Chapter 2
Operating Instructions

Controls & Indicators

Figure 2-1 identifies the major controls and on-screen indicators for the SKY497. Table 2-1 is the legend for figure 2-1 and lists other controls and indicators.
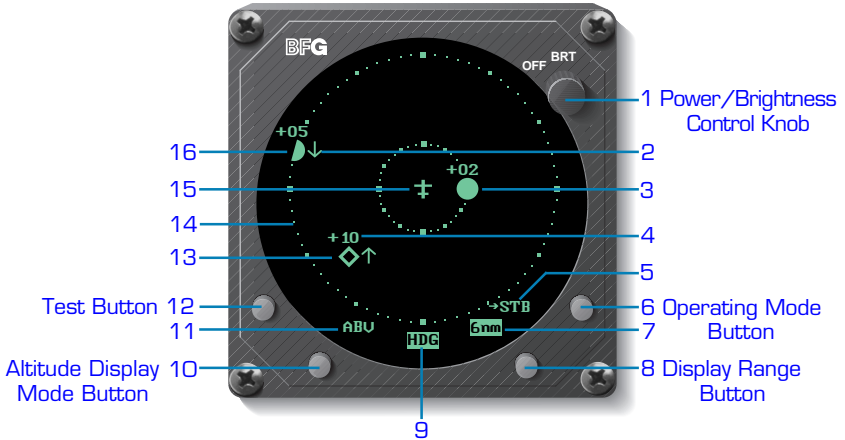

Figure 2-1. SKY497 Controls and Indicators

Table 2-1. SKY497 Controls and Indicators

No	Description
1	**Power/Brightness Control Knob (OFF/BRT)** The power/brightness control knob controls power to the SKY497 and WX-1000 (if installed) and adjusts display brightness.
2	**Vertical Trend Arrow** A vertical trend arrow indicates that the intruder aircraft is ascending (up arrow) or descending (down arrow) faster than 500 fpm. No arrow is shown for intruder aircraft in level flight, or for those moving vertically slower than 500 fpm, or for non-altitude-reporting intruder aircraft.
3	**Traffic Advisory (TA)** A TA consists of a symbol on-screen and a "traffic, traffic" message on the cockpit speakers or headset. When an intruder aircraft that meets the TA criteria described in chapter 3 is within the displayed range (inside or outside of the selected altitude display mode), the corresponding symbol is this circle located at a position on the screen that indicates the relative bearing and range of the intruder aircraft. In general, The SKY497 issues a TA when it detects an intruder aircraft within 30 seconds of a possible collision, or within a 0.5 nmi horizontal radius and a ±800 ft relative altitude range of your aircraft.

*Table 2-1. SKY497 Controls and Indicators (Continued)*

No	Description
4	**Data Tag** **+10**
	These two digits indicate, in hundreds of feet, the relative altitude of the intruder aircraft. For example, +10 means the intruder aircraft is 1,000 feet above you. A positive data tag is displayed above the traffic symbol to emphasize that the intruder aircraft is above your aircraft. Similarly, a negative data tag is displayed below the traffic symbol. If the intruder is at the same altitude as your aircraft, OO will be displayed above the traffic symbol.
	The data tag for a vertically out of range TA stays at the maximum or minimum altitude number of the current altitude display mode until the intruder aircraft comes within the altitude limits of the altitude display mode. The SKY497 only displays data tags for altitude reporting aircraft.
5	**Operating Mode Button Label** **→STB**
	This on-screen label identifies the function of the adjacent button. The →OPR label appears on the standby screen and means *go to normal operating mode*. The →STB label appears on the traffic screen and means *go to standby*. If your aircraft has a squat switch, the →STB label only appears when your aircraft is on the ground.
6	**Operating Mode Button**
	Pressing the operating mode button when it's labeled →STB switches the SKY497 out of normal operating mode and into standby. Pressing the button when it's labeled →OPR switches the SKY497 out of standby and into normal operating mode.
7	**Display Range Indicator** **6nm**
	This indicator identifies the currently selected display range (6 or 2 nmi). The indicator does not appear when the SKY497 is in standby.
8	**Display Range Button**
	This button toggles the SKY497 display range between 6 and 2 nmi as reflected in the on-screen display range indicator. Pressing the button when the SKY497 is in standby has no effect.
9	**Heading Flag** **HDG**
	The heading flag appears when the heading input is invalid or missing. The heading flag will disappear when a valid heading signal is supplied. The SKY497 *will* operate with a heading flag, but you may experience degraded performance, especially during high-rate-of-turn maneuvers.
10	**Altitude Display Mode Button**
	This button changes the SKY497 altitude display mode in the following order: above, normal, below, normal, etc., as reflected in the on-screen altitude display mode indicator. Pressing the button when the SKY497 is in standby has no effect.

