

Regional Best Practice: Met Intern TAF Writing Program

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Background

In a continued effort to improve service to the FAA, this training program will equip future aviation forecasters with the tools they need to write thorough and accurate TAFs. Students and interns may also attain a higher level of self motivation and a stronger work ethic, as a result of participating in this program.

Upon completion of the Central Region Aviation Training requirements (NWSI 20-103) a NWS Met Intern (MIT) or Student Trainee (SCEP) will be able to participate in this program. It is important that the Central Region Training requirements are completed before participation in this program begins, as it provides the Met Intern/Student with a strong Meteorological foundation that will allow them to produce the best possible forecast using the science and tools provided in the training. Completion of these requirements will fall under the direction of the SOO.

Met Intern TAF Writing Program

The following instructions are an excerpt from the Indianapolis program. Local offices would need to substitute their local AWIPS identifier and office name in instructions used locally. These instructions are provided so that the participant can use the AvnFPS software, in parallel with the forecaster, to produce a set of TAFs. This program will operate on a monthly basis. Each month, participants should strive to complete as many TAF sets as possible.

Participation in the program is encouraged for all Met Interns within the region, and it is required for all Met Interns on staff at WFO Indianapolis. A complete set of TAFs for all TAF sites should be written. In addition, a practice Aviation AFD (AAFD) should accompany each TAF set. The practice AAFD should be stored under a PIL such as WRKxxx, where xxx could be your initials or something else *besides* WRKAFFD. Participants should strive to write TAF sets when there is challenging weather to deal with.

Procedures for utilizing AvnFPS to write practice TAFs

Your site will first need to configure AvnFPS to include a "Practice" backup option. This is needed to keep practice TAFs separate from live TAFs:

- Create a "PRACTICE" group in AvnFPS. This is similar to the groups already in place for your primary and backup TAFS.
 - From a shell, type "`cd /awips/adapt/avnfps/etc/tafs`" and hit 'Enter' (note: OB8.x coincides with your AWIPS build).
 - You will see various files that end in .cfg.
 - Type "`cp XXX.cfg PRACTICE.cfg`" where "XXX" is your site identifier (i.e., IND).
 - Type "`ncedit PRACTICE.cfg`"

- In the editor, change the work PIL 'XXXWRKTAF' to 'XXXWRKPRA'
 - For each of your airports in the file (MCI, MKC, STJ), change the identifier's last letter to the number 1 (in this case, MC1, MK1, ST1).
 - Save and exit
- Go into the AvnFPS setup GUI (from the main AWIPS screen, select the "Start AvnFPS → Configuration GUI" option.
 - In the GUI, select "TAF Site Info Editor".
 - Once in this editor, call up your first "live" airport by typing its identifier (i.e. "KIND") into the airport box and click the 'Load' button.
 - When the GUI is filled in, it's time to make some changes.
 - Change the airport identifier from live to test (i.e., change "KIND" to "KIN1"
 - Change the WMO header to NZUS97 KXXX where XXX is your AWIPS identifier.
 - Change the AFOS box from CCCTAFXYZ to CCCTAFXY1 (XYZ is the last three letters of the airport identifier)
 - Towards the bottom of the screen, click the "Make Templates" button
 - Click the 'Save' button to save your new TAF site configuration
 - Repeat the above steps for each of your airports.
- Double-check your new PRACTICE group exists and is correct.
 - From the AvnFPS Setup GUI, click the "TAF Products" button
 - Click the PRACTICE option in the list and ensure that all your new practice sites are listed to the right. If they are not, you can use the GUI to add them
 - Click 'Close' to exit this GUI
- Add triggers for your practice TAFs. To do this, click the "Triggers" button from the AvnFPS Configuration GUI.
 - You will see a table with various entries for TAFs, METARs and CCFP products. Next to each of your new practice sites, there will be a blank box. Type in the AFOS-legacy nine-letter identifier for the new practice site(s).
 - Click the 'Make' button and then click the 'Close' button
 - As user 'fxa', run a localization –trigger on dx1 and dx2.
- Add the dummy PIL's to your afos2awips.txt file on your lx workstation. As user 'fxa', push this updated file to all lx's, dx's, px's and the xt's. Also, send it to any "na" boxes you have on AWIPS.

To write practice TAFs using AvnFPS:

- Log into AvnFPS as you normally would (with your login name)
- In the main AvnFPS GUI, click on the Backup button (far right button)
- In the Select Products window, select the PRACTICE group and click OK

- You will see the GUI change and each TAF site will now read with your “practice” airports and they will show up in **RED**. This is OK until you save and send your practice TAFs.
- Now you can go into the TAF Editor and click on LOAD.
- From the product loader window, select **Initialize From** (latest) or (template). If you click Latest you may get a message that says it can't access previous TAF for your test sites. If this pops up just click on OK and a template set up for the upcoming valid TAF set will load. If you select Template (instead of latest) a blank set of TAFs (with the tag lines for other sites when appropriate) will load into the editor window.
- *****IMPORTANT***** DO NOT try to restore the previous work TAF file (CCCWRKTAF.Rtn, that the forecaster has saved, into your template. This will interfere with normal transmission of the live TAFs that are sent out. ALWAYS use the LOAD feature, NOT the Restore feature.
- You can now write a practice set of TAFs.
- Use the **Syntax** button to check your TAF format. The QC button will not function as it normally would since it checks your TAFs against climatology and there are no climate files for your test work TAF sites.
- Click the **Save** button, it will save your TAF set to /tmp/CCCWRKPRA.Rtn
- Click on **Send** as well as **File-Store in DB** so your TAFs will save to the database and can be monitored through AvnFPS. You can call up your practice TAFs in an AWIPS text window under CCCWRKPRA. This is where you will print out your forecast (and AAFD) and give it to the forecaster for review (and then later place in the aviation focal point's mailbox).
- You'll notice that after your TAFs are sent, the monitoring window will look just like it does when you have live TAFs. It will continue to compare your TAFs to the Metars, persistence, etc. The only monitoring that will not work (the squares will remain gray) are the Grid and LLWS.
- You should to continue to keep AvnFPS open through your shift and monitor your practice TAFs real time.

To the best of your ability, the TAF set should be completed when the actual set of TAFs are due. (No later than 1130Z, 1730Z, 2330Z, or 0530Z). This is not absolute, so if you can't write TAFs by their due time, you can still write them later.

Upon completion of the TAF set, print out the TAFs and AAFD and ask the forecaster on duty if he or she can discuss/review your TAF set. Have the forecaster initial the printed TAF set and AAFD and make sure your name is on the document somewhere. Give the completed set of TAFs/AAFD to the Aviation Focal Point

A monthly running total of completed TAF sets/AAFD should be kept by the Aviation Focal Point for each participant in the program. The total number of TAF sets/AAFDs completed each month by each program participant will be sent to the participant as well as the Management team. Since this is a self paced program, there is no *minimum* number of TAF sets/AAFDs that will be required of each participant.