

ARCN Weather & Climate Monitoring
Site Visit Worksheet
Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

RAWS HelpDesk:

phone: (208) 387-5475

Hours: M-F, 6 AM-2:30 PM AST

Site name	Asik	DCS - Sat. TX Check	
Date of this visit	3/5/2019	phone: (757) 824-7450	
Operators	SOUSANES	24/7 technical support	

Pre-Field Information

(Look up the station: www.nifc.blm.gov --> Login --> 'Weather' --> 'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	swap HMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	Y	swap 05103
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	Y	reinstall ST2
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	Check no precip recently
NWS Site ID	Datalogger	N	
Camera	Transmitter	N	
Fence	Battery	N	Check - low with lots of sun

Record Site Conditions

Time visit begins:	12:15	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE --> Connect Button --> Measurements Tab --> 'Select 'Status' from Table Drop-Down Box)

(Laptop: Device config utility --> Select DataLogger CR1000 --> Connect Button --> Data Monitor tab --> Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	Asik_2017
StartTime	7/27/2017
12 V Battery Voltage	13.3
Panel Temperature	14.9
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	0
Replace if <2.9	3.5
Reset if >0	0
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data	Value OK? (Y/N)
RNIN before program update	Const SR50_ht= 73.5
SR50 height before	RNIN 8.2
Upload new program	WSM 4.4
Re-enter RNIN after	WDD 332
Measure and re-enter Sr50a	ATF_109 55.9
Clean rain gage	RHP 54.5
Clean temp shield	BVV 13.3
Level solar sensor	WSMPH 9.2
Wipe out enclosure	WDDP 19.7
Replace dessicant	SDI 590.9
Tighten bolts and guy wires	SRW 0.0
Clean battery terminals	STF 50.6
Clear snow depth area	STF2 48.9
Brush station vicinity	STF3 46.1
Take site photos	ATF Secondary 56.0
Tighten elements on YAGI	55.2
Electric Fence Rehab	ThermX just swapped
	HMP45

d Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	E2630027	HMP45	X3910059		
Solar Radiation						
Wind Speed/Dir	05103	87976	05103	95225		
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

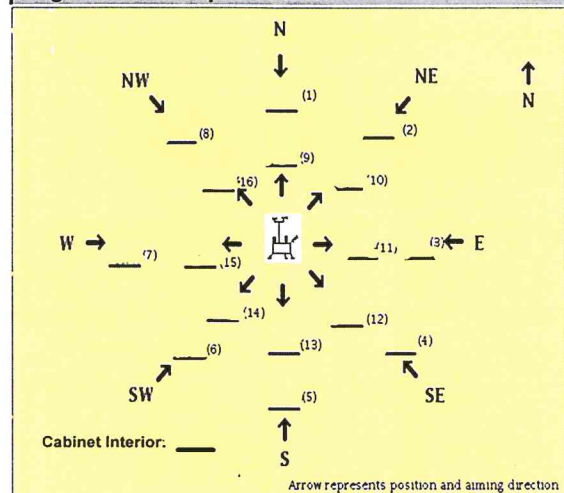
Swap HMP45 ☒ Swap Wind 05103 ☒ Check fence ☒ Precip check GOOD
 Replace STF2 20cm ☒

STATION LOOKED GOOD.
 - PILOT AIR LACED POLYWIRE ON FENCE, 1 CONNECTOR OFF.
 - NO OBVIOUS RAIN GAGE ISSUES
 - REPLACED STF2
 - SWAPPED WIND
 - PUT LOG IN BETTER SPOT - SWAPPED W/ THERM X
 -

WFSI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



#	To/From	Direction	Photo Numbers
1	Towards station	N	
2		NE	
3		E	
4		SE	
5		S	
6		SW	
7		W	
8		NW	
9	From station	N	
10		NE	
11		E	
12		SE	
13		S	
14		SW	
15		W	
16		NW	
17	Enclosure	Inside	

ARCNC Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARCNC Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Chimney Lake	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/10/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	HILL & SOUSANES	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov --> Login --> 'Weather' --> 'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
Fence	Transmitter	N	
	Battery	N	

Record Site Conditions

Time visit begins:	14:15	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE --> Connect Button --> Measurements Tab --> 'Select Status' from Table Drop-Down Box)
(Laptop: Device config utility --> Select DataLogger CR1000 --> Connect Button --> Data Monitor tab --> Status table)

Before Maintenance:	After Maintenance:
OSVersion	25
ProgName	Chimney_2017
StartTime	6/26/18 3:19 PM
12 V Battery Voltage	13.7
Panel Temperature	11.4
Watchdog Errors	0
Lithium Batt Volt	2.4
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	0
Replace if <2.9	2.4
Reset if >0	0
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data	Value OK? (Y/N)
RNIN before program update	RNIN 1.87
SR50 height before	WSM 10.4
Upload new program	WDD 18.4
Re-enter RNIN after	ATF_109 47.9
Measure and re-enter Sr50a	FTF
Clean rain gage	RHP 76
Clean temp shield	BVV 13.7
Level solar sensor	WDDP 20.6
Wipe out enclosure	WSMPH 13.0
Replace dessicant	SDI 0
Test guy wires, tighten	SRW 94.9
Tighten bolts and guy wires	AT1H
Clean battery terminals	AT1L
Clear snow depth area	STF 50.8
Brush station vicinity	STF2 50.7
Take site photos	STF3 37.3
Tighten elements on YAGI	STF4 34.3
	Const SR50_ht=