*Table 2-1. SKY497 Controls and Indicators (Continued)*

No	Description
11	**Altitude Display Mode Indicator** **ABV** This indicator displays the name of the currently selected altitude display mode: ABV (look up), BLW (look down), or NRM (normal). This indicator does not appear when the SKY497 is in standby.
12	**Test Button** This button starts a SKY497 self test when the SKY497 is in standby.
13	**Other Traffic** ◇ This symbol represents traffic detected within the selected display range and altitude display mode that does not generate a TA.
14	**Range Rings** The outer range ring represents a distance of 6 nmi from your aircraft when the display is set on the 6 nmi range, or a distance of 2 nmi when the display is set on the 2 nmi range. The inner range ring on the 6 nmi range represents a distance of 2 nmi.
15	**Own Aircraft** This symbol represents your aircraft.
16	**Out-of-Range Traffic Advisory** An out-of-range TA is one in which the intruder aircraft is beyond the displayed range. The corresponding symbol is this semicircle located at a position along the outer range ring that indicates the relative bearing of the intruder aircraft.
	Controls Required with the STORMSCOPE Option:
–	**SKYWATCH/STORMSCOPE Mode Switch (not shown)** This remote toggle switch determines whether traffic information or thunderstorm information is displayed on the screen. Both the SKY497 and the WX-1000 continue their tracking functions even if the switch is in the other position. If the SKY497 detects a TA or generates an error message when the switch is in the STORMSCOPE position, the display will switch to the traffic screen until the TA or error message disappears.
–	**WX-1000 Maintenance Switch (not shown)** This remote toggle switch (normally installed in the avionics bay) has a Normal position and an Override (WX-1000 maintenance) position. It should only be moved to the Override position when the WX-1000 processor is removed or powered down at the circuit breaker, and you still want to use the SKY497.

Table 2-1. SKY497 Controls and Indicators (Continued)

No	Description
	Aural Announcements:
–	**"Traffic Traffic"**
	This aural component of a traffic advisory is announced once over the cockpit speakers or headset when a TA aircraft is first detected.
–	**"Traffic Advisory System Test Passed"**
	This message is announced once over the cockpit speakers or headset after the SKY497 has passed an operator-initiated self test.
–	**"Traffic Advisory System Test Failed"**
	This message is announced once over the cockpit speakers or headset after the SKY497 has failed an operator-initiated self test.

Turn On the SKY497

CAUTION

To avoid power surges that could damage the SKY497 and the optional WX-1000, start your engines before turning on the SKY497.

1. **Turn the OFF/BRT knob clockwise to the desired display brightness.**

   The BFGoodrich screen (figure 2-2) appears and stays on the display until the power-on self test is complete.

   If the SKY497 passes the test, and your aircraft has a squat switch, and your aircraft is on the ground, the standby screen appears (figure 2-3).

   If the SKY497 passes the test, and your aircraft has a squat switch, and your aircraft is in the air, the traffic screen appears set on the 6 nmi display range and the *normal* altitude display mode (figure 2-4).

   If the SKY497 passes the test and your aircraft does not have a squat switch, the standby screen appears (figure 2-3).

   If a Failed screen similar to figure 2-5 appears, refer to the Failure Response section on page 2-9. (For installations with an ARINC 429 barometric altitude input, turning on the SKY497 during flight causes a temporary Error 20 message while the system is syncing up to the 429 data source.)

Run the Operator-Initiated Self Test

You should run the operator-initiated self test before the first flight of the day or as specified in your Aircraft Operating Manual (AOM).

1. **With the SKY497 in standby, press the test button.**

   The SKY497 begins its self test and the test screen (figure 2-6) appears. Upon *successful* completion of the self test, you will hear "Traffic Advisory System Test Passed" and the display will revert to the standby screen.

Figure 2-2. BFGoodrich Screen

Figure 2-3. SKY497 Standby Screen

Figure 2-4. In-Flight Traffic Screen

Figure 2-5. SKY497 Failed Screen

2. If you hear "Traffic Advisory System Test Failed" or see a SKY497 Failed screen (figure 2-5), push the test button again. If it continues to fail, refer to the Failure Response section on page 2-9.

3. If you hear "Traffic Advisory System Test Passed" without seeing the test screen, turn off the SKY497 using the OFF/BRT knob and contact your authorized BFGoodrich Avionics Systems dealer for troubleshooting help.

Figure 2-6. Operator-Initiated Test Screen

Switch Between Standby and Normal Operating Mode

You must switch out of standby if you want the SKY497 to display traffic information. The ability to switch out of standby on the ground in conjunction with the *above* display mode is especially useful for scanning the airspace around the airport before takeoff.

1. **To switch into normal operating mode from the standby screen (figure 2-3), press the button labeled ➡OPR.**

   The SKY497 switches out of standby into the *above* display mode and 6 nmi range. (See figure 2-7.)

   If your aircraft has a squat switch and you don't *manually* switch out of standby, the SKY497 will *automatically* switch out of standby 8 to 10 seconds after takeoff.

2. **To switch into standby from the traffic screen (figure 2-7), press the button labeled ➡STB.**

   The SKY497 goes into standby and the display switches back to the standby screen.

