

ASOS MODIFICATION NOTE 40 (for Electronics Technicians)

Engineering Division

W/OSO321:BGM

SUBJECT : Interface Connection and VDU Configuration for the Digital Automatic Terminal Information Service (DATIS) and the Systems Atlanta Information Display System (SAIDS).

PURPOSE : Addition of the DATIS and SAIDS ports for FAA use.

EQUIPMENT AFFECTED : ASOS (ACOMM)

PARTS REQUIRED : None

MOD PROCUREMENT : Internal modems and I/O panel filters will be issued by WSH as required for BUF, SDF, MEM & ATL. Contact Bob McCormick (301) 713-1835 if there are any discrepancies in either table B or C.

SPECIAL TOOLS REQUIRED : None

TIME REQUIRED : 1 hour

EFFECT ON OTHER INSTRUCTIONS : None.

AUTHORIZATION : Approvals of request for changes FAA021 (DATIS), FAA026 (SAIDS)

GENERAL:

This modification note provides instructions to interface the DATIS and SAIDS ports at 62 airports. Six ASOS sites have not been installed: Chicago, Midway (MDW); Ft. Lauderdale (FLL); Orange County (SNA); Oakland (OAK); San Jose (SJC); and Ontario (ONT). Unused ports on the SIO boards are to be used for the DATIS (Table B) and SAIDS (Table C) interface at 30 sites. Both the DATIS and SAIDS are FAA equipment. ASOS provides the 1 minute, hourly and special observations to this equipment via a Video Display Unit (VDU) port. Technicians will provide the FAA access to an existing VDU or the ACU I/O panel. The FAA will connect an RJ11 or a DB-25 connector/cable to one of the ACU ports or connect an RS-232 'Y' cable at the back of an existing VDU, which will interface to the DATIS or SAIDS equipment. The technician will not reassign any existing devices that are currently in use and approved under the site configuration. Direct cable runs for this modification shall not exceed 100 feet in length. The cable distance is calculated from the ACU to the DATIS or SAIDS equipment. When the length exceeds 100 feet the FAA will provide the external modem, cables, and a dedicated or leased

telephone line.

PROCEDURE

1. Call the AOMC at 1-800-242-8194. Inform the person who answers the phone at which ASOS site you will be installing Modification Note 40.
2. Get the approval of the responsible MIC/OIC before starting. Notify any point of contacts required to gain access.
3. Make the appropriate SYSLOG entries (MAINT-ACT-FMK) **Mod 40**
 - a. Log on as **TECH**.
 - b. Key the **MAINT** screen.
 - c. Key the **ACT** page.
 - d. Key **START** - Stop here and perform **Mod 40**.
Upon completion of the **Mod 40**, log onto the system.
4. The 22 sites listed in Table A require a direct hook up to a one existing VDU. An FAA representative or technician will provide a type of "Y" connector or a cable that will parallel the RS-232 cable already connected to the 'MASTER' input connector on the back of the VDU. Remove the cable connected to the back of the VDU and connect the "Y" cable or connector in its place. Reconnect the ASOS RS-232 cable to one of the ports on the "Y" connector/cable. Verify that the VDU information is being updated. Have the FAA connect the DATIS RS-232 cable to the other port of the "Y" connector/cable. Again, verify that the information on the VDU is being updated. If at any point the VDU information is not updating, remove the cable or connector and have the FAA replace the part.
5. The 23 DATIS sites listed in Table B, and 7 SAIDS sites listed in Table C, have available hardware already installed in the ACU necessary to complete the interface connection. In some cases, a VDU port may be installed and enabled but not used. In those cases, the technician can plug the DATIS or SAIDS cable into the appropriate connector on the ACU I/O panel. Tables B and C identifies the recommended port connection. Continue with step 8.
6. Based on the configuration data, only four systems require extra hardware: BUF, SDF, MEM, and ATL. If the configuration listed in Table B does not match the current system configuration and additional hardware is required, contact Bob McCormick at (301) 713-1834 X 167.
7. Install the modem and adapter in the following locations: for BUF, SDF, and ATL use modem slot # 9; For MEM use modem slot # 8. Install filters in the following locations: for BUF, SDF, and ATL use I/O panel location J20; for MEM use I/O panel location J19. Connect the spare SIO port to the appropriate modem. The 25 pin RS-232 connectors on the ends of the extra white wire bundles found inside the ACU are labeled as to which SIO board and port to which they are connected. Connect the phone side of the modem to the newly installed filter using an RJ11 cable.
8. If an OID is not available, the technician will use the laptop computer to configure the DATIS.