Electric Fence Rehab		ATF ThermX	4.8.5
		ATF HMP	4.8.2

Record Sensor Configuration Changes

Model # out	Serial# out	Model # in	Serial# in	Cable length (ft)	Height/depth (in)
HMP45	FA010026	HMP45	FA301006		
Temp/RH					
Solar Radiation					
Wind Speed/Dir					
Snow depth					
Soil Temp 1					
Soil Temp 2					
Soil Temp 3					
Precipitation					
Barometric pressure					
Datalogger					
Temp 1					

Comments	To do:
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STATION LOOKS GREAT. FENCE IS REALLY GOOD SHAPE.
 DOWNLOADED DATA + SWAPPED HMP45. PROBLEM RESOLVED.
 (DATA ON KEN'S TABLE)
 THERMOGRAPHS IN VICINITY: 46.5°
 - SET THERMOGRAPHS TAKING PHOTOS.

WFMJ Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

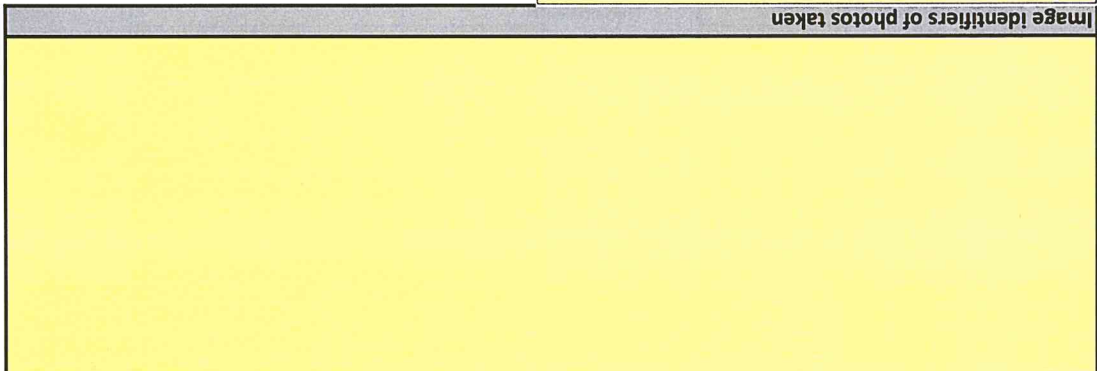
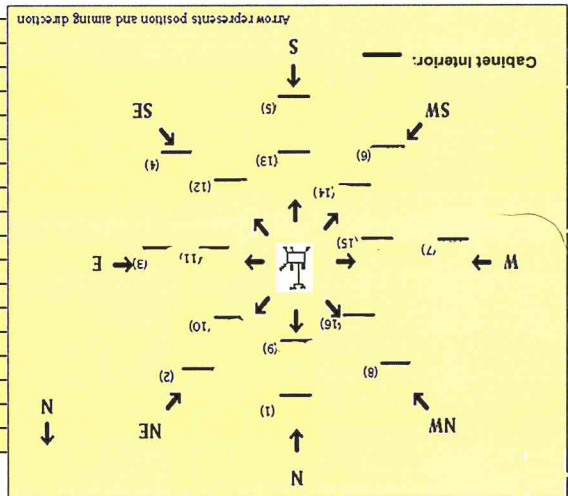


Image identifiers of photos taken



Key	Camera Image #	Direction	Comp. Image #
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

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ARCN Program Contact:
Pam Sousanes/Ken Hill
phone: (907) 455-0677/(907)-455-0678
email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Devil Mountain	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	8/1/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	Sousanes	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	Y	LI200x
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
Fence	Transmitter	N	
Camera	Battery	N	

Record Site Conditions

Time visit begins:	2:30 11:30	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	Devil_2018
StartTime	7/25/18 17:37
12 V Battery Voltage	13.5
Panel Temperature	14.1
Watchdog Errors	0
Lithium Batt Volt	3.4
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	
Replace if <2.9	
Reset if >0	
Reset if >0	

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data	Value OK? (Y/N)
RNIN before program update	Const SR50_ht= 50.5
SR50 height before	RNIN 1.63
Upload new program	WSM 11.2
Re-enter RNIN after	WDD 193
Measure and re-enter Sr50a	ATF_109 55.0
Clean rain gage	RHP 59.9
Clean temp shield	BVV
Level solar sensor	WSMPH 16
Wipe out enclosure	WDDP 195
Replace dessicant	SRW 330
Tighten bolts and guy wires	SDI 1.4 (leaves)
Clean battery terminals	STF 43.3
Clear snow depth area	STF2 43.1
Brush station vicinity	STF3 37.9
Take site photos	STF4
Tighten elements on YAGI	ATF_HMP45 54.2
Electric Fence Rehab	ATF ThermX 54.4