   If your aircraft has a squat switch, the ➡STB button label is not displayed while you're airborne and the SKY497 will not go into standby while airborne, but *will* automatically go into standby 24 seconds after landing. (This delay allows the SKY497 to remain out of standby during a touch-and-go maneuver.)

Change the Display Range

You can change the display range anytime your aircraft is not in standby.

1. **Press the display range button to toggle the display range between 6 & 2 nmi. (See figures 2-7 and 2-8.)**

   With each press of the button, the screen changes to display the traffic detected within the chosen display range. The numerical value of the chosen display range (2 nm or 6 nm) is displayed next to the button.

   The SKY497 continues to track up to 30 intruder aircraft within its maximum surveillance range regardless of the display range selected.

Figure 2-7. Traffic Screen Set on 6 nmi Range　　　*Figure 2-8. Traffic Screen Set on 2 nmi Range*
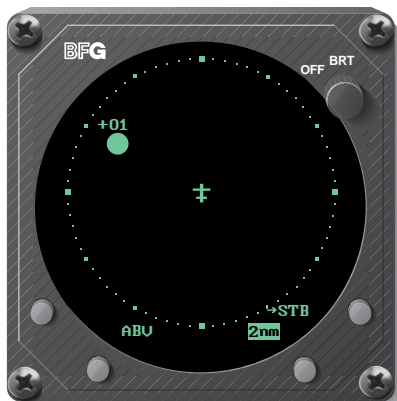
Change the Altitude Display Mode

You can change the altitude display mode anytime your aircraft is not in standby.

1. **Press the altitude display mode button to toggle the altitude display mode between above, normal, and below.**

   With each press of the button, the screen changes to display the traffic detected within the chosen altitude display range. (See figure 2-9.) The name of the chosen altitude display mode (ABV, NRM, or BLW) is displayed next to the button.

   The SKY497 continues to track up to 30 intruder aircraft within its maximum surveillance range regardless of the altitude display mode selected.
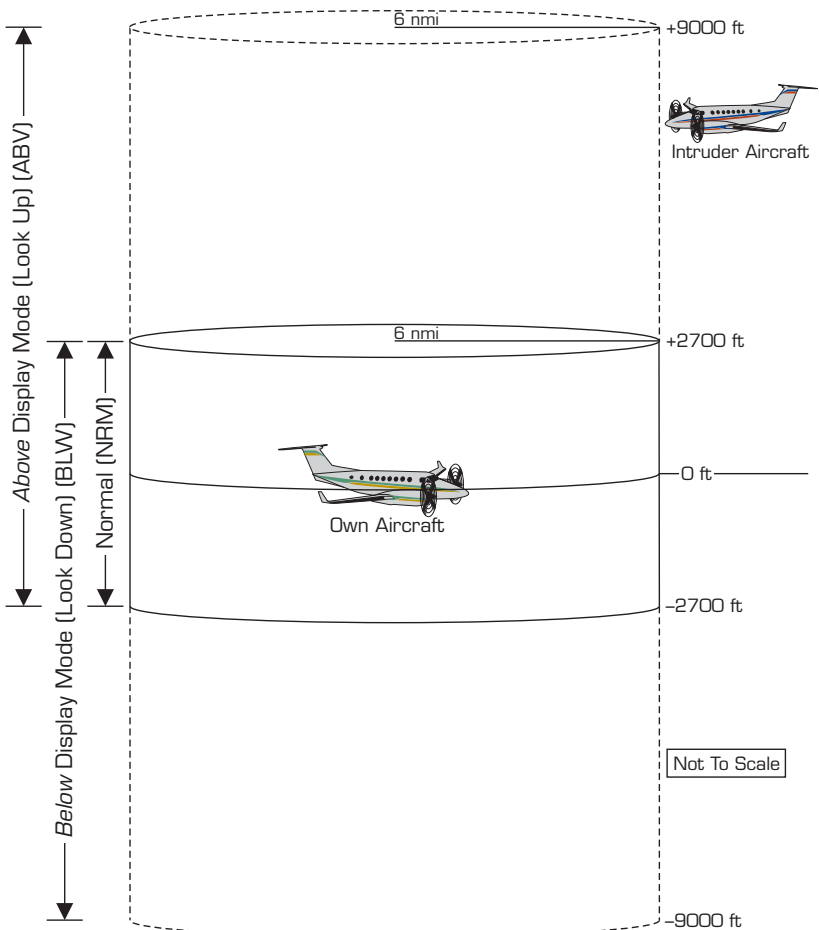

Figure 2-9. Altitude Display Modes

Switch Between SKYWATCH and STORMSCOPE Modes (Optional)

If you have a STORMSCOPE WX-1000 installed with the SKY497, you can switch between SKYWATCH and STORMSCOPE screens (figures 1-2 and 1-3) using the remote SKY-WATCH/STORMSCOPE mode switch. Once in STORMSCOPE mode, you can use the buttons on the display bezel to control STORMSCOPE functions.

