

MOONEY AIRCRAFT CORPORATION
LOUIS SCHREINER FIELD
KERRVILLE, TEXAS 78028

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

MOONEY AIRCRAFT MODELS

M20J (S/N 24-3000 THRU 24-TBA), M20K (S/N 25-1000 THRU 25-TBA), M20L (S/N
26-0001 THRU 26-0041), M20M (S/N 27-0001 THRU 27-TBA), M20R (S/N 29-0001
THRU 29-TBA)

WITH

STORMSCOPE™ WX-1000 or WX-1000 PLUS (+) SERIES II WEATHER MAPPING
SYSTEM (REVISION 3, 3.20 thru 3.25 AND ON SOFTWARE)

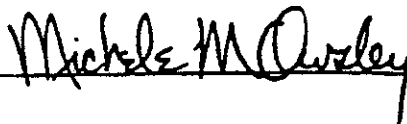
MODEL NO. _____

REG. NO. _____

SERIAL NO. _____

This Supplement must be inserted in the applicable FAA Approved Pilot's Operating Handbook and Airplane Flight Manual (POH/AFM) when the Stormscope™ Series II WX-1000 or WX-1000+ Weather Mapping System (with Rev. 3, 3.20 thru 3.25 and on software) is installed in accordance with Mooney Drawing No. 810197. The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures and performance information not contained in the supplement, consult the basic POH/AFM. The pilot should become thoroughly familiar with this Supplement as well as the Pilot Handbook for this equipment, if applicable, issued by the manufacturer of this equipment.

FAA APPROVED: _____



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REV. A 9-92

REV. B 2-93

REV. C 3-93

REV. D 1-94


REV. E 7-94

REV. F 7-95

REV. G 10-96

REV. H 5-98

LOG OF REVISIONS

| REVISION NUMBER | REVISED PAGES | DESCRIPTION OF REVISIONS | FAA APPROVED | DATE |
|-----------------|----------------------------|---|---|---------|
| H | Page 1 of 35 | S/N effectivity added; added reference software revision 3.25 and on; added reference to manufacturer's Pilot Handbook. |  | 6-19-98 |
| | Page 5 of 6 | Reference to EHSI changed to EHI 40. | | |
| | Page 3 of 35 thru 35 of 35 | Deleted duplicate info contained in manufacturer's Pilot's Handbook; added references to manufacturer's Pilot's Handbook; corrected grammatical errors. | | |

The revised portions of affected pages are indicated by vertical black lines in the margin.

SECTION I - GENERAL

The primary purpose of Stormscope™ Series II systems is to enable thunderstorm avoidance. The systems map electrical discharge activity 360 degrees around the aircraft to a distance of 200 nautical miles. The Model WX-1000+ has the capability of being connected to an external analog synchro heading source to maintain proper display orientation during turns. Additional general description of this system and associated controls is contained the manufacturer's Pilot's Handbook entitled "Stormscope™ Series II Weather Mapping System" provide with your unit.

NOTE

If a "Mic Key Stuck" error is detected, verify that aircraft radios are turned ON, as some radios pull the mic key line to airframe potential when turned OFF, thereby inhibiting operation of the system.

Stormscope™/EFIS (EHI 40) Display

The Stormscope™/EFIS (Bendix-King) system can be in one of the two following configurations:

A. Bendix-King (Allied Signal) EFIS (EHI 40) as sole indicator:

1. Stormscope™ power ON/OFF switch provided to shut off Stormscope™ system when not desired. Switch is located on upper radio panel.
2. A display clear, PUSH button switch to clear processor of data. (located on upper radio panel)
3. Only strike data is supplied to EFIS indicator for display. Checklist mode is disabled.

B. Stormscope™ and EFIS indicators available for display:

1. All Stormscope™ functions are available with the following exception:
 - a. Flight plan information from Loran/GPS is not available on Stormscope™ indicator.

C. With either configuration, the Stormscope™ presentation on EFIS is enabled by pressing either ARC or HSI to enter 360° map mode; then press HSI or ARC to enable Stormscope™ data which is the next selection sequence after MAP for both ARC and HSI buttons (up to 10 seconds delay). Stormscope™ mode is annunciated by a lightning bolt, with an arrow on each arm and the word "ON", in the lower left corner of the EFIS display (Figure 3-1). "ARC" (expanded sector mode) is selected by pressing ARC and the Stormscope™ is enabled by pressing "ARC" again. In either presentation (360° or ARC) Stormscope™ is de-selected by pressing HSI or ARC buttons. This method selects both Lightning and Weather if so configured.