+ could not reset to 0 ??

removed

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	X3410049	HMP45	31240025		
Solar Radiation	LI200X		LI200X	60189		
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

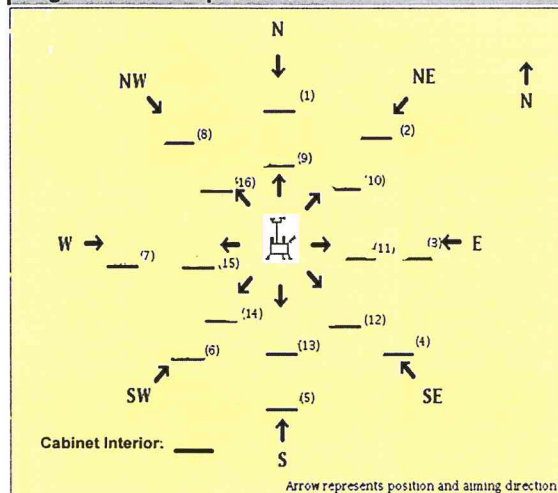
Swap HMP45 ☒ Swap LI200X ☒ Repair fence ☒ Remove

- 1 fence post + all polywire were missing. Decided to remove fence.
- tipping bucket was 90° off, righted + leveled.
- swapped HMP + LI200X
- replaced old solar panel power cables - looked bad.
- Tested TB but could not reset to RNW + 0. Left as is.
- Installed TX321 for the TX312.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



#	To/From	Direction	Photo Numbers
1	Towards station	N	
2		NE	
3		E	
4		SE	
5		S	
6		SW	
7		W	
8		NW	
9	From station	N	
10		NE	
11		E	
12		SE	
13		S	
14		SW	
15		W	
16		NW	
17	Enclosure	Inside	

ARCN Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Ella Creek	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	9/11/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	Sousanes	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude 65 16.511	Temp	N	
Longitude 163 49.2080	Temp/RH	Y	HMP45
NESDIS ID 396182E2	Solar Radiation	N	
Tx Time (mm:ss) 0:40:00	Wind Speed/Dir	N	
Tx Channel 152	Snow Depth	?	Check crossbar/March spike
Antenna Azimuth (Deg Mag) 136	Soil Temp 1	Y	No data
Antenna Elev. (Deg.) 14	Soil Temp 2	N	
Currently activated? Y	Soil Temp 3	N	
Currently transmitting? Y	Precipitation	?	Check crossbar/ March spike
NWS Site ID ELLA2	Datalogger	N	
Camera N	Transmitter	N	
Fence N	Battery	N	

Record Site Conditions

Time visit begins: 10:15	Time visit ends:
Station accessible? (Y/N) Y	If no, comment:
Cables intact? (Y/N) Y	If no, comment:
Power source ok? (Y/N) Y	If no, comment:
Batteries ok? (Y/N) Y	If no, comment:

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select Datalogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion 26	26
ProgName Ella_2017	7/24/18 5:16 PM
StartTime 7/24/18 5:16 PM	7/24/18 5:16 PM
12 V Battery Voltage 13.4	13.4
Panel Temperature 15.2	10.4
Watchdog Errors 0	0
Lithium Batt Volt 3.4	3.4
Low 12V Batt Count 0	0
Skipped Scan 0	0
Reset if >0	Reset if >0
Replace if <2.9	Replace if <2.9
Reset if >0	Reset if >0
Reset if >0	Reset if >0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data Y	Const SR50_ht= 76.5	
RNIN before program update 10.33	RNIN 10.33	
SR50 height before 76.5	WSM 1.7	
Upload new program N	WDD 26.2.9	
Re-enter RNIN after	ATF_109 44.5	
Measure and re-enter SR50a	RHP 62.3	
Clean rain gage Y	BVV 13.4	
Clean temp shield Y	WSMPH 5.02	
Level solar sensor N	WDDP 8.9	
Wipe out enclosure Y	SRW 3.5	
Replace dessicant Y	SDI 1.2	
Tighten bolts and guy wires Y	STF 44.9	just installed
Clean battery terminals N	STF2 42.5	
Clear snow depth area N/A	STF3 44.5	
Brush station vicinity N/A	STF4	
Take site photos Y	ATF HMP45 44.5	
Tighten elements on YAGI replaced	ATF ThermX 43.6	
Electric Fence Rehab N/A		

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	F4010027	HMP45	424 10067		
Solar Radiation						
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						

Datalogger					
Temp 1					

Comments

Swap HMP45 ✓ Consider moving Precip/Snow crossbar down

swapped antenna- many missing / broken elements
 replaced ST1 cable had been secured
 Swapped out TX312 for TX321. Wanted for GPS fix, checked status, data in buffer.
 Precip funnel missing, replaced- tested rain gauge

- replaced small radiation shield - top cracked.
 - tightened S guy wire

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken

Diagram showing 17 numbered photo locations around a central station. Arrows indicate the aiming direction for each photo. The locations are numbered 1 through 17. A north arrow points upwards. The diagram includes labels for cardinal and ordinal directions: N, NE, E, SE, S, SW, W, NW. A label 'Cabinet Interior:' is at the bottom left with an arrow pointing to location 14. A note at the bottom states 'Arrow represents position and aiming direction.'