WARNING

If the SKY497 is in SKYWATCH mode, the display will not automatically switch into STORMSCOPE mode to display thunderstorms or STORMSCOPE errors: You must use the remote SKYWATCH/STORMSCOPE mode switch to periodically check for thunderstorms or STORMSCOPE errors.

The SKY497 does not superimpose SKYWATCH data on top of STORMSCOPE data or vice versa; however, if the SKY497 is in STORMSCOPE mode and the SKY497 detects a TA, the display automatically switches back to SKYWATCH mode until the TA goes away. Also, if the SKY497 is in STORMSCOPE mode and the SKY497 detects a failure, the SKY497 Failed screen appears with a message to "Press Any Key to Ack." Pressing any key switches the SKY497 back to STORMSCOPE mode.

Observe the Display

WARNING

The SKY497 relies on information obtained from transponders in nearby aircraft. The SKY497 does not detect or track aircraft which are not equipped with an operating ATCRBS transponder.

WARNING

The SKY497 does not track intruder aircraft approaching at a closure rate greater than 900 knots.

WARNING

Some traffic within the chosen display range may not be displayed due to traffic prioritizing or antenna shielding.

CAUTION

Optimum SKY497 performance is realized when intruder aircraft are reporting their altitude (via a mode C or other altitude reporting transponder).

Monitor the activity of any traffic displayed. Keep in mind the following points when watching traffic on the display:

- Traffic Prioritizing – The SKY497 can track up to 30 intruder aircraft simultaneously, but to reduce clutter, it displays only the 8 most threatening aircraft of those tracked.
- Ground Target Filtering – If your aircraft has a compatible Arinc 429 radio altimeter connected to the SKY497, TAs and *other* traffic symbols will not be issued for traffic detected under 380 ft AGL when your aircraft is below 1,700 ft AGL.
- Refer to chapter 3 for a description of the TA criteria and other factors that affect the display of traffic symbols.

Respond to Traffic Advisories

Do not attempt evasive maneuvers based solely on traffic information shown on the SKY497 display. Information on the display is provided to the flight crew as an aid in visually acquiring traffic; it is not a replacement for ATC and See & Avoid techniques.

When the SKY497 issues a TA, look outside for the intruder aircraft. When you spot an intruder aircraft, use normal right-of-way procedures to maintain separation.

Turn Off the SKY497 and the Optional WX-1000

1. **Rotate the OFF/BRT knob on the display bezel counterclockwise until the switch turns off.**

Failure Response

All errors indicated by a SKY497 Failed screen (figure 2-5) prevent continued operation of the SKY497 in SKYWATCH mode; however, error #20, Barometric Altitude Input, is a recoverable error. For example, if you turn on the SKY497 before you turn on the barometric altitude source, a SKY497 Failed screen will appear with error #20 and continued operation of the SKY497 in SKYWATCH mode is not possible; but when you eventually turn on the barometric altitude source, the SKY497 Failed screen will disappear and operation will return to normal.

Respond to a SKY497 Failed screen as follows:

1. **If the Barometric Altitude Input error (#20) occurs, make sure the barometric altitude source has been turned on and given enough time to warm up.** Most #20 errors are due to the failure of equipment external to the SKY497.

2. **If any other error occurs, or if error #20 remains after 5 minutes, write down the error number and description.**

3. **If you have a STORMSCOPE WX-1000, you can still switch into STORMSCOPE mode using the remote SKYWATCH/STORMSCOPE mode switch.**

4. Remove power from the SKY497 at the circuit breaker.

   If you haven't already manually switched into STORMSCOPE mode, the display will automatically switch into STORMSCOPE mode once you disconnect power from the SKY497 regardless of the position of the SKYWATCH/STORMSCOPE mode switch.

5. Contact your authorized BFGoodrich Avionics Systems dealer for trouble-shooting help. Be sure to give the troubleshooting personnel the error number and description that you wrote down in step 2.

Operate the Optional WX-1000 When the SKY497 is Removed

After removing the SKY497 for maintenance, maintenance personnel will install a jumper plug that will allow continued operation of the WX-1000.

Operate the SKY497 When the Optional WX-1000 is Removed

After removing the WX-1000 for maintenance, maintenance personnel will move the WX-1000 maintenance switch to the OVERRIDE (WX-1000 maintenance) position to allow continued operation of the SKY497.

Chapter 3
Principles of Operation

Introduction

This chapter describes Traffic Advisory (TA) criteria and other factors that affect the display of traffic symbols. Table 3-1 summarizes the criteria necessary for the SKY497 to display a TA. Figures 3-1 through 3-3 show the TA zones for various aircraft configurations.

