

Test Plan

Greenville SC

10. Test Plan

The APX-114 and APS-152 V(2) Radar will be co-located in a Taiwan P-3C aircraft on the ground at The Lockheed Martin Donaldson Center facility. An Aeroflex IFF-701Ti test set will be employed as an aircraft transponder. The test set will be positioned on the tarmac in front of the Radar antenna with the embedded dipole array mounted in the nose of the aircraft. The test set will provide the capability to simulate an aircraft transponder at various ranges and altitudes at the relative bearing of the test set to the a/c (effectively zero degrees in our typical set-up). For testing SIF Mode 1,2,3, and C, the test set will be configured with the proper Mode and Code to provide valid replies to the interrogator in each selected mode. An IFF sector will be employed to limit the scope of the interrogation. For Mode 4 A and B, the test set will be loaded with the same test key as the interrogator. In Mode 4, the simulated a/c will be interrogated for only a few scans in a small sector of fixed width in the direction of the simulated target. Mode 4 interrogation is initiated on one target at a time as directed by an operator action.