Pilot's Operating Handbook and
FAA Approved Airplane Flight Manual
Supplement
for

L-3 Avionics Systems SkyWatch Traffic Advisory System

When the L-3 Avionics Systems SkyWatch 497 is installed in the Cirrus Design SR22, this POH Supplement is applicable and must be inserted in the Supplements Section (Section 9) of the appropriate Cirrus Design Pilot's Operating Handbook. This document must be carried in the airplane at all times. Information in this supplement adds to, supersedes, or deletes information in the basic Pilot's Operating Handbook.

• Note •

This POH Supplement Revision dated Revision 02: 03-27-07 supersedes and replaces the Revision 1 of this supplement dated 10-12-05.

FAA Approved Joseph C Mieras Date Mar 26 2007

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Section 1 - General

This airplane is equipped with a L-3 Avionics Systems SkyWatch SKY497 Traffic Advisory System to advise the pilot of transponder-equipped aircraft that may pose a collision threat. SkyWatch advisory information is displayed on the GARMIN 430 display. The display indicates relative range, bearing, and altitude of intruder aircraft. Aural warnings are integrated into the airplane's audio system.

Section 2 - Limitations

• WARNING •

SkyWatch can only detect aircraft that are equipped with operating transponders.

1. Traffic information shown on the GARMIN 430 displays is provided as an aid in visually acquiring traffic. Pilots must maneuver the aircraft based only upon ATC guidance or positive visual acquisition of conflicting traffic.
2. If the pilot is advised by ATC to disable transponder altitude reporting, the SkyWatch must be turned OFF.
3. The L-3 Avionics Systems SkyWatch Traffic Advisory System Model SKY497 Pilot's Guide P/N 009-10801-001 Rev B (6/6/00) or later must be available to the pilot during flight with the SkyWatch operating.
4. The GARMIN 400 Series Pilot's Guide Addendum for "Display Interface for Traffic and Weather Data" P/N 190-001140-10 Rev B or later revision must be available to the pilot during flight with the SkyWatch operating.

Section 3 - Emergency Procedures

No Change

Section 4 - Normal Procedures

After Engine Start

1. Avionics Power Switch .....ON
2. SkyWatch will turn on, complete a self-test, and then enter the STBY mode.

   • Note •

   During the takeoff run, SkyWatch will automatically switch to operational mode approximately 8 seconds after 35 KIAS is achieved.

   During the landing roll out, SkyWatch will automatically switch back to STBY approximately 24 seconds after the airplane slows to 35 KIAS or below.

   Serials 1602, 1644, 1663 and subsequent: To minimize pilot distraction, Skywatch system sensitivity will automatically be set to level B (reduced) and aural warnings will be inhibited when flaps are set to 50% and 100%.

3. *Refer to the GARMIN 400 Series Pilot's Guide Addendum* for "Display Interface for Traffic and Weather Data" P/N 190-001140-10 Rev B for additional SkyWatch operational data not included in this supplement.

Operator Initiated Control of SkyWatch

Self-Test

In addition to the power-up self-test, an automatic self-test is performed several times each minute. If the SkyWatch is in STBY or FAILED modes, an operator initiated self-test may be performed using the GNS 430 controls as described below:

1. Rotate the small PUSH CRSR knob to select the Traffic / Weather page.
2. From the Traffic Screen, press the MENU key to select the Menu page.
3. Rotate the small PUSH CRSR knob to select SELF TEST and then press the ENT key.

Switch to Normal from the Standby Screen

SkyWatch must be switched out of STBY to display traffic information. The ability to switch out of STBY on the ground is useful for scanning the airspace around the airfield prior to takeoff. Using the GNS 430 controls:

1. Turn the cursor on and highlight STBY.
2. Use the small PUSH CRSR knob to select OPER?
3. Press the ENT key to place SkyWatch in the OPER (operational) mode. SkyWatch will switch into the 6 nmi display range.