Table 3-1. Ten Situations in Which a Traffic Advisory Will Occur

		The SKY497 Will Issue a Traffic Advisory...		
No.	If Your Aircraft...	And Your Aircraft's Altitude Is...	And Your Landing Gear Is...	And An Intruder Aircraft Is Detected...
1	has a radio altimeter*	below 2000 ft AGL		within a 0.2 nmi horizontal radius and a ±600 ft relative altitude
2				within 15–20 sec. of CPA**
3		above 2000 ft AGL		within a 0.55 nmi horizontal radius and a ±800 ft relative altitude
4				within 20–30 sec. of CPA**
5	does not have a radio altimeter*		down	within a 0.2 nmi horizontal radius and a ±600 ft relative altitude
6				within 15–20 sec. of CPA**
7			up	within a 0.55 nmi horizontal radius and a ±800 ft relative altitude
8				within 20–30 sec. of CPA**
9			fixed	within a 0.55 nmi horizontal radius and a ±800 ft relative altitude
10				within 20–30 sec. of CPA**

Sensitivity Level A   Sensitivity Level B

* Having a radio altimeter means having a compatible Arinc 429 radio altimeter wired to the SKY497 and providing valid altitude information.

** CPA means Closest Point of Approach.

Sensitivity Levels

The SKY497 uses one of two sensitivity levels, A or B, to determine when to display a TA. Having two sensitivity levels allows the SKY497 to reduce the number of nuisance TAs during takeoff and landing (sensitivity level A), and to maximize the detection of TAs during the cruise phase of your flight (sensitivity level B).

Sensitivity Level A

Sensitivity level A consists of two criteria for displaying a TA:

1. The intruder aircraft enters into a cylinder of airspace surrounding your aircraft defined by a 0.2 nmi horizontal radius and a height of ±600 ft from your aircraft. (See figures 3-1 and 3-2.)

OR…

2. The intruder aircraft approaches your aircraft on a course that will intercept your course within 15 or 20 seconds (within 15 seconds for a non-altitude reporting intruder aircraft; within 20 seconds for an altitude reporting intruder aircraft).

The SKY497 uses sensitivity level A in the following situations:

1. Your aircraft has a radio altimeter and is below 2,000 ft AGL.

2. Your aircraft has no radio altimeter but its retractable landing gear is down. (Sensitivity level A is not used if you have fixed landing gear and no radio altimeter.)

Sensitivity Level B

Sensitivity level B consists of two criteria for displaying a TA:

1. The intruder aircraft enters into a cylinder of airspace surrounding your aircraft defined by a 0.55 nmi horizontal radius and a height of ±800 ft from your aircraft. (See figures 3-1 through 3-3.)

OR…

2. The intruder aircraft approaches your aircraft on a course that will intercept your course within 20 or 30 seconds (within 20 seconds for a non-altitude reporting intruder aircraft; within 30 seconds for an altitude reporting intruder aircraft).

The SKY497 uses sensitivity level B in the following situations:

1. Your aircraft has a radio altimeter and is above 2,000 ft AGL.

2. Your aircraft has no radio altimeter but its retractable landing gear is up.

3. Your aircraft has fixed landing gear and no radio altimeter.

Audio Inhibit, SKY497

This audio inhibit feature prevents the aural part of TAs, "traffic traffic," from being announced during takeoff and landing in order to minimize pilot distraction. The corresponding TA symbols are still displayed.

The SKY497 uses this audio inhibit feature in the following situations:

1. Your aircraft has a radio altimeter and you're below 400 ft AGL. (See figure 3-1.)

2. Your aircraft has no radio altimeter but its retractable landing gear is down. (See figure 3-2.) (Audio is not inhibited if you have fixed landing gear and no radio altimeter.)
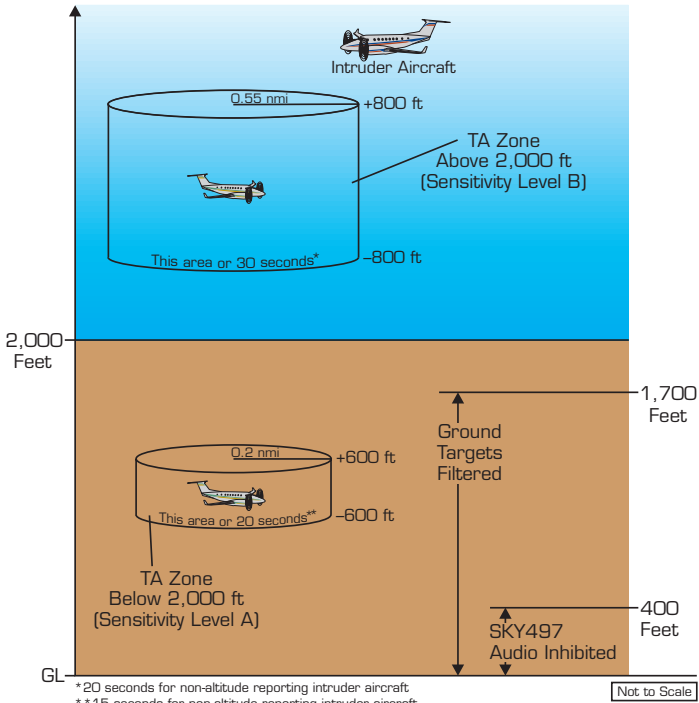
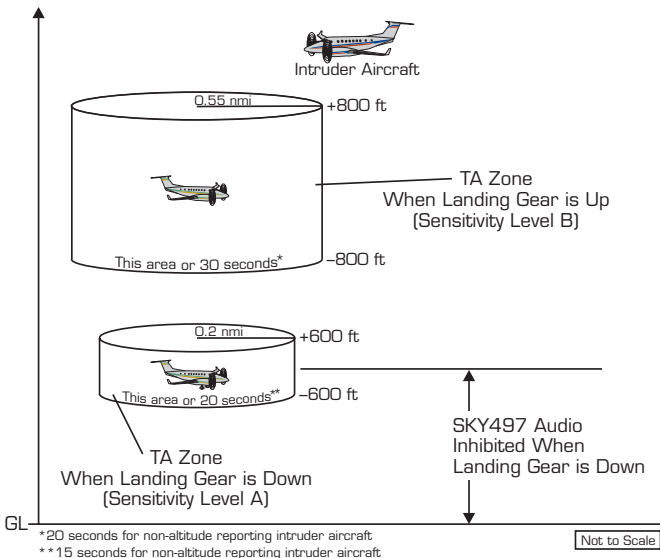*Figure 3-1. TA Zones If Your Aircraft Has a Radio Altimeter*

