkboxes for 'Publish Active Overlays' (checked) and 'Embed Linked Images' (unchecked).
- Output Size:** A group box containing a radio button for 'Pixels' and a section for 'Geographic Bounds (Northwest / Southeast)'. The 'Geographic Bounds' section has two rows of input fields for 'Datum' (both set to 'WGS84') and 'Location...' (first row: 'N 35° 28.697' W 093° 20.296'', second row: 'N 34° 39.651' W 091° 48.337'). Below these is a button 'Get Geographic Bounds From Map' with a compass icon.
- Source:** A list box containing several items with expand/collapse icons: 'Blank', 'Elevation', 'OpenStreetMap (OSM_Base_Map)', 'Raster', and five 'geoint.nrlssc.navy.mil' items with various suffixes. Below the list is an 'Unselect All' button.
- Scale Factor:** A section with a 'Scale Factor' dropdown menu (currently empty) and 'Effective Scale : N/A'.
- Output Path:** A text field containing 'C:\Users\newtond\Desktop' and a browse button (...).
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

6. **After a pause, a completion dialog will appear.** Press OK.

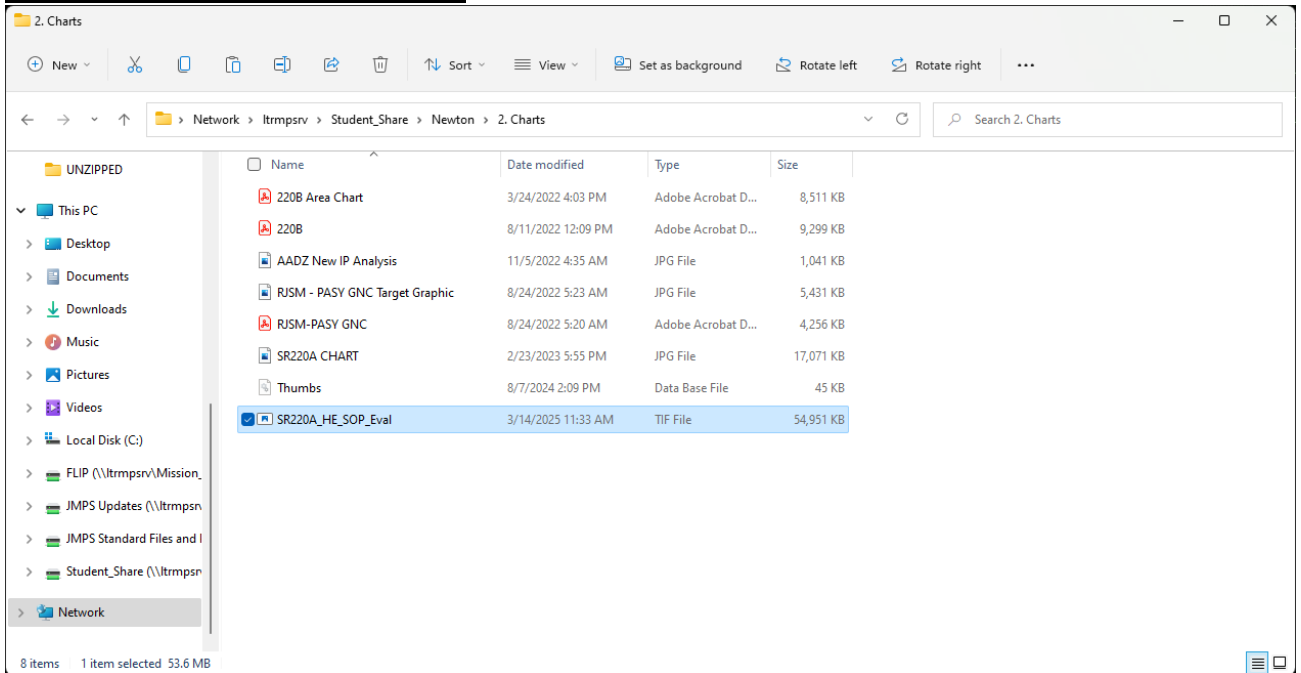
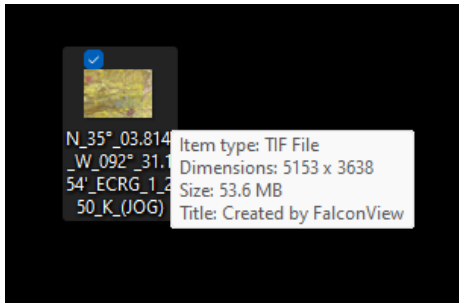


The 'Target Graphic Summary' dialog box is shown. It has a title bar with a close button (X). The dialog contains a text area with the following text:

Graphics generated:
C:\Users\newtond\Desktop\N_35°_03.814'_W_092°_31.154'_ECRG

At the bottom right is an 'OK' button.