9. Go to the **REVIEW, SITE, CONFIG, COMMS** configuration page and configure the SIO port as a VDU, which must agree with the hardware configuration performed in step 2 or 5. Set the following parameters: 2400, N, 8, 1, NONE, LEASED, modem number, and TONE for remote connections and 2400, N, 8, 1, NONE, and Hardwire for local connections.

10. Using a spare VDU, connect to the newly installed port and verify that the VDU displays the 1 minute screen. Mark the 1A9 panel to indicate which connector is DATIS or SAIDS. This completes the installation.

Reporting Modification

Target date for completion of this modification is identified in the last column of Tables A, B, and C. Report completed modification on WS Form A-26 maintenance record, following instructions in EHB-4, part 2, Appendix F, using reporting code ACOMM. If the hardware configuration described in Tables B and C is not correct, please provide the updated information on the A-26. Refer to attachment A for example of form A-26.

Original Signed

John McNulty
Chief, Engineering Division

Attachment A

TABLE A

Site Location	Site ID	ASOS ACU Location	ASOS/DATIS Interface	DATIS Installation Date
Albuquerque, NM	ABQ	FAA/NWS Bldg Stor. Rm (1st flr)	ASOS VDU	10/20/96
Austin, TX	AUS	relocated to ATCT	ASOS VDU	11/18/96
Cleveland, OH	CLE	Federal Facilities Bldg Eq Rm (2nd flr)	ASOS VDU	12/2/96
Denver, CO	DEN	NWS Bldg. Ops Area (1st flr)	ASOS VDU	10/15/96
Dallas/Ft. Worth, TX	DFW	Delta Hangar NWS CMO (2nd flr)	ASOS VDU	11/4/96
El Paso, TX	ELP	relocated to ATCT	ASOS VDU	10/16/96
Newark, NJ	EWR	Bldg # 51 NWS Ops (2nd flr)	ASOS VDU	10/16/96
Greensboro, NC	GSO	NWS Office	ASOS VDU	10/9/96
Washington, DC (Dulles)	IAD	Telephone Bldg Wx Obs. Area (3rd flr)	ASOS VDU	12/2/96
Houston Intercontinental, TX	IAH	Qualitron Bldg Contract Obs. Office (3rd flr)	ASOS VDU	10/23/96
Indianapolis, IN	IND	new WFO Eq Rm (1st flr)	ASOS VDU	10/9/96
New York, NY (Kennedy)	JFK	Intl. Arrival Bldg. Wx Obs. Office (2nd flr)	ASOS VDU	11/18/96
New York, NY (La Guardia)	LGA	Marine Air Terminal Bldg. CWO's Office (3rd flr)	ASOS VDU	10/28/96
Miami, FL	MIA	Gen. Avia. Cntr. Bldg NWS Office (1st flr)	ASOS VDU	10/28/96
New Orleans, LA	MSY	NWS CMO Electrical Closet (2nd flr)	ASOS VDU	10/15/96
Portland, OR	PDX	relocated to ATCT	ASOS VDU	10/30/96
Philadelphia, PA	PHL	Main Terminal CWO's Office (4th flr)	ASOS VDU	10/15/96
San Antonio, TX	SAT	ATCT Comm Eq Rm (1st flr)	ASOS VDU	10/28/96
Seattle, WA	SEA	Terminal Complex NWS Ops Area (5th flr)	ASOS VDU	12/9/96
San Juan, PR	SJU	Terminal Bldg Wx Eq Rm (5th flr)	ASOS VDU	12/9/96
Salt Lake City, UT	SLC	Kibbie Exec. Terminal NWS Ops Area (1st flr)	ASOS VDU	10/15/96
Tampa, FL	TPA	Hangar One Wx Eq Rm (2nd flr)	ASOS VDU	10/30/96

