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FAA APPROVED
ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
TO THE

Eurocopter AS350, AS350B, AS350B1, AS350B2, AS350B3

Aircraft S/N: _____ Aircraft Reg. No.: _____

This document must be attached to the FAA Approved Rotorcraft Flight Manual, when the rotorcraft is modified by the installation of Sandel Avionics ST3400H Helicopter Terrain Awareness and Warning System in accordance with FAA STC No. SR02314LA.

For rotorcraft approved to operate in accordance with the provisions of this Rotorcraft Flight Manual Supplement, the information contained herein supplements the information of the basic flight manual. For limitations, procedures, and performance data not contained in this supplement, consult the basic flight manual.

FAA APPROVED: 
Manager, Flight Test Branch, ANM-160L
Federal Aviation Administration
Los Angeles Aircraft Certification Office
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LOG OF PAGES


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	i	14-JAN-14		
	ii	14-JAN-14		
	1 of 4	14-JAN-14		
	2 of 4	14-JAN-14		
3 of 4	14-JAN-14			
4 of 4	14-JAN-14			

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
LOG OF PAGES	i
TABLE OF CONTENTS	ii
SECTION 1: GENERAL	1
SECTION 2: LIMITATIONS	3
SECTION 3: EMERGENCY PROCEDURES	3
SECTION 4: NORMAL PROCEDURES	4
SECTION 5: ABNORMAL PROCEDURES	4
SECTION 6: PERFORMANCE DATA	4
SECTION 7: WEIGHT AND BALANCE DATA	4
SECTION 8: SYSTEM DESCRIPTIONS	4

SECTION 1: GENERAL

The ST3400H is a self-contained HTAWS (Helicopter Terrain Awareness Warning System) and meets the FAA requirements for Helicopter Terrain Awareness and Warning System (HTAWS). It includes an advanced HTAWS computer, graphics symbol generator and Sandel's high brightness display engine built within a standard 3-inch instrument chassis. It includes Radar altimeter features and can be used to directly replace an existing Radar altimeter indicator. It has the optional capabilities of acting as a primary or secondary traffic indicator, showing traffic either in standard TCAS format or overlaid on terrain when connected to an external traffic detection system.

Terrain protection is enabled during all airborne phases of flight - Departure, Enroute, Terminal, and Approach and in any selected display mode.

The ST3400H physical layout consists of a full three inch display, 9 backlit buttons, one push-pull rotary knob.