Photo Key	Image on camera #	Direction	On Computer
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

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Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Howard Pass	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/11/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	Hill, Sousanes	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	Y	Again
Tx Channel	Snow Depth	N/A	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
	Transmitter	N	
	Battery	N	

Record Site Conditions

Time visit begins:	14:30	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)		If no, comment:	5108 Black cable disconnected, Solar panel cable disconnected.
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	29 26 29
ProgName	Howard Pass_2018
StartTime	7/23/18 13:52
12 V Battery Voltage	12.4
Panel Temperature	16.6
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
	Reset if >0
	Replace if <2.9
	Reset if >0
	Reset if >0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data	Y	
RNIN before program update	1.32	
SR50 height before	N/A	
Upload new program	Y	
Re-enter RNIN after	Y	
Measure and re-enter Sr50a	N/A	
Clean rain gage	22	
Clean temp shield	22	
Level solar sensor	22	
Wipe out enclosure	22	
Replace dessicant	22	
Test guy wires, tighten	22	
Tighten bolts and guy wires	22	
Clean battery terminals	22	
Clear snow depth area	22	
Brush station vicinity	22	
Take site photos	Y	
	RNIN	1.32
	WSM	15.1
	WDD	22.0
	ATF_109	56.8
	FTF	—
	RHP	39.9
	BVV	13.1
	WDDP	21.7
	WSMPH	18.1
	SDI	— no sensor
	SRW	426
	AT1H	—
	AT1L	—
	STF	53.5
	STF2	50.0
	STF3	46.8
	Const SR50_ht=	—

Tighten elements on YAGI

Y

Electric Fence Rehab

N

ATF ThermX

56.2

45 ATF HMP155

56.0

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP155	H2950012	HMP45		GRASS	By MISTAKE AT CALWICK
Solar Radiation						
Wind Speed/Dir	5108 Alpine HD	WM160868	5108 Alpine HD			
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

To do:

Replace Wind Monitor NO ^{rewire only} Replace Solar Panel ✓ Replace Coax ✓ Replaced HMP155 & cable
 Download Program with HMP45 prgm ✓

On Arrival:

- HMP 45 busted @ head shield ok. - 5108 Wind cable disconnected (black ground wire only)
- Solar panel black wire disconnected - ST1 & ST2 on surface
- PUT IN 7 WIRE HMP 45, CHANGED PROGRAM
- SOLAR PANEL MOUNTED, NEEDED TO CUT U-BOLTS TO FIT ON FRAME.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken

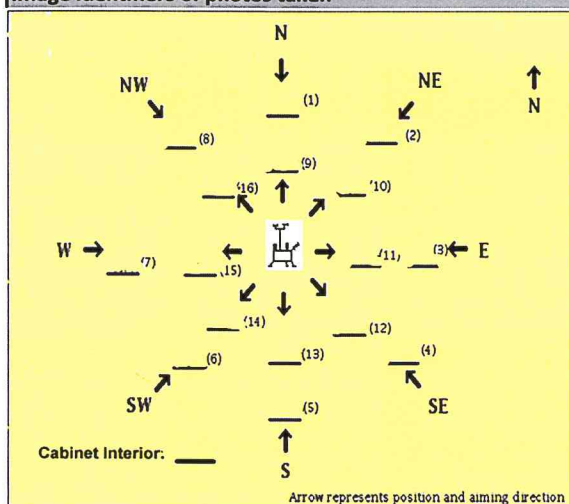


Photo Key	Image on camera #	Direction	On Computer
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

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Site Visit Worksheet

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ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Imelyak	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/11/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	HILL + SOUSANES	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.njfc.blm.gov-->Login-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP155
NESDIS ID	Solar Radiation	Y	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	Removing
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	?	All zeros since last visit
NWS Site ID	Datalogger	N	
	Transmitter	N	
	Battery	N	

Record Site Conditions

Time visit begins:	5:00 PM	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	Imelyak_2018
StartTime	6/12/18 6:14 PM
12 V Battery Voltage	13.5
Panel Temperature	12.4
Watchdog Errors	0
Lithium Batt Volt	3.44
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	9.5
Replace if <2.9	0
Reset if >0	3.4
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data	Y	
RNIN before program update	0	
SR50 height before	Removing	
Upload new program	N	
Re-enter RNIN after	0.00	
Measure and re-enter Sr50a	1	
Clean rain gage	Replaced	
Clean temp shield	2	
Level solar sensor	Y	
Wipe out enclosure	Y	
Replace dessicant	Y	
Test guy wires, tighten	Y	
Tighten bolts and guy wires	Y	
Clean battery terminals	Replaced	
Clear snow depth area	N/A	
Brush station vicinity	N/A	
Take site photos	Y	
Check transmitted values:		
RNIN	0	
WSM	9.9	
WDD	378	
ATF_109	46.7	
FTF		
RHP	60.5	
BVV	13.5	
WDDP	16.7	
WSMPH	320	
SDI	178	
SRW		
AT1H		
AT1L		
STF	52.4	
STF2	48.9	
STF3	45.4	
Const SR50_ht=	1	

