

SUBJECT : Installation of External Threshold Detector Power Supply for Setra Model 470

PURPOSE : To ensure a proper reset of power to the pressure sensors in the event of an under voltage or power failure.

EQUIPMENT AFFECTED : Class 1 ASOS Pressure Sensors A1 and A2

PARTS REQUIRED : Threshold Detector, P/N 347501 QTY 2  
Ty-strap, P/N TY25M QTY 1

MOD PROCUREMENT : The above parts will be provided by the contractor as ASOS Field Modification Kit (FMK) #027.

SPECIAL TOOLS REQUIRED : None.

TIME REQUIRED : 1 hour.

EFFECT ON OTHER INSTRUCTIONS : None.

CERTIFICATION STATEMENT : This modification was not tested for operational integrity.

### GENERAL

This modification note provides instructions for inserting a threshold detector in series with pressure sensors (A1) and (A2) located on the RF/Pressure Mounting Shelf (A6). The threshold detector is installed in series between **P3 to J2** on pressure sensor (A1) and **P4 to J2** on pressure sensor (A2). Reference figure 2.4.12 page 2-97 in the ASOS Site Technical Manual S100 for a detailed block diagram. This modification note affects the class 1 ASOSs.

### PROCEDURE

Follow installation instructions for ASOS FMK #027 provided by AAI Systems Management, Inc.

### REPORTING MODIFICATION

Target date for completing this modification is 30 days after receipt of parts. Report completed modification on WS Form H-28, Engineering Progress Report, according to instructions in EHB-4, part 2, using reporting code ASOS.

J. Michael St. Clair  
Chief, Engineering Division

Attachment

W/OSO321:BGMcCormick:sol:2/26/93  
10,11,12,"ASOSMOD3.H11"  
WP5.1 speller

disk ehbs

SID \_\_\_\_\_

FMK 027

**ASOS FIELD MOD KIT (FMK)**

CONTRACT 50-SANW-1-00050

UPON COMPLETION OF MOD, COMPLETE LOWER SECTION  
OF THIS SHEET AND RETURN TO:

AAI SYSTEMS MANAGEMENT INC.  
11101 GILROY ROAD  
HUNT VALLEY, MD. 21030-1108

NOTE: MAKE A COPY FOR ON-SITE RECORDS

Date Prepared: 09/24/92 Task Order/ECP: E92SM05FO40 ECN No: 19316

Part Numbers Affected: 62828-90110-10 SETRA MODEL 470

Documentation Included: SETRA Installation instructions and SMI ECN 19316

Description of Change: This FMK includes parts and instructions to install an external threshold detector on each Pressure Sensor located in the RF/Pressure tray in the ACU cabinet. This change will affect class 1 ASOS systems only.

Parts Included: Threshold Detector P/N 347501 QTY. 2  
Ty-strap P/N TY25M QTY. 1

QA Concurrence With FMK:

Date Modification Complete:

Part Removed Serial#

Part Installed Serial#

Person Completing Modification:

Were FMK Instructions clear/concise: Y / N (circle)  
Was FMK complete (parts, drawings, etc.): Y / N (circle)  
If NO please comment (use back of form if needed):

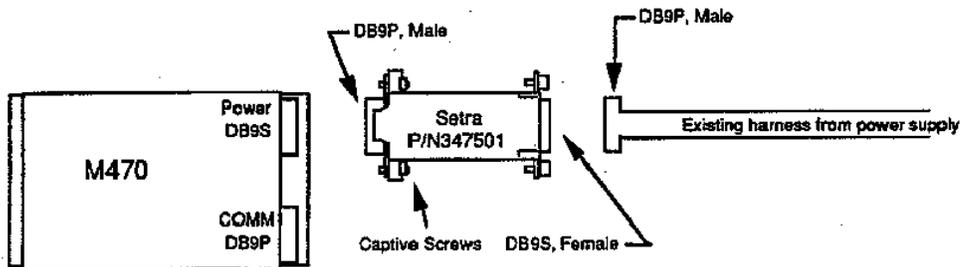
## Instructions Installation

1. At the ACU RF/Pressure tray locate the 4-port pressure tubing coupler, and cut the ty-strap securing it in place.
2. Relocate holes for tubing coupler, refer to ECN 19316 (sheet 2) for hole size and location. Re-strap the coupler in the new position.
3. Install the Setra External Threshold Detector (part number 347501) per Setra installation instructions.
4. Secure RF/Pressure tray in the ACU cabinet and verify sensor is operational. (The sensor will resume reporting within 10 minutes.)

Setra Part Number 347501

## External Threshold Detector for Setra Model 470

This adapter module is installed in series between the Setra Model 470 and a 5 vdc regulated power supply.



1. Unplug the existing power supply harness from the M470 power connector.
2. Plug the 347501 module into the 470 power connector.
3. Tighten the captive screws on the module into the screw jacks on the M470.
4. Plug the existing power supply harness into the 347501 module.

This module contains a circuit which monitors the voltage level of the power supply. In the event of an under-voltage condition, this circuit shuts off the voltage supply to the 470 and does not turn it back on until the supply exceeds the threshold voltage, in order to ensure proper reset and startup.

45 Nagog Park Acton, Massachusetts 01720

**setra**