

BF GOODRICH SKYWATCH (SKY497) TRAFFIC ADVISORY SYSTEM - DESCRIPTION AND OPERATION**1. General**

- A. The BF Goodrich Avionics Systems SKYWATCH (SKY497) is an airborne traffic advisory system that advises the flight crew where to look for airplanes posing a collision threat. SKYWATCH (SKY497) alerts the crew to nearby transponder equipped airplanes that may present a danger.

NOTE: Display unit is also utilized by the BF Goodrich WX1000+/E Stormscope system and is referred to as an WX-1000/SKY497 display.

NOTE: The BF Goodrich WX1000+ indicates an enhanced version of the Stormscope. The added E indicates the WX- 1000+ Stormscope with NAVAID.

- B. Traffic information is graphically displayed on the display unit. A range of either 2 or 6 nautical miles may be selected.
- C. SKYWATCH (SKY497) components include a TRC497 Transmitter Receiver Computer (TRC), a TRC mounting tray, a shared WX-1000/SKY497 display and a NY-164 antenna located on the forward upper fuselage. A selector switch mounted on the instrument panel next to the indicator allows the crew to choose between either STORMSCOPE OR SKYWATCH operation.

2. Operation

- A. With SKYWATCH mode selected, the system can track up to 30 intruder airplanes with only the 8 highest priority showing on the display. Horizontal surveillance tracking radius is 11 nautical miles maximum with a relative altitude tracking range of plus or minus 10,000 feet maximum. An ON/OFF control and display brightness is controlled through the OFF/BRT switch located on the WX- 1000/SKY497 display.
- B. SKYWATCH/STORMSCOPE mode switch is required if the WX-1000+/E Stormscope Weather Mapping System is installed. This switch permits the flight crew to switch the display between the SKY497 and WX- 1000+/E. If a traffic advisory is detected in the Stormscope display mode, the display will switch to the SKYWATCH mode automatically.
- C. The WX-1000+/Emaintenance switch is located on the aft tailcone avionics shelf. This switch, when moved to SKYWATCH position, allows the SKYWATCH system to be powered up if the WX-1000+/E has been removed. If the SKYWATCH TRC is removed, then a shorting plug is used to allow the WX-1000+/E to continue operating.
- D. The NY-164 directional antenna is a teardrop shaped antenna. Connections are made through two TNC and one BNC connector. The antenna is sealed by using an O-ring to ensure a tight seal between antenna and skin of the airplane.