

ASOS MODIFICATION NOTE 74, REVISION A (for Electronics Technicians)  
Maintenance, Logistics, and Acquisition Division  
W/OPS12: WDW

SUBJECT : ACE-IDS Interface Port Assignment and Configuration

PURPOSE : Instructions for Automated Surface Observing System (ASOS) Controller Equipment - Interface Display System (ACE-IDS) configuration.

EQUIPMENT AFFECTED : ASOS Acquisition Control Unit (ACU) (AACU)

PARTS REQUIRED : V.3225 Modem (S100-1A3A1-2) at selected sites, see Attachment A.  
Serial I/O (SIO) Board (S100-1A2A6-1) at selected sites, see Attachment A.

MODIFICATION PROCUREMENT : Modems and SIO Boards will be initially issued by the National Weather Service Headquarters.

EFFECTIVITY : All ASOS systems listed in Attachment A.

ESTIMATED TIME REQUIRED : 1 Hour.

EFFECT ON OTHER INSTRUCTIONS : None.

AUTHORIZATION : This modification is authorized by Request for Change FAA157A.

VERIFICATION STATEMENT : This modification has been tested for operational integrity and verified by the Federal Aviation Administration (FAA).

SPECIAL INSTRUCTIONS : None.

## GENERAL:

This modification note provides instructions for configuring the port assignment and ACE test configuration for the ACE-IDS connection. Inside the ACU cabinet, NWS personnel will install all equipment necessary in order to transfer ASOS data to the ACE-IDS computer.

### NOTE

Both the hardware interface and ACU software (Version 2.6) are identical to the existing ACE interface.

The FAA will install and maintain all ACE-IDS equipment.

**PROCEDURE:****NOTE**

At sites requiring an additional SIO board (see Attachment A), install this SIO board now in accordance with Table 2.5.17, page 2-134 and the item drawing on page 2-177 in the Site Technical Manual. Once the SIO board is installed, proceed to the Hardware Configuration Page (**REVUE-SITE-CONFIG-HDWE**) and change the number of SIO boards installed in the ACU. At sites designated as "Remote" connection types (see Attachment A), a V.3225 modem will be needed to transfer ASOS data to the ACE-IDS equipment. In this case, install a V.3225 modem as outlined in Modification Note 12.

1. At the Operator Interface Device (OID), proceed to the Configuration Page (**REVUE-SITE-CONFIG-COMMS**). If "OID-2 SECONDARY" is present, record this SIO port. If "OID-2 SECONDARY" is not present, locate an empty slot and record this SIO port.
2. Where applicable, disconnect any equipment at the SIO port identified in step 1.
3. **For Remote connections**, connect the SIO port to the DTE connection on the V.3225 modem. On the V.3325 modem, connect the DCE connection to the 1A9J7 connector at the bottom of the ACU cabinet.
4. Plug the ACE-IDS connection into the SIO port.
5. At the OID, return to the Configuration Page. Proceed to the SIO port to which the ACE-IDS connection was just made. Change this port function (**CHANG**) from "OID-2 SECONDARY", if applicable, to "ACU-ACE". All other parameters for this port remain in their default settings as listed below:

**NOTE**

The Modem Slot setting can vary depending on the site configuration.

	FUNCTION	ACU-ACE	
STATUS	ENABLED	HANDSHAKE	NONE
BAUD RATE	9600	CONNECTION	LEASED
PARITY SELECT	NONE	MODEM SLOT	2
BITS/CHAR	8	DIAL TYPE	tone
STOP BITS	1		

**Figure 1. ACU SERIAL COMMS Sample**

**REPORTING MODIFICATION:**

Report the completed modification using the Engineering Management Reporting System (EMRS) according to the instructions in the NWS Instruction 30-2104, Maintenance Data Documentation, Part 4 and Appendix D. Include the following on the EMRS report:

- An equipment code of **AACU** or **ASCA** in block 7 for the modification to the ACU.
- The appropriate serial number in block 8.
- A modification number of **74A** in block 17a.

See Attachment B for a completed sample of the EMRS report. Contact Mike Brown at (301) 713-1892 x143 for further assistance with EMRS reporting.