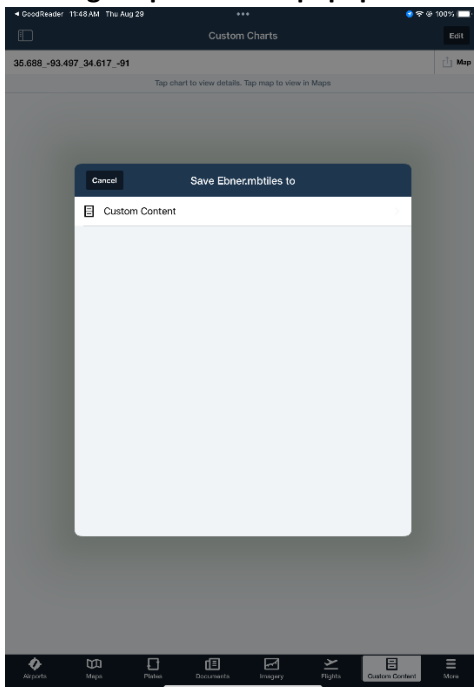
7. Find your file in the generated location and rename to something useful. Save to Student Share folder.



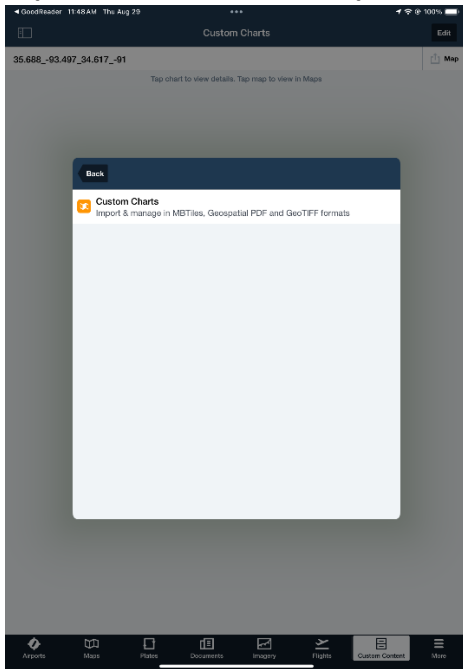
Send to ForeFlight

If you didn't save the file to a share folder, then copy it to either Student or Instructor Share. Now switch to the EFB and GoodReader. Most of these steps are identical to importing a PDF.

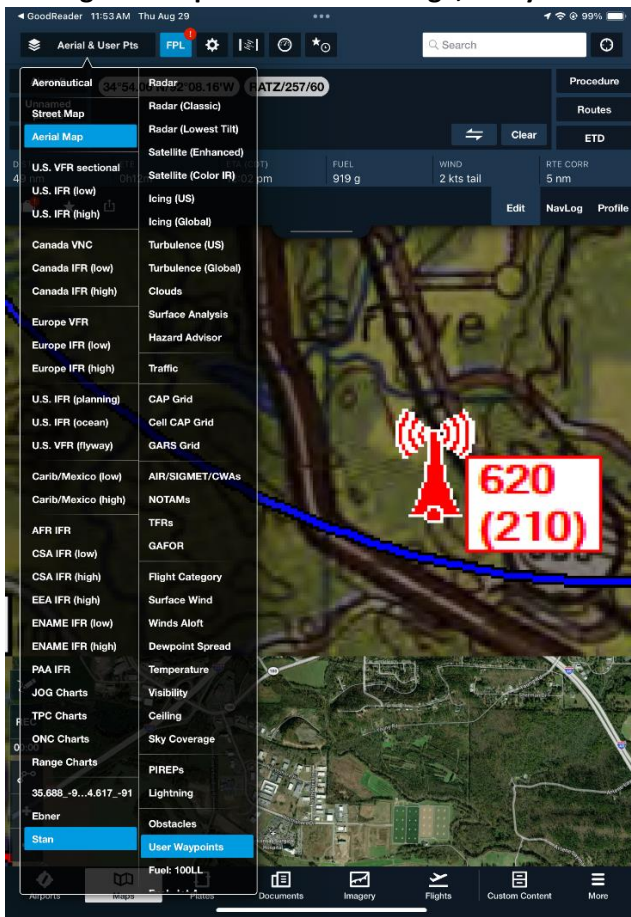
1. Press the Connect globe in the main menu and open either Student Share or Instructor Share location that you saved your chart to.
2. Browse to the file, select it, and press Download.
3. Select a location in GoodReader (Downloads, Home, etc.)
4. Go to that location in GoodReader.
5. Long-press the chart file name to get the "manage" menu up.
6. Select Share.
7. Find the ForeFlight icon or press the 3 dots to add it to the share list.
8. Select the ForeFlight icon and it will switch to ForeFlight.
9. ForeFlight opens with a popup "Save xxx.xxx to". It should show "Custom Content."



