

tions which must be reduced so that controllers can use the radar more effectively.

Altitude on radar. Among the most significant deficiencies of current ATC surveillance radar is its lack of altitude information. Without altitude information on the radar scope, it is exceedingly difficult for controllers to properly assess the collision potential between aircraft whose blips appear on radar.

If the radar display showed altitude information automatically tied to aircraft targets, more meaningful traffic information and advisories would be possible. Furthermore, controllers and pilots would not be distracted by targets representing aircraft already safely separated by altitude; thus they would have more time to cope with traffic deserving their attention.

The airlines recommend: Expedited installation of alphanumeric and automatic altitude read-out on all terminal and en route facilities. (See fig. 5.)

MAKING BETTER USE OF RADAR

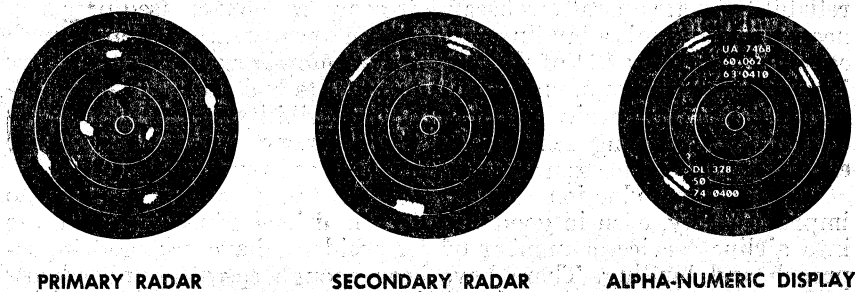


Figure 5.

Daylight radar scopes. The high ambient light level in control tower cabs during daylight hours can render a radar scope unusable unless some of light shield or cover is placed around the scope. Such shields themselves interfere with the controller's ability to readily view the scope. Consequently, bright tube radar displays suitable for daylight viewing have been developed and are planned for those control towers which currently have radar. Because the bright tube display makes it possible for the tower controller to utilize his radar during daylight hours, it should become a standard installation in radar equipped control tower cabs. This would be of considerable aid to the controller in the handling of both VFR and IFR traffic.

The airlines recommend that: FAA provide bright tube radar displays for all tower cabs at radar-equipped locations.

Radar weather displays. Thunderstorms and other weather phenomena containing heavy precipitation introduce severe clutter on some radar scopes to the extent that the radar can become useless for ATC. To offset such problems, circular polarization has been utilized to