Tighten elements on YAGI
Electric Fence Rehab

Replaced

ATF_ThermX
ATF_HMP155

44.6

45.5

d Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP155	F1150020	HMP155	H2946034		
Solar Radiation	LI200X	239334	LI200X	43036		
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

To do:

Swap HMP 155 ☒ Swap LI200X ☒ Consider removing or moving SR50a to lower height (many errors) REMOVE

No data from new rain gauge installed last year; check Swapped Replace YAGI ☒

Re[place power cable with terminal ends in conduit wrong size

Swapped precip. bucket, no readings, labeled.

Conduit is 1/2" not 3/4" - swap + bring again next year.

Removed snow, replaced yagi

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken

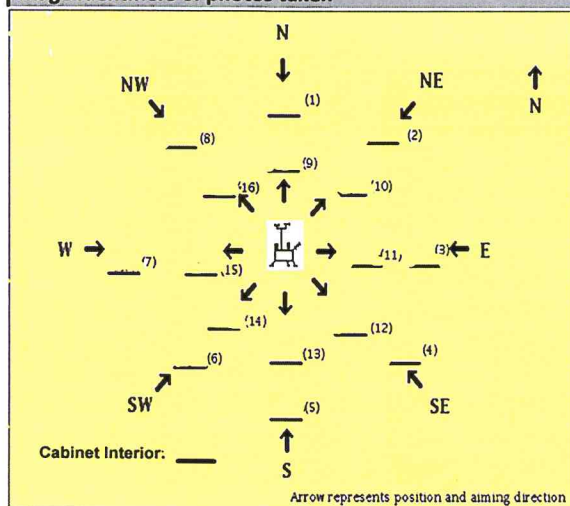


Photo Key	Image on camera #	Direction	On Computer
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

ARCN Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

RAWS HelpDesk:

phone: (208) 387-5475

Hours: M-F, 6 AM-2:30 PM AST

Site name	Kaluich	DCS - Sat. TX Check	
Date of this visit	6/12/2019	phone: (757) 824-7450	
Operators	Hill, Sousanes	24/7 technical support	

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP155 WMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
	Transmitter	N	swap coax
	Battery	N	

Record Site Conditions

Time visit begins:	1045	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	See Notes
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	Kaluich2018
StartTime	6/12/18 1:41 PM
12 V Battery Voltage	13.2
Panel Temperature	23.9
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	0
Replace if <2.9	3.4
Reset if >0	0
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data	Y	
RNIN before program update	2.50	
SR50 height before	80.6	
Upload new program	Y	
Re-enter RNIN after	2.50	
Measure and re-enter Sr50a	49	
Clean rain gage	N	
Clean temp shield	N	
Level solar sensor	N	
Wipe out enclosure	N	
Replace dessicant	Y	
Test guy wires, tighten	Y	
Tighten bolts and guy wires	Y	
Clean battery terminals	N	
Clear snow depth area	N	
Brush station vicinity	NA	
Take site photos	Y	
	RNIN	2.50
	WSM	4.4
	WDD	2.88
	ATF_109	57.0
	FTF	
	RHP	49.8
	BBV	13.4
	WDDP	278
	WSMPH	7.6
	SDI	0.2
	SRW	724
	AT1H	
	AT1L	
	STF	48.9
	STF2	45.4
	STF3	40.2
	Const SR50_ht=	49

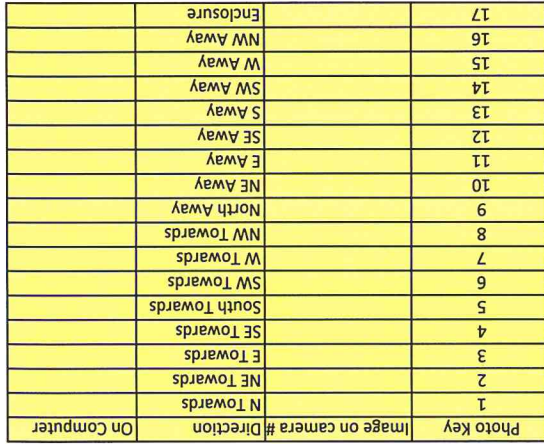


Image identifiers of photos taken

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

WFMI Maintenance Narrative

- Next year ASPACE
 THERM-X SMALL
 LADDITION
 SHIELD

Comments	

Record Sensor Configuration Changes			
Tighten elements on YAGI	replaced	ATF_Therm	58.1
Electric Fence Rehab	NA	ATF_HMP156	57.4

ARCN Weather & Climate Monitoring
Site Visit Worksheet
Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

RAWS HelpDesk:

phone: (208) 387-5475

Hours: M-F, 6 AM-2:30 PM AST

Site name	Killik Pass	DCS - Sat. TX Check	
Date of this visit	6/11/2019	phone: (757) 824-7450	
Operators	JILL + SOUSANES	24/7 technical support	