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Director, Maintenance, Logistics, and Acquisition Division

Attachment A - Effectivity List  
Attachment B - EMRS Report Sample

### Attachment A - Effectivity List

Site ID	Facility	Region	Remote or Local	SIO board
APC	Napa Tower	Western	Local	
ATL	Atlanta Hartsfield Tower	Southern	Local	
BED <sup>a</sup>	Bedford, MA - Boston TRACON	Eastern	Local	
BFI <sup>a</sup>	Boeing Field, WA - Seattle TRACON	Western	Local	
BLI <sup>a</sup>	Bellingham, WA - Seattle TRACON	Western	Remote	
BOS <sup>a</sup>	Boston, MA - Boston TRACON	Eastern	Local	
BVY <sup>a</sup>	Beverly, MA - Boston TRACON	Eastern	Local	
BWI	Baltimore Tower	Eastern	Remote	
CCR	Concord Tower	Western	Local	
CPS	St. Louis Downtown Parks Airport	Central	Local	Yes
CSG	Columbus, Georgia Tower	Southern	Local	
DCA	Washington Reagan National	Eastern	Local	
DFW	Dallas - Fort Worth Regional Tower	Southern	Local	
HNL	Honolulu Tower	Pacific	Remote	
HWD	Hayward Tower	Western	Remote	
IAD	Dulles Tower	Eastern	Remote	
ITO	Hilo Tower	Pacific	Remote	
JRF	Kalaeola Tower	Pacific	Local	Yes
KOA	Kona Tower	Pacific	Remote	
LIH	Lihue Tower	Pacific	Remote	
LVK	Livermore Tower	Western	Remote	
LWM <sup>a</sup>	Lawrence, MA - Boston TRACON	Eastern	Local	
MCN	Macon, Georgia Tower	Southern	Local	
MHT <sup>a</sup>	Manchester, NH - Boston TRACON	Eastern	Local	
MKK	Molokai Tower	Pacific	Remote	Yes
MOD	Modesto Tower	Western	Local	
MRY	Monterey Tower	Western	Local	

Site ID	Facility	Region	Remote or Local	SIO board
NUQ <sup>a</sup>	Moffett Field, CA - Northern California TRACON	Western	Local	
OAK	Oakland Tower	Western	Local	
OGG	Kahului Tower	Pacific	Local	
OKC	Will Rogers World Tower	Southern	Local	
OLM <sup>a</sup>	Olympia, WA - Seattle TRACON	Western	Remote	
OWD <sup>a</sup>	Norwood, MA - Boston TRACON	Eastern	Local	
PAE <sup>a</sup>	Everett, WA - Seattle TRACON	Western	Local	
PWA	Wiley Post Tower	Southern	Local	
RIC	Richmond Tower	Eastern	Remote	
RNT <sup>a</sup>	Renton, WA - Seattle TRACON	Western	Local	
SAC	Sacramento Exec Tower	Western	Remote	
SCK	Stockton Tower	Western	Remote	
SEA <sup>a</sup>	Seattle TRACON	Western	Local	
SFO	San Francisco Tower	Western	Remote	
SJC	San Jose Tower	Western	Remote	
SMF	Sacramento Intl Tower	Western	Local	
SNS	Salinas Tower	Western	Local	
STL	St. Louis Tower - Lambert Field	Central	Local	
STS	Santa Rosa Tower	Western	Local	
SUS	Spirit of St. Louis Airport	Central	Local	Yes
TIW <sup>a</sup>	Takoma Narrows, WA - Seattle TRACON	Western	Remote	

a. New site as a result of Revision A.

### Attachment B - EMRS Report Sample

A26 Detail Form - ESCM2, SILVER SPRING, MD - EMRS ANALYST - Microsoft Internet Explorer

**GENERAL INFORMATION**

NEW RECORD      WFO\* [LSX]      Document No.\* [LSX30327000]

1. Open Date: [03/25/2003]      Open Time: [09:00]      2. Op Initials: [WSH]      3. Response Priority:   
 Immediate     Low     Routine     Not Applicable

4. Close Date: [03/25/2003]      Close Time: [10:00]

5. Maintenance Description: [414 characters left]      ASOS  
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**EQUIPMENT INFORMATION**

6. Station ID\* [CPS]      7. Equipment Code [AACU]      8. Serial Number [000395]      9. TM [M]      10. AT [M]      11. How Mal [999]

Alert:      Time Remaining: (For Block 12 use only)

**13. PARTS USAGE and CONFIGURATION MANAGEMENT REPORTING**

ASN	Vendor Part No. (New Part)	Serial Number (Old Part)	Serial Number (New Part)	
				New Row
				Delete Row

**14. WORKLOAD INFORMATION**

a. Routine		b. Non-Routine		c. Travel		d. Misc		e. Overtime	
Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes
						1	0		

**MISCELLANEOUS INFORMATION**

15. Maintenance Comments: [664 characters left]  
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16. Tech Initials: [BNM]

**17. SPECIAL PURPOSE REPORTING INFORMATION**

a. Mod No. [74A]      b. Mod Act/Deact Date [03/25/2003]      c. Block C [ ]      d. Trouble Ticket No. [ ]      e. Block E [ ]

Commit A26      Place on Hold      Cgpy A26      New A26      Cancel