Figure 3-2. TA Zones If Your Aircraft Has No Radio Altimeter, But Does Have Retractable Landing Gear
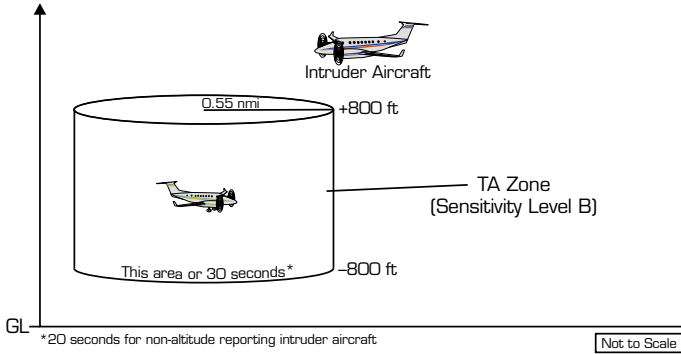
Figure 3-3. TA Zones If Your Aircraft Has Fixed Landing Gear and No Radio Altimeter

Audio Inhibit, GPWS

If your aircraft has a Ground Proximity Warning System (GPWS) interfaced with the SKY497 and a GPWS alarm occurs, the SKY497 will sense the alarm and delay the aural "traffic, traffic" component of any TAs issued during the GPWS alarm until the alarm clears.

TA Symbol Duration

The TA symbol remains on screen for a minimum of 8 seconds even if the intruder aircraft no longer meets the TA criteria as long as the SKY497 continues to track the aircraft.

Ground Target Filtering

Ground target filtering reduces the clutter of visual symbols and aural announcements that would otherwise be generated for intruder aircraft that are typically present on or near the ground near airports.

Ground target filtering prevents the issuing of TAs and *other* traffic symbols for intruder aircraft determined to be below 380 ft AGL.

The SKY497 uses ground target filtering only if your aircraft has a radio altimeter and you're below 1,700 ft AGL.

Chapter 4
Display Interpretation

Introduction

This chapter explains the meaning of several sample screens. If you have a STORMSCOPE WX-1000 installed, refer to the STORMSCOPE WX-1000 pilot's guide for interpretation of the STORMSCOPE screens. The abbreviation CPA used in some of the figures means closest point of approach.

Traffic Advisory:
Intruder aircraft at 9 o'clock, 2 nmi away, 200 ft below you, ascending at a rate greater than 500 fpm. CPA within 20 to 30 seconds.
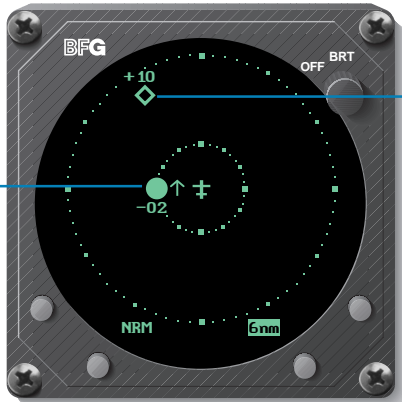
Other Traffic:
Intruder aircraft at 11 o'clock, 5 nmi away, 1,000 ft above you in level flight. No immediate threat.