10. Tap Custom Content, then tap Custom Charts.



11. You'll get an Import Success message, and your chart is now available in Aerial & User Pts list.



Use Tactical Map Tool (ForeFlight)

Pros

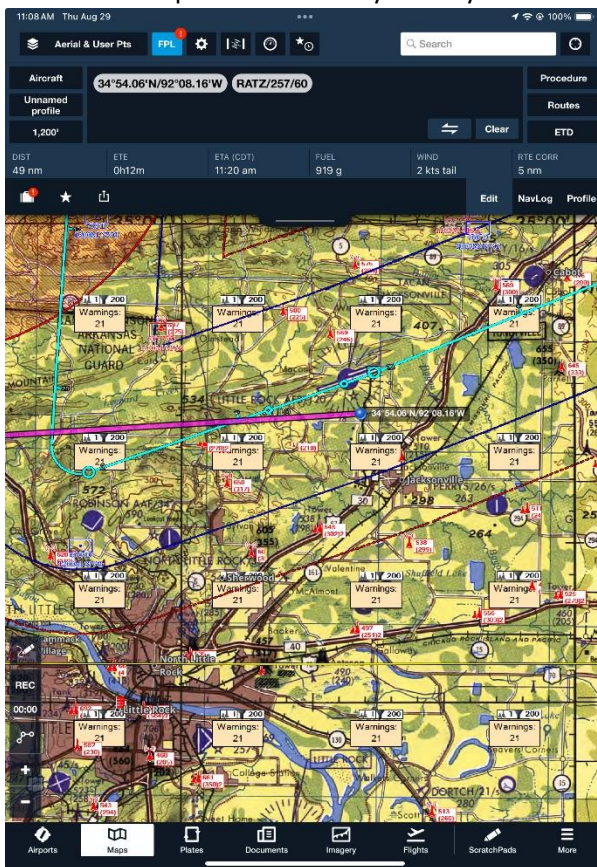
- Is georectified. Selection as a ForeFlight overlay allows it to function like a moving map (if you have GPS feed).
- Not constrained by size or scaling; draw as big a square as you want.
- Brings in all JMPS overlays, and way quicker than generating a file for the digimap.

Cons

- May take a lot longer to generate.
- Some jaggies in ForeFlight (won't matter much if you overlay a ForeFlight flight plan over it.)
- Not usable in GoodReader or desktop applications.

- If you have an airdrop mission (CARP) open in JMPS and there are warnings, this little stamp will be on every tile in your chart. (See screenshot below)

