

HEADQUARTERS
568TH SIGNAL AIRCRAFT WARNING BATTALION
APO 86

TAW:njk
6 July 1945

UNNUMBERED)

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MEMORANDUM) Standard Operating Procedure for MEW Operation
During the Calibration and Final Installation Period

In order to take full advantage of all radar facilities available, it is believed that the low angle coverage capabilities of the MEW during the period it is being calibrated and permanently installed should be used whenever possible. This will be accomplished as follows:

A. Radar

1. Equipment. – Two units composed of a PPI scope, interrogator, and plotting board each, will be set up for operation. One additional PPI scope and one B scope will be made available to be operated by the crew chief.
2. Operating Crew. – The normal operating crew will consist of:
 - 1 – Crew Chief
 - 2 – PPI scope operators
 - 2 – AN/TPX operators
 - 2 – Plotter-tellers
 - 2 – Recorders
3. Duties of the crew:
 - a. Crew Chief – The crew chief will supervise the operation of other members of the crew to insure that all information is being properly reported. He will separate the extra PPI and B scopes upon the request of the radar operations officer, obtaining any special information desired by him. Upon the request of the radar operations officer, he will direct one of the AN/CPX operators to interrogate special flights beyond the range of the other interrogators. He will rotate other members of the crew through all positions at twenty minute intervals. He will keep a log of all instructions received from the radar operations officer and the results of action taken. He will also indicate in his log calibration and maintenance periods.

- b. PPI scope operator – He will report all targets in his assigned sweep to the plotter-teller.
- c. Plotter-teller – He will plot all targets reported to him by the scope operator. He will refer the new flight to the interrogator operator for identification and call the targets to the ADCC plotter. After a target has been identified, he will have it interrogated as often as necessary to assure that its color does not change.
- d. Interrogator operator – He will interrogate all flights referred to him by the plotter-teller or crew chief.
- e. Recorder – He will record all bogies and SOS plots passed to the ADCC.
- f. In addition to the above, the normal technical personnel necessary to operate the station will be employed.

4. Communications – All reporting will be done by telephone.

- a. The crew chief will have a direct line to the radar operations officer and facilities for monitoring the reporting lines.
- b. The scope operator will wear a head and chest set paralleled with those of the plotter teller and interrogator operator.
- c. The plotter-teller will wear a special head and chest set wired with one ear piece on the reporting line and the other on the local circuit. His transmitter will be equipped with a switch allowing him to talk on either the local line or the reporting line.
- d. The recorder will have a head and chest set on the reporting line. His transmitter switch will normally be in the “off” position.

5. Operations.

- a. Operators will be on a twenty-four hour-a-day schedule.
- b. Maintenance time will be taken as required at times agreeable to the calibration officer and the MEW platoon commander.
- c. Calibration requirements will have priority on all equipment. During calibration, the conditions outlined in paragraph A1 above will be met as far as available equipment allows.
- d. When two PPI scopes are available for reporting, one will cover from 20 to 70 miles from 270° to 90° and the other from 20 to 70 miles from 90° to 270°. When only one scope is available, it will cover 360° from 20 to 70 miles.
- e. All reporting to the ADCC will be in polar coordinates using the location of the stations as the center of the polar chart.
- f. The crew chief and recorders log sheets will be forwarded to the S-3, this headquarters, so as to arrive not later than 1000 of the day following their completion.

B. ADCC

1. Personnel – Reporting Company “D” will provide two additional plotters per shift to plot the information received from the MEW.
2. Communications:
 - a. Two additional plotting positions will be provided on the plotting board. One to cover the north side and the other the south side.
 - b. All reporting will be by telephone.
 - c. A direct telephone line from the radar operations officer’s position to the MEW crew chief will be installed.
3. Operations:
 - a. Plotters will use helmas {sic} for displaying the MEW information in the same manner as the arrows are now being used for other radar stations.
 - b. Polar coordinates will be used exclusively for plotting MEW information.
 - c. Each MEW plotter will filter his own plots.
4. The chief filterer will combine the MEW plots with those received from the other radars as prescribed in VII Fighter Command Memorandum 100-12.
5. The radar operations officer will use the MEW crew chief to maximum advantage for confirmation or more detailed information desired on any information received from the other radars. Since the AN/TPX interrogator has a 250 mile range, it may be used to good advantage in determining the identification of flights beyond the interrogator range of the other radar stations.

BY ORDER OF LIEUTENANT COLONEL CHAMBERLIN:

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