Figure 4-1. Traffic Advisory and Other Traffic

Out-of-Range Traffic Advisory:
Intruder aircraft at 9:30, more than 2 nmi away, 500 ft above you, descending at a rate greater than 500 fpm. CPA within 20 to 30 seconds.
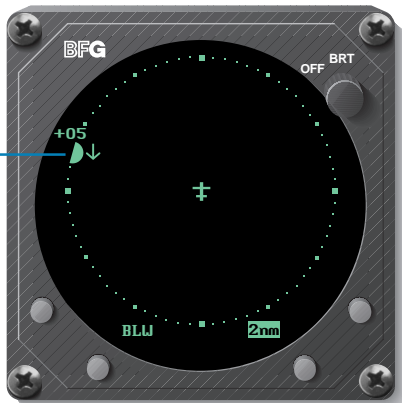
Figure 4-2. Out-of-Range Traffic Advisory

Other Traffic:
Non-altitude-reporting intruder aircraft at 7 o'clock, 5 nmi away. No immediate threat.
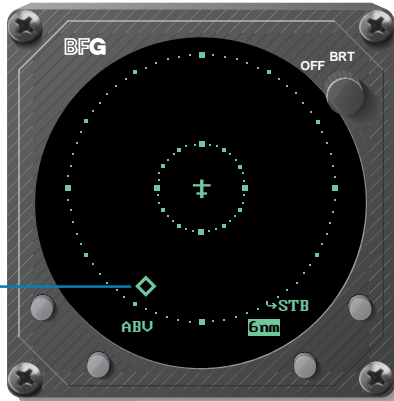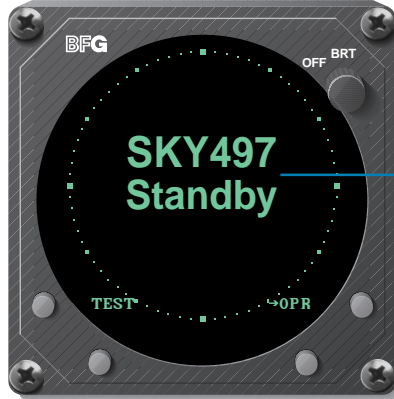
Figure 4-3. Non-Altitude-Reporting Traffic

When in standby, the SKY497 does not transmit interrogations or track intruder aircraft. Press the button labeled →OPR to begin tracking intruder aircraft.

Figure 4-4. SKY497 Standby Screen

This message occurs any time the SKY497 detects an error that prohibits further operation of the SKY497 in SKYWATCH mode as long as the message remains on the screen.

The TEST label only appears if the failure occurred during standby.

Error 20 indicates that the barometric input is missing or invalid. Once valid barometric input returns, this screen goes away and normal operation resumes. All other errors are unrecoverable, in which case you can switch into optional STORMSCOPE mode, or turn off the SKY497.

Figure 4-5. SKY497 Failed Screen

Chapter 5
Specifications

Table 5-1. Transmitter Receiver Computer (TRC497) Specifications*

Part Number:
   805-10800-001

Size:
   Not including mounting tray:
      7.62 in (19.36 cm) high
      3.56 in (9.04 cm) wide
      12.52 in (31.90 cm) deep

Weight:
   Not including mounting tray:
      8.94 lb (4.06 kg)
   Including mounting tray:
      9.82 lb (4.45 kg)

Tracking Capability:
   Up to 30 intruder aircraft (displays only the 8 highest priority aircraft)

Surveillance Range:
   Horizontal tracking radius:
      11 nmi maximum
   Relative altitude tracking range:
      ±10,000 ft maximum

Display Ranges:
   Horizontal display ranges:
      2 and 6 nmi
   Relative altitude display ranges:
      ±2,700 ft (normal mode)
      +9,000 ft to -2,700 ft (above mode/look up)
      +2,700 ft to -9,000 ft (below mode/look down)

Range Accuracy:
   ±0.05 nmi (typical)

Bearing Accuracy:
   5° RMS (typical); 30° peak error

Altitude Accuracy:
   ±200 ft

Power Input Requirements:
   11 to 34 V dc, 70 W (maximum)

Transmitter Power Output:
   40 W peak (nominal)

Operating Temperature:
   -55 to +70 °C (-67 to +158 °F)

Storage Temperature:
   -55 to +85 °C (-67 to +185 °F)

Operating Altitude:
   55,000 ft maximum

Cooling:
   Conduction and forced air convection (internal fan)

Certification Compliance:
   U.S. FAA TSO C147. Contact BFG for the latest foreign country certifications. Refer to FSAW 98-04 for Flight Standards Service policy concerning follow-on field approvals.

RTCA Compliance:
   DO-160C Category F2-BA(NBM)XXXXXXXZBABAUAXXXXXX

*Specifications subject to change without notice.

Table 5-2. WX-1000/SKY497 Display Specifications*

Part Number Definition:
    78-8060-5900-8 – black bezel
    78-8060-5900-9 – gray bezel

Size: (3ATI)
    3.37 in (8.56 cm) high
    3.37 in (8.56 cm) wide
    8.24 in (20.92 cm) deep

Weight:
    2.3 lb (1.0 kg)

Power Input Requirements:
    +15 and -15 V dc, 0.7 A maximum

Operating Temperature:
    -20 to +55 °C (-4 to +131 °F)

Storage Temperature:
    -55 to +70 °C (-67 to +158 °F)

Operating Altitude:
    55,000 ft maximum

TSO Compliance:
    C110a and C113

RTCA Compliance:
    DO-160C F1-CA(NBM)XXXXXXZXXXZUAXXXXXX

*Specifications subject to change without notice.