Pre-Field Information

(Look up the station: www.nifc.blm.gov --> Login --> 'Weather' --> 'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	Y	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	X	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
	Transmitter	N	
	Battery	N	

Record Site Conditions

Time visit begins:	1:00 pm	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE --> Connect Button --> Measurements Tab --> 'Select 'Status' from Table Drop-Down Box)

(Laptop: Device config utility --> Select DataLogger CR1000 --> Connect Button --> Data Monitor tab --> Status table)

Before Maintenance:	After Maintenance:
OSVersion	25
ProgName	Killik_2018(V2)
StartTime	6/27/2018 15:22:00 PM 9/18/18 2:46 pm
12 V Battery Voltage	12.6
Panel Temperature	8.7
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	
Replace if <2.9	
Reset if >0	
Reset if >0	

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data	Value OK? (Y/N)
RNIN before program update	RNIN 1.32
SR50 height before	WSM 13.5
Upload new program	WDD 23.5
Re-enter RNIN after	ATF_109 45.4
Measure and re-enter Sr50a	FTF
Clean rain gage	RHP 48
Clean temp shield	BVV 13.6
Level solar sensor	WDDP 19.9
Wipe out enclosure	WSMPH 24.5
Replace dessicant	SDI 0.8
Test guy wires, tighten	SRW 70.7
Tighten bolts and guy wires	AT1H
Clean battery terminals	AT1L
Clear snow depth area	STF 48.5
Brush station vicinity	STF2 44.2
Take site photos	STF3 31.9
Tighten elements on YAGI	Const SR50_ht=
	ATF_ThermX 46.3

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	F4010024	HMP45	F4010005		
Solar Radiation	LI200X	68923	LI200X	py 9055 L		
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

To do:

Swap HMP45 ✓

Swap Li200x ✓

STATION LOOKED GOOD. SWAPPED AT/RH + SOLAR. REPLACED ONE
ELEMENT THAT WAS ON GROUND.

LIGHTNING ROD STILL ON GROUND, CAN BRING U/BOLT MOUNT
TO REATTACH NEXT VISIT.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

ge identifiers of photos taken

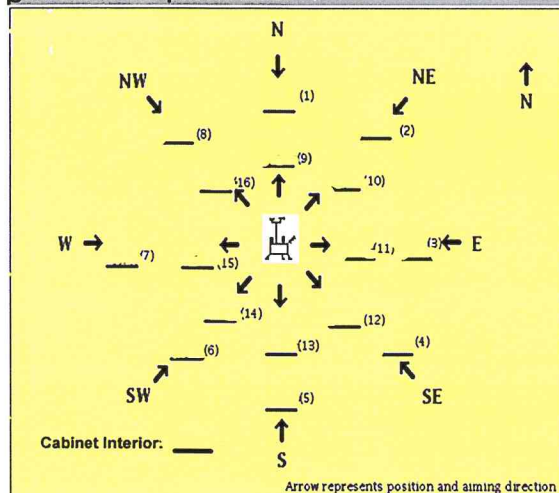


Photo Key	Image on camera #	Direction	On Computer
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

ARCN Weather & Climate Monitoring
Site Visit Worksheet
Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

RAWS HelpDesk:

phone: (208) 387-5475

Hours: M-F, 6 AM-2:30 PM AST

Site name	Kuguruk	DCS - Sat. TX Check
Date of this visit	8/5/2019	phone: (757) 824-7450
Operators	Sousanes	24/7 technical support

Pre-Field Information

(Look up the station: www.nifc.blm.gov --> 'Weather' --> 'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
Fence	Transmitter	N	
Camera	Battery	N	

Record Site Conditions

Time visit begins:	1000	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	Kuguruk_2017
StartTime	7/26/17 4:40 PM
12 V Battery Voltage	13.7
Panel Temperature	28.8
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	0
Replace if <2.9	3.5
Reset if >0	0
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data	Y	
RNIN before program update	5.87	
SR50 height before	81	
Upload new program	N	
Re-enter RNIN after	Yes, after testing	
Measure and re-enter Sr50a	Y	
Clean rain gage	Y	
Clean temp shield	Y	
Level solar sensor	Y	
Wipe out enclosure	Y	
Replace dessicant	Y	
Tighten bolts and guy wires	Y	
Clean battery terminals	Y	
Clear snow depth area	Y	
Brush station vicinity	Y	
Take site photos	Y	
Tighten elements on YAGI	Y	
Electric Fence Rehab	Y	
Const SR50_ht=	81	
RNIN	5.87	
WSM	2.9	
WDD	20.4	
ATF_109	53	
RHP	54	
BVV	13.7	
WSMPH	5.1	
WDDP	16.2	
SRW	29.7	
SDI	0	
STF	49.7	
STF2	49.0	
STF3	48.6	
ATF_HMP45	55.3	
ATF_ThermX	54.0	

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	A2120054	HMP45	62630055		
Solar Radiation						
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