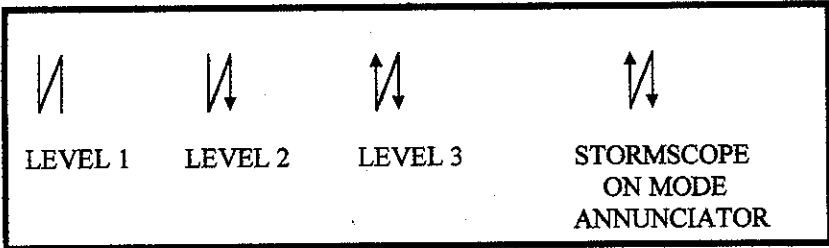


FIGURE 3-1

D. The location of up to 63 cells of electrical activity are presented on the EFIS indicator. These cells are not individual discharges but the intensity level of activity in that cell and displayed as a single lightning bolt for Level 1 (lowest level). Level 2 is displayed as the same lightning bolt with a point on the lower leg. Level 3 is displayed as the same lightning bolt with a point on the upper and lower leg. (Figure 3-1)

E. Whenever Stormscope™ is selected and the Stormscope™ is not ON. The display in the lower left corner of the EFIS display will have the lightning bolt with the letters "FLT" to its right, to indicate a fault.

SECTION II - LIMITATIONS

The WX-1000 or WX-1000+ Weather Mapping System signal displays are not intended for the purpose of penetrating thunderstorm areas or areas of severe turbulence; such intentional use is prohibited.

NOTE

Range selector determines receiver sensitivity and therefore relative range. Displayed range is based on signal strength and is not to be used for accurate determination of thunderstorm location.

CAUTION

THIS AFM SUPPLEMENT IS TO BE USED ONLY WITH AIRCRAFT INCORPORATING SOFTWARE REVISION 3, 3-20 thru 3.25 AND ON FOR THE WX-1000 OR WX-1000+ WEATHER MAPPING SYSTEM.

Only the WX-1000+ is compatible with the EHI-40 indicator.

The WX-1000+ Navaid Option must not be used as a primary means of navigation.

PLACARDS REQUIRED:

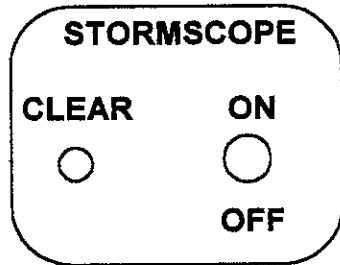
**LIGHTNING DETECTION
EQUIPMENT NOT TO BE
USED FOR THUNDERSTORM
AREA PENETRATION**

OR (EARLIER VERSION):

**STORMSCOPE NOT TO BE USED FOR
THUNDERSTORM AREA PENETRATION**
(Located adjacent to Stormscope™ indicator)

2. (Used when EHI 40 is only indicator installed.)

(located on upper radio panel)



SECTION III - EMERGENCY PROCEDURES

Refer to the Pilot's Handbook that came with your Stormscope™ Series II for explanations pertaining to error messages associated with the unit's common errors and malfunctions.

SECTION IV - NORMAL PROCEDURES

Refer to the Pilot's Handbook that came with your Stormscope™ Series II for explanations pertaining to the unit's normal operating procedures.

SECTION V - PERFORMANCE

The text of this Section is not affected by installation of this equipment.

SECTION VI - WEIGHT AND BALANCE

The text of this Section is not affected by installation of this equipment. The system weight will be included in the Optional Equipment List.

SECTION VII - AIRPLANE AND SYSTEMS DESCRIPTION

Refer to the Pilot's Handbook that came with your Stormscope™ Series II for explanations pertaining to the unit's controls and indicators.

SECTION VIII - HANDLING, SERVICE AND MAINTENANCE

The text of this Section not affected by the installation of this equipment. Refer to the Pilot's Handbook that came with your Stormscope™ Series II for explanations pertaining to the unit's maintenance and service information.

SECTION IX - SUPPLEMENTAL DATA

This AFM SUPPLEMENT will be added to this Section of the POH/AFM for an aircraft when the WX-1000 or WX-1000+ Weather Mapping System is installed by Mooney Aircraft Corporation.

SECTION X - SAFETY TIPS

The text of this Section not affected by the installation of this equipment.

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