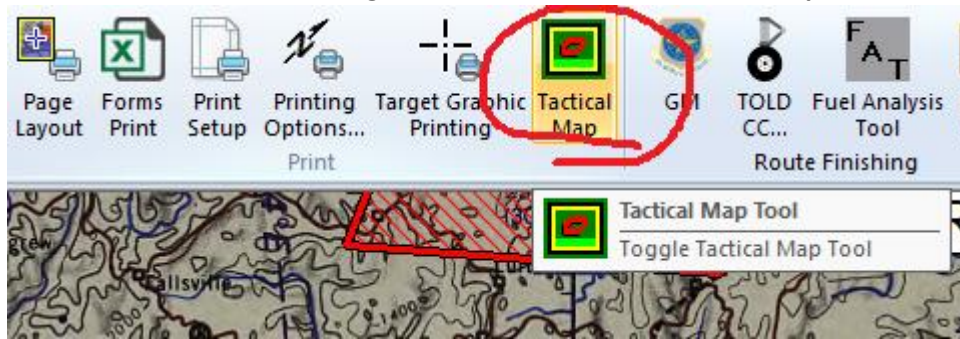
Warnings:
22



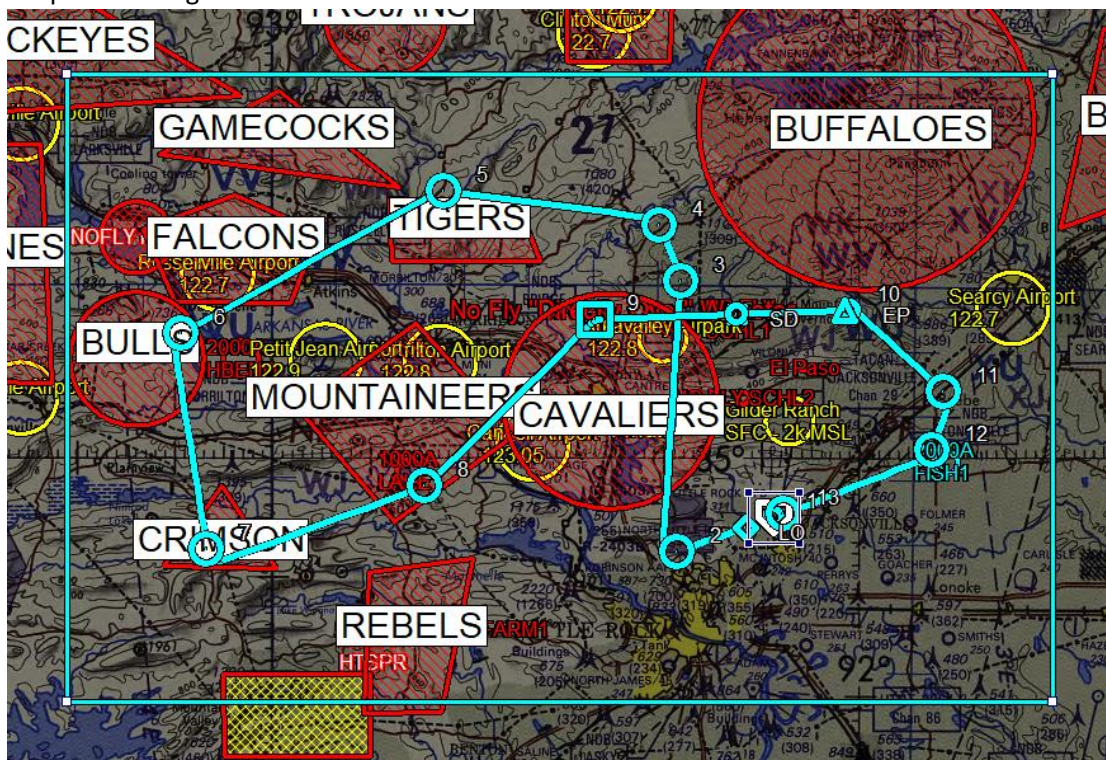
Create the MBTile Chart

8. Ensure the route is complete, calculated, and required/desired overlays are enabled.
9. Select a chart scale that allows you to see the whole route, or zoom out on the current scale. In this example, I used ONC scale with VO and doghouses not shown above 1:500K just for clarity.

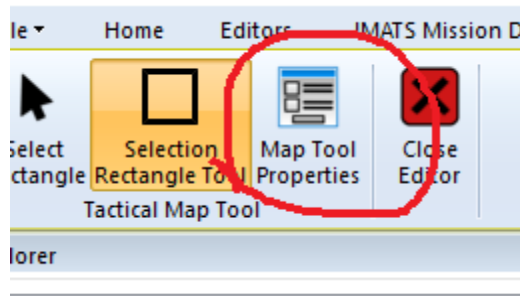
10. In the JMATS Mission Planning tab, select the colorful Tactical Map.



11. It will open with the selection cursor enabled. Click and drag a box just like doing Target Graphic Printing.



12. Select Map Tool Properties.



13. Select Chart Scale.

14. Select a file name if desired.

15. Select Output File Type as MBTile.

16. Select Maximum Output File Size as Fit on DVD.

17. Select Tile Resolution as High.

18. Set the output directory of your choice. The easiest method is to save it to your Student Share or Instructor Share folder.