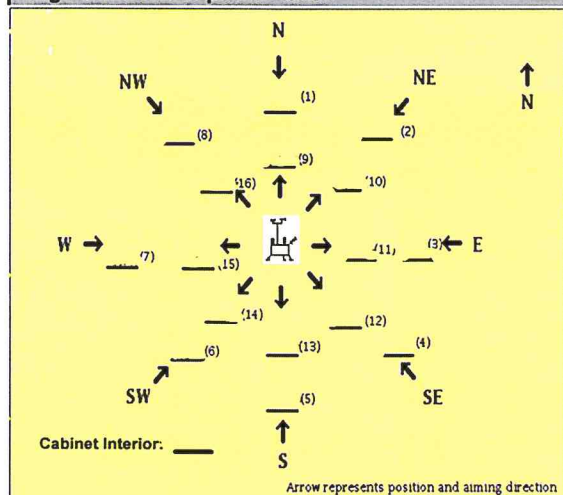
Swap HMP 45 ✓ Swap SD camera card ✓ Check Fence ✓

STATION LOOKED GOOD, BUT SOMETHING MAY HAVE SMUCK IN THROUGH FENCE. BATTERY BOX FOR CAMERA HAS CHAW MARKS, PRECIP CABLE WAS SEVERED + GPS CABLE WAS PULLED OUT SLIGHTLY. SOME SMALL SCRATCH MARKS ON TOP OF ENCLOSURE ALSO, BIRDS?
 - THE INSIDE OF THE ENCLOSURE WAS A BIT WET + 1 OF THE DESSICANT PACKS WAS SATURATED. NOT SURE HOW WATER GOT IN?
 - swapped SD card

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



#	To/From	Direction	Photo Numbers
1	Towards station	N	
2		NE	
3		E	
4		SE	
5		S	
6		SW	
7		W	
8		NW	
9	From station	N	
10		NE	
11		E	
12		SE	
13		S	
14		SW	
15		W	
16		NW	
17	Enclosure	Inside	

* July 30 2100 LAST TIME TB TIPPED. DAMAGE HAPPENED THEN.

- Spliced TB / tested w/ tips
 - taped solar panel wires to panel
 - wiped out enclosure + added putty to small holes in door of enclosure + made sure putty was secure in opening.

- Suspect porcupine damage

ARCN Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Midnight Mountain	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	8/1/2017	phone: (757) 824-7450	phone: (208) 387-5475
Operators	S. J. S. A. N. E. S.	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	?	
Longitude	Temp/RH	N/A	
NESDIS ID	Solar Radiation	N/A	
Tx Time (mm:ss)	Wind Speed/Dir	N/A	
Tx Channel	Snow Depth	N/A	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N/A	
Antenna Elev. (Deg.)	Soil Temp 2	N/A	
Currently activated?	Soil Temp 3	N/A	
Currently transmitting?	Precipitation	N/A	
NWS Site ID	Datalogger	N/A	
	Transmitter	N/A	
	Battery	N	Small solar panel

Record Site Conditions

Time visit begins:	12:00 PM	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)

(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	25
ProgName	Midnight_2017_ThermX_Air
StartTime	8/10/2017 10:22 AM
12 V Battery Voltage	13.7
Panel Temperature	
Watchdog Errors	Reset if >0
Lithium Batt Volt	Replace if <2.9
Low 12V Batt Count	Reset if >0
Skipped Scan	Reset if >0

Maintenance Checklist

Completed? (Y/N)	Check values:	
	Value	OK? (Y/N)
Download Hourly Data	42.8	
RNIN before program update	43.1	
SR50 height before	42.9	
Upload new program		
Re-enter RNIN after		
Measure and re-enter Sr50a		
Clean rain gage		
Clean temp shield		
Level solar sensor		
Wipe out enclosure		
Replace dessicant		
Tighten bolts and guy wires		
Clean battery terminals		
Clear snow depth area		
Brush station vicinity		
Take site photos		
Tighten elements on YAGI		

Electric Fence Rehab

N/A

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH						
Solar Radiation						
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

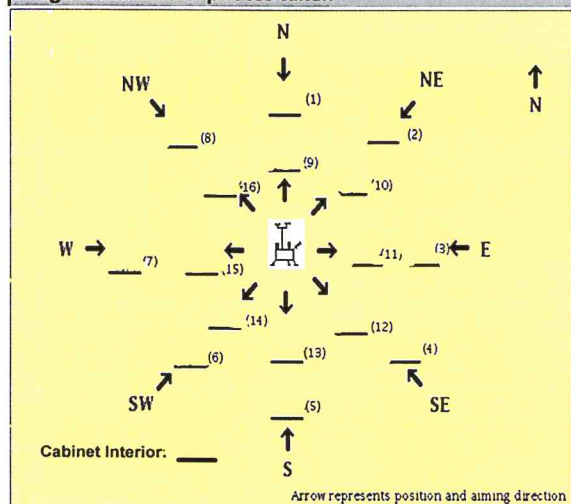
Install 10 W panel with two u-bolts, remove large panel ✓

- REPLACED LARGE SOLAR PANEL W/ 10W PANEL. MOUNTED W/ HOSE CLAMPS. MECHANISM ~~WEEKLY~~, HOPEFULLY IT SURVIVES. LEFT LARGE SOLAR PANEL ON SITE - COULD NOT FIT IN R44. PLACED ROCKS ON TOP, RETURNED NEXT YEAR!
- STATION LOOKED DECENT, NO ADDITIONAL DAMAGE TO RADIATION SHIELDS.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