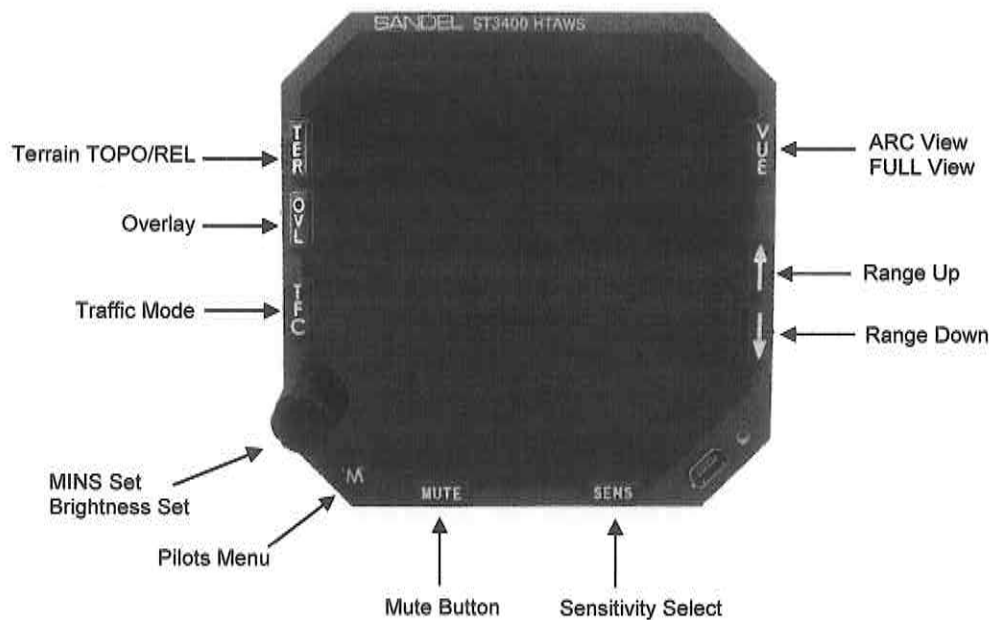


Figure 1: ST3400H Pilot Interface

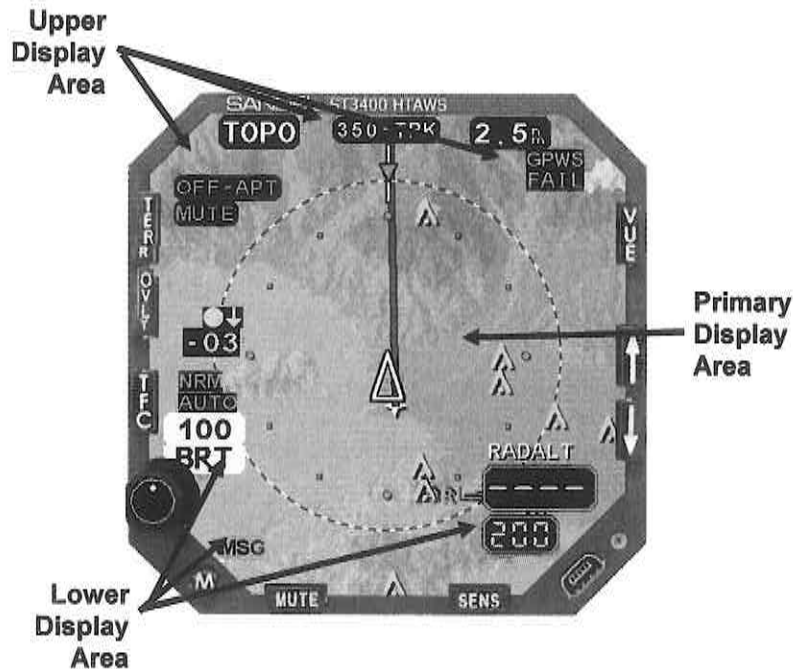


Figure 2 ST3400H Display Areas

The upper display area presents data from the heading source as well as several annunciators.

The lower display area displays RADALT (Radar Altitude), the "MINS" setting window, The "BRT" setting annunciator, a message indicator as well as terrain and obstacle visual alerts.

The control knob when pulled displays the "BRT" setting (0-100) and changes the brightness setting when rotated. The ST3400H will power up in the last brightness setting.

The control knob when in the normal in position changes the value in the "MINS" setting window.

If the Radar Altimeter Display function is installation enabled:

The "MINS" setting is compared to the Radar Altitude and activates the "MIN" annunciator when the Radar Altitude is less than or equal to the "MINS" setting.

If the Traffic Display function is installation enabled:

Pressing the TFC button will toggle between the two traffic display modes, On or Auto.

ON:

Enables display of all targets within the selected map range.

AUTO:

Traffic will be displayed only when alerting traffic is present (TA or RA). The ST3400H will auto-scale to an appropriate range to show the traffic on-screen. This can be useful in busy terminal areas where the display of all traffic may cause the screen to become too cluttered.

SECTION 2: LIMITATIONS

The HTAWS shall NOT be used for navigation purposes.

The HTAWS is an alerting system. It is intended for use in rotorcraft primarily during the cruise phase of flight in VMC and in IMC while operating under instrument flight rules (IFR). The system does NOT guarantee successful recovery from a conflict due to factors such as pilot response, aircraft performance and database limitations. No standardized recovery technique is defined as recovery maneuvers may vary.

The ST3400H must utilize FAA approved software version 1.00 or later FAA approved version.

The ST3400H Pilots Guide, SPN 82046-PG (applicable revision) must be immediately available to the flight crew.

Data loading and maintenance mode operation are prohibited during normal flight operation.

The "CRC Self Test Failed" message must not appear on power-up if flight operations are predicated on the use of the ST3400H.

SECTION 3: EMERGENCY PROCEDURES

No Change

SECTION 4: NORMAL PROCEDURES

Before each flight a TAWS Pre-Flight Test should be conducted. Press the "M" button to enter the PILOTS MENU and then press the "TEST" softkey. Refer to the Pilot's Guide for details of the test results.

To avoid un-wanted alerts when landing at an airport that is not in the airport database, inhibit the Forward-Looking Terrain Avoidance (FLTA) function by pressing the "M" button then the "OVL" button TAWS INHIBIT softkey.

If desired, all alerts except for Altitude callouts can be disabled by pressing the "M" button and then pressing the "TAWS INHIBIT" softkey.

SECTION 5: ABNORMAL PROCEDURES

No Change.

SECTION 6: PERFORMANCE DATA

No Change.

SECTION 7: WEIGHT AND BALANCE DATA

See current weight and balance data.

SECTION 8: SYSTEM DESCRIPTIONS

Refer to the ST3400H Pilot's Guide referenced in Section 2 of this manual for other procedures, error messages, alerts and more detailed operating information.