Switch into Standby from the Traffic Screen

SkyWatch cannot be switched to Standby while airborne. With the airplane on the ground, use the GNS 430 controls as described below:

1. Turn the cursor on and highlight OPER.
2. Use the small PUSH CRSR knob to select STBY?
3. Press the ENT key to place SkyWatch in the STBY (standby) mode.

Change Altitude Display

1. From the Traffic Screen, turn the cursor on, highlight the current mode, and use the small PUSH CRSR knob to cycle through the options.
2. With each turn, the display changes to display the traffic in the selected display range (ABV, look up; NRM, normal: BLW, look down; or UNR, unrestricted). *Refer to the L-3 Avionics Systems SkyWatch Traffic Advisory System Model SKY497 Pilot's Guide* P/N 009-10801-001 Rev B (6/6/00) or later for information regarding the display ranges.

Respond to Traffic Advisories

1. When the SkyWatch issues a TA (Traffic Advisory), visually scan outside for the intruder aircraft. Call ATC for Guidance. If you visually acquire the intruder aircraft, use normal right-of-way procedures to maintain separation.

• Note •

Do not maneuver solely on traffic information shown on the display. Information shown on the display is provided as an aid in visually acquiring traffic - It is not a replacement for ATC and See & Avoid techniques.

Section 5 - Performance

No Change

Section 6 - Weight & Balance

SkyWatch adds the following optional (Sym = O) equipment at the weight and arm shown in the following table.

ATA/ Item	Description	Sym	Qty	Part Number	Unit Wt	Arm
34-01	SkyWatch Inverter	O	1	14484-001	0.5	118.0
34-02	SkyWatch Antenna Instl.	O	1	14477-001	2.3	150.5
34-03	SkyWatch Track Box	O	1	14477-050	10.0	140.0
34-04	SkyWatch Wiring Instl	O	1	14479-001	2.0	145.0

Section 7 - Systems Description

The SkyWatch model SKY497 is an airborne Traffic Advisory System (TAS). SkyWatch monitors a radius of approximately 6 nautical miles around the aircraft by interrogating transponders in the monitored area and determining if a collision threat exists. To determine if a collision threat exists, SkyWatch calculates the range, altitude, bearing, and closure rate of all transponder equipped aircraft with the 6 nautical mile range. When SkyWatch detects an intruder aircraft within.55 nautical mile horizontal distance and a ±800 ft relative altitude or detects an intruder aircraft is on a course that will intercept the SkyWatch airplane's course within 20 seconds (non-altitude reporting intruder aircraft) or 30 seconds (altitude reporting intruder aircraft), SkyWatch will issue a Traffic Advisory (TA). Traffic Advisories are indicated on the GNS 430 displays and aural "Traffic, Traffic" warnings are announced in the headphones and cabin speaker.

Aircraft Serial Numbers 0002 thru 2344 after installation of L3 Service Bulletin SB805-10800-204, and Serial Numbers 2345 and Subsequent, the SkyWatch® VIP system features extended aural alerts of range, bearing and relative altitude. In addition, the number of targets able to be displayed on the MFD simultaneously, will increases from 8 to 10.

SkyWatch may be pilot controlled through the GNS 430 controller. STBY (standby), OPER (operational), and SELF TEST modes as well as altitude display (ABV, look up; NRM, normal: BLW, look down; or UNR, unrestricted) can be selected.

The SkyWatch System consists of a Transmitter Receiver Computer (TRC) installed under the copilot's seat just forward of the spar tunnel and a directional antenna installed on the airplane exterior above the cabin. The system also utilizes inputs from the altitude encoder, the aircraft heading system (gyro slaving amplifier), and a speed switch plumbed into the pitot system. Electrical power for system operation is 28 vdc supplied through the 5-amp SKYWATCH Circuit Breaker on the Avionics Non-Essential bus.

• Note •

Refer to the L-3 Avionics Systems SkyWatch Pilot's Guide (P/N 009-10801-001) for a description of the SkyWatch System.

Refer to the GARMIN Addendum for "Display Interface for Traffic and Weather Data" P/N 190-001140-10 for additional operational information and a display description.