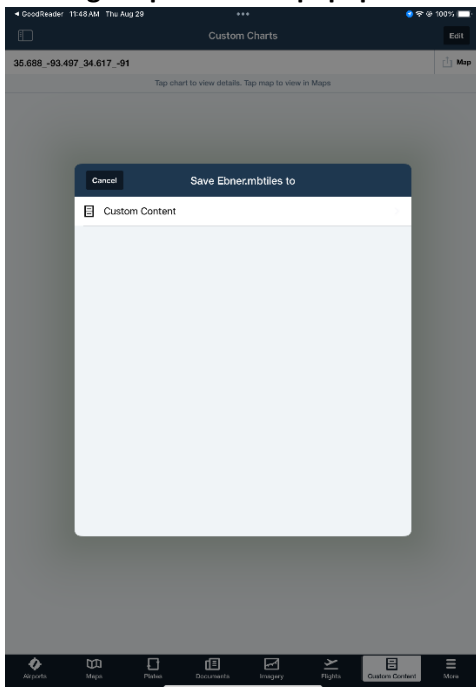
19. Press the Create Image button.

A screenshot of the 'Tactical Map Tool' configuration window. The window has a title bar 'Tactical Map Tool'. The 'Status' is 'Ready!'. The 'Map Type' is 'ECRG 1:250 K (JOG)' with an 'Update' button. The 'Output Scale' section has two radio buttons: 'Relative' (selected) and 'City Scale'. The 'Relative' scale is set to '1:250K JOG' and the 'City Scale' is set to '1:25K'. The 'File Name' is 'STAN'. The 'Output File Type' section has three radio buttons: 'CADRG Mosaic', 'CADRG Tile', and 'MBTile' (selected). There are also 'User Defined' and 'One File' options. The 'Maximum Output File Size' section has three radio buttons: 'Fit on CD', 'Fit on DVD' (selected), and 'Other'. The 'Other' option is set to '2000 MB'. There are 'Max Width' and 'Max Height' fields, and an 'Equalize' checkbox. The 'Geo TIFF Metadata' section has 'Software' set to 'Tactical Map Tool' and 'Description' set to 'Maps and overlays derived from FalconView'. The 'Selected Areas' section has a table with one row: 'Area 1' with 'Lat: 35.531496 to 34.669158' and 'Lon: -93.345430 to -91.706545'. There are 'Edit' and 'Remove' buttons. There is a 'Show Zone Lines' checkbox and a 'Settings' button. The 'Tile Resolution' section has four radio buttons: 'Low', 'Medium', 'High' (selected), and 'Very High'. The 'Currency Display Frequency' section has four radio buttons: 'Never', 'Once', 'Some', and 'Frequently'. The 'Output File Directory' is 'C:\Users\jmatstu\Desktop\' with a 'Browse...' button. There are 'Create Image' and 'Quit' buttons at the bottom.

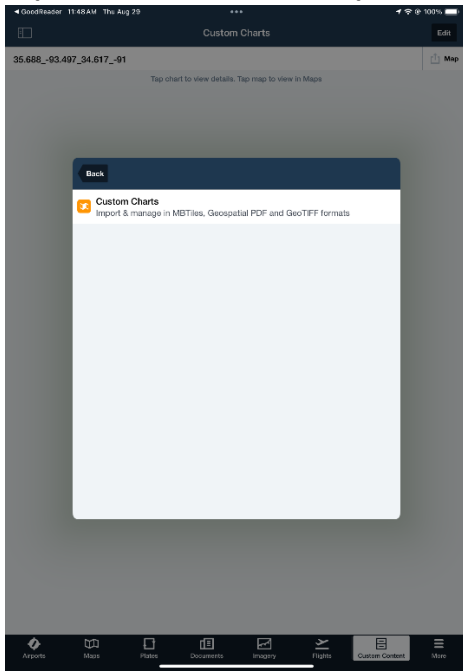
Send to ForeFlight

If you didn't save the file to a share folder, then copy it to either Student or Instructor Share. Now switch to the EFB and GoodReader. Most of these steps are identical to importing a PDF.

12. Press the Connect globe in the main menu and open either Student Share or Instructor Share location that you saved your chart to.
13. Browse to the file, select it, and press Download.
14. Select a location in GoodReader (Downloads, Home, etc.)
15. Go to that location in GoodReader.
16. Long-press the chart file name to get the "manage" menu up.
17. Select Share.
18. Find the ForeFlight icon or press the 3 dots to add it to the share list.
19. Select the ForeFlight icon and it will switch to ForeFlight.
20. ForeFlight opens with a popup "Save xxx.xxx to". It should show "Custom Content."



21. Tap Custom Content, then tap Custom Charts.



22. You'll get an Import Success message, and your chart is now available in Aerial & User Pts list.