Table 5-3. NY164 Directional Antenna Specifications*

Part Number:
    805-10890-001

Size:
    1.30 in (3.25 cm) high
    6.25 in (15.88 cm) wide
    11.00 in (27.94 cm) deep

Weight:
    2.3 lb (1.04 kg)

Speed:
    Rated to 600 knots (0.9 Mach) @ 25,000 ft

Frequency:
    1,030-1,090 MHz

TSO Category:
    C118

Environmental Category:
    DO-160C F2-AC(CLM)XSFDFSXXXXXXXL(2A)X

Finish:
    Gloss white Skydrol resistant polyurethane paint

*Specifications subject to change without notice.

Chapter 6
Warranty Information

Introduction

The SKY497 is warranted for 2 years from the date of installation (not to exceed 30 months from the date of shipment from BFGoodrich Avionics Systems, Inc.) subject to the following limitations.

Warranty Statement

BFGoodrich Avionics Systems, Inc. (hereinafter called BFGAS) warrants each item of new equipment manufactured or sold by BFGAS to be free from defects in material and workmanship, under normal use as intended, for a period of 30 months from date of shipment by BFGAS to an authorized facility, or 24 months from date of installation by an authorized facility, whichever occurs first. No claim for breach of warranties will be allowed unless BFGAS is notified thereof, in writing, within thirty (30) days after the material or workmanship defect is found.

The obligation of BFGAS shall be limited to replacing or repairing at its factory the equipment found defective under terms of this warranty certificate; providing that such equipment is returned in an approved shipping container, transportation charges prepaid, to BFGAS, Grand Rapids, Michigan, or such other location as BFGAS may authorize. BFGAS reserves the right to have necessary repairs performed by an authorized agency.

This warranty shall not apply to any unit or part thereof which has not been installed or maintained in accordance with BFGAS instructions, or has been repaired or altered in any way so as to adversely affect its performance or reliability, or which has been subjected to misuse, negligence or accident.

This warranty is exclusive and is accepted by buyer in lieu of all other guaranties or warranties express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose. Buyer agrees that in no event will BFGAS liability for all losses from any cause, whether based in contract, negligence, strict liability, other tort or otherwise, exceed buyer's net purchase price, nor will BFGAS be liable for any special, incidental, consequential, or exemplary damages.

BFGAS reserves the right to make changes in design or additions to or improvements in its equipment without the obligation to install such additions or improvement in equipment theretofore manufactured.

A Subsidiary of The BFGoodrich Company

Related Policies and Procedures

a. If the original registered owner of a SKY497 sells the aircraft in which the SKY497 is installed during the warranty period, the remaining warranty may be transferred. Written notification of the transaction must be submitted by the initial recipient of the warranty to:

<div align="center">

ATTENTION: WARRANTY ADMINISTRATOR
BFGoodrich Avionics Systems, Inc.
5353 52nd Street, S.E.
Grand Rapids, MI 49588-0873 U.S.A.

</div>

b. Equipment must be installed by a BFG Avionics Systems, Inc. authorized dealer or installer. Installation of equipment by facilities not specifically authorized will void the equipment warranty.

c. Notice of a claimed product defect must be given to BFG Avionics Systems, Inc. or a designated BFG Avionics Systems, Inc. service agency within the specified warranty period.

d. A product which is defective in workmanship and/or material shall be returned to BFG Avionics Systems, Inc. via any authorized dealer with transportation charges prepaid. After correction of such defects, the equipment will be returned to the dealer, transportation prepaid by BFG Avionics Systems, Inc. via surface transportation. Any other means of transportation must be paid by the customer.

The risk of loss or damage to all products in transit shall be assumed by the party initiating the transportation of such products. All items repaired or replaced hereunder shall be warranted for the unexpired portion of the original warranty.

e. BFG Avionics Systems, Inc. is in no way obligated or responsible for supporting or participating in the costs of the installation warranty. The entire responsibility lies with the BFG Avionics Systems, Inc. authorized dealer making the installation. BFG Avionics Systems, Inc. is only responsible for the product warranties outlined in the warranty statement.

f. BFG Avionics Systems, Inc. cannot authorize warranty credit for troubleshooting of other systems in the aircraft in order to reduce noise interference with the SKY497.

Record of Important Information

Dealer Information

Name _____

Address _____

City, State, Zip _____

Telephone _____

Equipment Information

Date of Purchase _____

Installation Date from FAA Form 337 _____

TRC

Model Number _____

Part Number _____

Serial Number _____

Firmware Version _____

Display

Model Number _____

Part Number _____

Serial Number _____

Directional Antenna

Model Number _____

Part Number _____

Serial Number _____

Note

To ensure that a new or repaired SKY497 meets the TSO, gets foreign government approval, and meets BFGoodrich Avionics Systems, Inc. performance standards, your SKY497 must be installed and tested by a BFG-authorized SKY497 dealer.