

SECTION X - AERONAUTICAL CHART UPDATING

INTRODUCTION:

The NOS-Charting and Geodetic Services (C&GS), Aeronautical Chart Division rely on user notification of any modifications that may be required to keep AERONAUTICAL CHARTS and other related publications current. In 1978 the Auxiliary entered into a program of AERONAUTICAL CHART UPDATING in cooperation with NOS-C&GS, Aeronautical Chart Division. In consideration of the training and experience of Auxiliary members in NAUTICAL CHART UPDATING activities as part of the ATON/CU Program, the incorporation of the AERONAUTICAL CHART UPDATING program was relatively uncomplicated. Today, AERONAUTICAL CHART UPDATING has become an important responsibility in the Auxiliary ATON/CU Program efforts. Refer to Section IX.

OBJECTIVE:

1. To acquire a general knowledge of the responsibilities of the Auxiliary in AERONAUTICAL CHART UPDATING activities.
2. To become familiar with the characteristics of the AERONAUTICAL CHART UPDATING information to be reported.
 - o The procedures for requisitioning aeronautical charts.
 - o The different types of reportable items.
3. To become familiar with the method of reporting AERONAUTICAL CHART UPDATING information on the NOAA 77-5 form with attachments.

INFORMATION:

Auxiliary aviators may find many opportunities to file reports regarding AERONAUTICAL CHARTS during flights, whether on personal or Auxiliary business. There are numerous types of aeronautical charts, however, of particular interest in ATON/CU Program activities are those used in piloting which depend upon recognizable features on the surface of the earth for positioning. Auxiliary aviators should routinely note any non-standard conditions related to the charts they normally use, i.e., landmarks (natural and man-made features) that are easily recognizable from the air that may have changed or are new to the area covered by the chart. Accordingly, such findings for AERONAUTICAL CHART UPDATING should be reported in the same manner as NAUTICAL CHART UPDATING reports, using NOAA 77-5 forms (refer to Section IX).

In order to conduct AERONAUTICAL CHART UPDATING activities, it is recommended that a copy of NOS-C&GS publication "Aeronautical Chart Users Guide" be obtained through regular chart supply sources. The "Aeronautical Chart Users Guide" provides

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a complete listing of aeronautical symbols for identifying chart features and for training.

Unlike nautical charts, aeronautical charts are not numbered, they are primarily characterized by SECTIONAL and TERMINAL areas.

Aeronautical charts are requisitioned in the same manner as nautical charts. For Flotillas which have assigned operational aircraft, aeronautical charts are furnished by NOS specifically for updating purposes and only for the areas normally covered by the Flotilla aircraft. As is the procedure for nautical charts, the Flotilla requests for aeronautical charts are forwarded by the FSO-ANs to the SO-AN for consolidation into a single Division request. The SO-ANs forwards the Flotilla/Division consolidated request to the DSO-AN for review and forwarding to the BC-ONC. The period for such chart requests is from January 1 through May 1 or at other times for specific "special" projects. The turn-around time for Flotilla receipt of charts is approximately eight weeks. Refer to Section VI and Section VII. In certain Coast Guard Districts, requests for aeronautical charts must be approved by the ADSO-Air OP.

There are two types of observations that are made, either AERIAL or AERONAUTICAL as defined below:

- a. **AERIAL** - Observation of navigable water from an aircraft for the purpose of comparing actual surface conditions with nautical charts and related publications.
- b. **AERONAUTICAL** - Air or surface observation of actual surface (water and land) conditions and comparison with aeronautical charts and related publications. These charts are primarily SECTIONAL and TERMINAL area charts.

REPORTABLE AERONAUTICAL CHART UPDATING ITEMS

UNCHARTED OR IMPROPERLY CHARTED OBSTRUCTIONS

More than 200-feet above ground such as towers, stacks, cooling towers, and bridges. Less than 200-feet above ground, report only those obstructions or features which are a hazard to flight or in approach paths.

INCORRECT OR UNCHARTED AIRPORT/FACILITY DATA

Surface lighting, navigation, facility information (frequency, name identifier, etc.), pilot briefing services (phone number), special operations (parachute jumping areas and glider operations).

REPORTABLE AERONAUTICAL CHART UPDATING ITEMS (con't)

INCORRECT/UNCHARTED
LANDMARKS

Such as linear features (major highways, railroads, pipelines), major power transmission lines, mines and quarries, hydrography (major lakes, rivers and dams), outdoor theaters, race tracks, lookout towers, microwave towers, and tank farms.

MARINE RADIO BEACONS

Incorrect or uncharted (include frequency data and characteristics).

INCORRECT OR OMITTED
GEOGRAPHIC NAMES

STRONG MAGNETIC DISTURBANCES

CHANGES TO SHORELINE PROFILE
OR DETAIL

The purpose of an Auxiliary flight chart updating mission is to conduct aircraft flights over areas charted by NOS, in order to examine, verify and evaluate topographic and aeronautical data. Auxiliary aircraft flight crew duties include indicating corrections and/or changes to charts, recommending addition or deletion of data, and resolving questions raised by the chart compiler that cannot be settled by office review. The chart compiler questions will be furnished through the Auxiliary National Division Chief, Aids to Navigation (DVC-ON) to the DSO-AN upon request. Auxiliary flight checking is usually performed at altitudes of **2,000** to **5,000** feet above the terrain and only during periods of good visibility. The Auxiliary observer must always consider the usefulness of the chart features as seen by a pilot flying at a much lower altitude under minimum visibility. Flights may be conducted at lower altitudes, however the flight commander must observe Federal Aviation regulations while conducting these activities.

