

SCR-584 Operator Duties

1. PPI Operator: Searches for target and tracks until within range of automatic following.
 - a. From information given by plotter searches in range and bearing to pick up aircraft beginning run.
 - b. Reports target when located.
 - c. Reports identification of target when chaff is seen on PPI.
 - d. Reports "On Target" when aircraft is engaged by automatic following.
2. Range Operator: Picks up target at 32,000 yards and controls automatic following until run is completed.
 - a. Engages automatic following when aircraft arrives within proper range of 584 and controls automatic following throughout remainder of the run.
3. Plotter: Plots position of fixes of aircraft during run on coarse and fine scale maps.
 - a. Receives position information aircraft. If not within range of plotting map, converts to approximate range in thousands of yards and bearing to mils from tables.
 - b. If on map, plots position of aircraft and determines range and bearing from 584. Passes this information to PPI operator.
 - c. Continues following until target identified.
 - d. When PPI reports "On Target", calls read at convenient ranges (Every 5,000 yards). Records bearing received from recorder and range as read on information board. Plots fix on coarse map.
 - e. At fixes (bombs away and impact), notes range and records bearing received from recorder and plots on map.
 - f. If run is satisfactory, plots as many points as possible on fine map and determines circular error, deflection error, and range error, and passes this information to recorder.
4. Recorder: records information read from data box for each run.
 - a. Checks to be sure that new run number is showing.
 - b. Records date, aircraft call sign, bomb group, run number, altitude for each run as aircraft reports from I.P.
 - c. After "On Target" report, starts camera and photo-flood and records bearings and receives ranges from plotter. Passes bearings to plotter.
 - d. At fixes, reads bearings and records bearings, ranges from plotter, time from controller and frame number from assistant controller.
 - e. Also at fixes takes single extra picture at instant of "Mark" and takes another exposure immediately afterwards with lens of camera covered (i.e. blank after fix).
 - f. Stops camera after approximately fourth picture following second fix.

- g. Takes single pictures of information boards interposes a few blank frames between run, turns off camera and photo-flood until required for next run.

5. Controller Assistant: Makes final recording of all data concerning each run. Prepares information boards to be photographed before and after each run.

- a. Fills out information boards and places them in position at beginning and end of runs.
- b. At end of run changes run number.
- c. Reads frame numbers at fixes and passes information to recorder.
- d. During early part of run records individual aircraft run information from previous run on consolidated information sheet, receives this data from recorder.

6. Controller: Directs all activities of 584. Carries on VHF contact with aircraft.

- a. Switches to RX and TX in use. Checks all positions on call to be sure other stations are switched to correct RX.
- b. Aircraft contact controller from orbit point and requests clearance to make run. Controller gives clearance.
- c. Answers call from aircraft at I.P. requests range and bearing of aircraft from target if not already given.
- d. Receives warning from PPI that aircraft is picked up at 65,000 yards.
- e. Calls aircraft and requests "Spill Your Beans".
- f. Receives O. K. from PPI "Target Identified".
- g. Calls aircraft: "Aircraft Identified, Proceed On Run".
- h. Records times of fixes. Passes times of fixes to recorder.
- i. At end of run, call aircraft "Run Completed, Return To Orbit Point".
- j. Calls up fresh aircraft unless otherwise specified in order of calling from O. P.
- k. Keeps operational log sheet: call signs, time at O. P., I.P., end of run and explanatory remarks, station phone calls etc.