TABLE B

Site Location	Site ID	ASOS ACU Location	Recommended Modem & I/O Panel Port Connection with current use.	D-ATIS Installation Date
Windsor Locks, CT	BDL	relocated to ATCT	1) VDU modem #7 - J18 2) CVD modem #6 - J17 3) Modem #8 - J19	11/18/96
Nashville, TN	BNA	ATCT Comm Eq Rm	1) AWIPS modem #8 - J19	10/23/96
Boston, MA	BOS	ATCT Comm Rm (21st flr)	1) AWIPS modem #8 - J19	10/16/96
Burbank, CA	BUR	ATCT Eq Rm (1st flr)	1) CVD modem #6 - J17 2) Printer modem #1 - J12	12/2/96
Baltimore-Washington, MD	BWI	relocated to ATCT	1) CVD modem #6 - J17 2) AWIPS modem #8 - J19	10/30/96
Charlotte, NC	CLT	ATCT Radio Eq Rm (1st flr)	1) CVD modem #7 - J18 2) VDU modem #10 - J21	10/15/96
Columbus, OH	CMH	relocated to ATCT	1) CVD modem #6 - J17	11/4/96
Cincinnati, OH	CVG	Terminal Bldg B NWS Ops Area (2nd flr)	1) CVD modem #6 - J17 2) AWIPS modem #8 - J19	10/17/96
Washington, DC (National) [Old ATCT]	DCA	Terminal Bldg Comm Equip Rm (3rd flr)	1) OID (CVD) modem #6 - J17 2) AWIPS modem #8 - J19 3) AFOS modem #10 - J21	10/23/96
Detroit, MI (Metro)	DTW	ATCT AF Work Rm (1st flr)	1) J17 2) J19	10/15/96
Las Vegas, NV	LAS	ATCT FAA Radio Eq Rm (1st flr)	1) VDU modem #7 - J18 2) Printer modem #6 - J17 3) CVD modem #8 - J19	10/23/96
Los Angeles, CA	LAX	ATCT Eq Rm (4th flr)	1) Modem #8 - J19 2) RTA modem #9 - J20 3) ABT modem #10 - J21	11/15/96
Orlando, FL	MCO	ATCT FAA Eq Rm (1st flr)	1) CVD modem #6 - J17 2) Modem #8 - J19 3) Modem #9 - J20	10/16/96

Site Location	Site ID	ASOS ACU Location	Recommended Modem & I/O Panel Port Connection with current use.	D-ATIS Installation Date
Milwaukee, WI	MKE	ATCT Telco Rm (1st flr)	1) VDU modem #7 - J18 2) CVD modem #6 - J17 3) Modem #8 - J19	10/16/96
Minneapolis-St. Paul, MN	MSP	ATCT Telco Eq Rm (4th flr)	1) CVD modem #6 - J17 2) Modem #10 - J21	12/2/96
Chicago, IL (O'Hare) [New ATCT]	ORD	ATCT Field Cable Rm B (basement)	1) CVD modem #6 - J17	11/18/96
Phoenix, AZ	PHX	ATCT Eq Rm (1st flr)	1) J18 2) J19	10/23/96
Pittsburgh, PA	PIT	ATCT Radar Rm (2nd flr)	1) AWIPS modem #8 - J19 2) AFOS modem #9 - J20 3) AFOS spare modem #10 - J21	11/12/96
Raleigh-Durham, NC	RDU	AFSS Telco Rm (1st flr)	1) AWIPS modem #8 - J19 2) AFOS modem #10 - J21	10/15/96
San Diego, CA [New ATCT]	SAN	ATCT Eq Rm (3rd flr)	1) VDU modem #7 - J18 2) CVD modem #6 - J17 3) Modem #8 - J19 4) Modem #9 - J20	10/20/96
San Francisco, CA	SFO	Intl Term/ATCT NWS Office (6th flr)	1) VDU modem #7 - J18 2) CVD modem #6 - J17 3) AWIPS modem #8 - J19	10/15/96
Sacramento, CA	SMF	ATCT Eq Rm (1st flr)	1) VDU modem #7 - J18 2) CVD modem #6 - J17	11/12/96
Tulsa, OK	TUL	relocated to ATCT	1) VDU modem #7 - J18 2) CVD modem #6 - J17 3) Modem #8 - J19	12/9/96

TABLE C

Site Location	SID	Recommended I/O Port Connection	SAIDS Installation Date
Des Moines, IA	DSM	Local SAIDS Port 1) ADAS- J29	11/15/96
Wichita, KS	ICT	Remote SAIDS Port 1) VDU modem # 7-J18 2) CVD modem # 6-J17	11/15/96
Kansas City, MO [New ATCT]	MCI	Local SAIDS Port 1)J28 2)J29	10/23/96
Loathe, KS	OJC	Local SAIDS Port 1) ADAS J29 2) AWIPS J30	11/15/96
Omaha, NE	OMA	Local SAIDS Port 1) ADAS- J29	11/15/96
Springfield, MO	SGF	Remote SAIDS Port 1)VDU modem # 7 - J18 2)CVD modem # 6 - J17	11/15/96
St. Louis, MO	STL	Remote SAIDS Port 1)VDU modem # 7 - J18 2)CVD modem # 6 -J17 3)AWIPS modem# 8 -J19	11/15/96