The "Meander Traverse System" method of flight checking, i.e., where flights are made along cultural and topographic features such as highways, railroads, drainage, etc., is best used in areas where there is sufficient detail which enables the observer to fix the relative position of the aircraft at all times. The observer should verify all information shown on the published chart. Only corrections, additions, deletions, and/or discrepancies are reported. Special attention should be given to such features as water tanks, railroad round houses and other landmarks which may have been dismantled or destroyed. It is very important that landmarks which are shown on the chart be deleted if they do not exist on the ground or are not prominent enough to have any real value as a landmark. The observer should add new landmarks which aid in positive identification of a certain geographic location.

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Reporting procedures for discrepancies, additions and/or deletions to aeronautical charts are the same as for nautical charts. Submit reports on a NOAA 77-5 form with a cutout from the SECTIONAL/TERMINAL chart (preferably a photocopy of the chart section) through the DSO-AN. Mark the top portion of the NOAA 77-5 form, "AERONAUTICAL CHART UPDATE" and indicate in the CHART NO./NAME block of the form the SECTIONAL/ TERMINAL chart name, instead of the chart number as for a nautical chart update.

Auxiliary members and their units submitting NOAA 77-5 reports are awarded credits, refer to Section XII.

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USCG AUX. - NOS COOPERATIVE CHART UPDATING PROGRAM
 Please type or print with ballpoint to assure 3rd copy legibility. LEAVE SHADED AREAS BLANK.

1. NAME: **SAMUEL** (Last Name) **WILLIE E.** (First Name and Initial)
 2. ADDRESS: **2201 FRONT ST** (Street) **READING PA** (City) **19606** (Zip Code)
 3. TELEPHONE: **215 123 4567** (Telephone No.)
 4. DATE OF INVESTIGATION: **12/92** (Date)
 5. NUMBER OF THIS REPORT: **1** (Number)
 6. LATITUDE: **40° 19' 14" N** (Latitude) **75° 53' 37" W** (Longitude)
 7. AIRWAY SUBMITTER TO: **NOAA** (Agency)
 8. U.S.C.G. (U.S. Coast Guard)
 9. CHART NO./NAME: **NY SECTIONAL** (Chart No./Name)
 10. TOTAL MILES TRAVELED: **13** (Miles)
 11. ST: **PA** (State)
 12. ZIP CODE: **19606** (Zip Code)
 13. C: YES (Chart Corrective)
 14. NO: NO CHANGES (Chart Corrective)
 15. APPROXIMATE APPROACH DEPTH: (Approach Depth)
 16. REVISIONS: (Revisions)
 17. U.S. COAST GUARD: (U.S. Coast Guard)
 18. APPROVED: (Approved)
 19. DATE: (Date)
 20. TITLE: **AERONAUTICAL CHART** (Title)
 21. SUBJECT: **2 AERO CHART UPDATE** (Subject)
 22. EXPLAIN CHANGE OR CORRECTION BEING REPORTED: **DETERMINED FROM FCC-EM BROADCAST STATION LICENSE ISSUED TO CITY BROADCASTING CO. INC., READING, PA. (COPY ENCLOSED).**
THERE IS A NEW 540-FT. RADIO TOWER ON THE EASTERN PEAK OF NEWSINK MOUNTAIN AT THE POSITION GIVEN ABOVE. IT IS LOCATED IMMEDIATELY ADJACENT TO THE ORIGINAL (CHARTED) 41-FT. EDO TOWER APPROXIMATELY 300-FT. EAST (SOUTH) OF THE FINAL APPROACH INTO RUNWAY-31 AT READING AIRPORT WHICH IS HEAVILY USED BY MILITARY COMMERCIAL PRIVATE AND CORPORATE AIRCRAFT. THIS TOWER HAS THE REQUIRED FIXES & FLASHING RED WARNING LIGHTS. THIS TOWER HAS FCC & FAA APPROVAL.
RECOMMEND THIS TOWER BE ADDED TO AERONAUTICAL CHARTS. THE TOWER COULD BE A HAZARD TO AN UNBARY PILOT. COMMERCIAL AIRCRAFT ROUTINELY FLY LOWER THAN THE TOP OF THIS TOWER ON THEIR FINAL APPROACH TO RUNWAY 31.
NOTE: ATTACHED PHOTOS & NEWSPAPER ARTICLES.
Include Enclosures if possible

FOR ACKNOWLEDGEMENT, FILL OUT BACK OF COPY 1
 DATE REPORT SUBMITTED: **12/92**

EXAMPLE - CHART UPDATE REPORT (NOAA 77-5) - AERONAUTICAL