#	To/From	Direction	Photo Numbers
1	Towards station	N	
2		NE	
3		E	
4		SE	
5		S	
6		SW	
7		W	
8		NW	
9	From station	N	
10		NE	
11		E	
12		SE	
13		S	
14		SW	
15		W	
16		NW	
17	Enclosure	Inside	

ARCN Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Mt. Noak	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	8/4/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	Sousanes	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather' -->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	Y	Out on 6/23, bring xtra shield
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	Y	LI200x
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	Y	Out on 6/23
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	?	Low, check
NWS Site ID	Datalogger	N	
Fence	Transmitter	N	
Camera	Battery	N	

Record Site Conditions

Time visit begins:	4:15	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	noak_2017
StartTime	7/22/18 3:59 PM
12 V Battery Voltage	13.5
Panel Temperature	16.5
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0

Maintenance Checklist

Completed? (Y/N)	Const SR50_ht=	Value	OK? (Y/N)
Download Hourly Data	66.7	1.15	
RNIN before program update		6.6	
SR50 height before	44.9 in.; 2018 notes	29.7	
Upload new program	same	57.4	
Re-enter RNIN after		43.8	
Measure and re-enter Sr50a	66.7	13.5	
Clean rain gage	Y repaired	10.4	
Clean temp shield	N	312	
Level solar sensor	Y	SDI	
Wipe out enclosure	Y	SRW	
Replace dessicant	Y	STF	
Tighten bolts and guy wires	Y	STF2	
Clean battery terminals	N	STF3	
Clear snow depth area	N	STF4	
Brush station vicinity	N	ATF_HMP45	
Take site photos	Y	ATF_ThermX	
Tighten elements on YAGI	Y		

Electric Fence Rehab

y

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45C	A2120053	HMP45	E2L30054		
Solar Radiation	L1700X	107543	L1700X	63699		
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Camera						
Datalogger						
Temp 1						

Comments

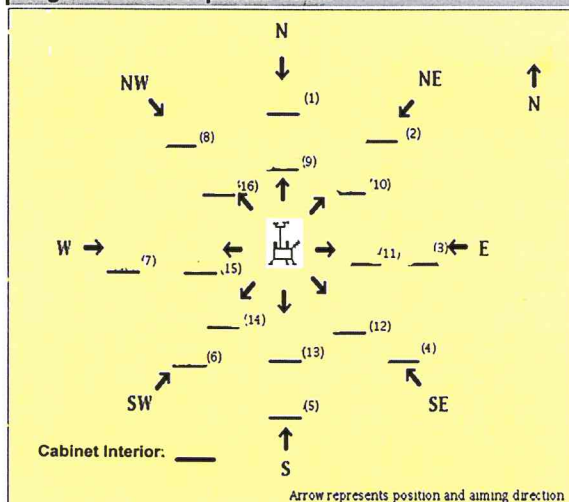
Swap HMP45 ☒ Swap 109/Shield? ☒ Swap SD card ☒ Check Camera ☒ Assess/Repair fence ☒
 Check/Replace snow ☒ Check Precip ☒

- Replaced TB b/c mounting bracket was busted, should be ok.
 - Moved crossbar up. One U-bolt was missing - it was stress on the solar panel - Swapped HMP45
 - fixed fence - tightened guy wire
 - replaced S&SD - solar panel box lid was off - taped back on
 - replaced 109 - Swapped SD card, camera looked good.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



#	To/From	Direction	Photo Numbers
1	Towards station	N	
2		NE	
3		E	
4		SE	
5		S	
6		SW	
7		W	
8		NW	
9	From station	N	
10		NE	
11		E	
12		SE	
13		S	
14		SW	
15		W	
16		NW	
17	Enclosure	Inside	

ARCN Weather & Climate Monitoring
Site Visit Worksheet
Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Pamichtuk	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/10/2017	phone: (757) 824-7450	phone: (208) 387-5475
Operators	HILL / SOUSANES	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather' -->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude 67 45.977	Temp	N	
Longitude 152 09.854	Temp/RH	Y	HMP45
NESDIS ID 3961E704	Solar Radiation	Y	
Tx Time (mm:ss) 0:23:00	Wind Speed/Dir	Y	
Tx Channel 108	Snow Depth	N	
Antenna Azimuth (Deg Mag) 143	Soil Temp 1	?	Check depth 5/15 <0C
Antenna Elev. (Deg.) 13	Soil Temp 2	N	
Currently activated? Y	Soil Temp 3	N	
Currently transmitting? Y	Precipitation	N	
NWS Site ID PAMA2	Datalogger	N	
Fence Y	Transmitter	N	
	Camera SD Card	Y	
	Battery	N	

Record Site Conditions

Time visit begins: 3:30 pm	Time visit ends:
Station accessible? (Y/N) Y	If no, comment:
Cables intact? (Y/N) Y	If no, comment:
Power source ok? (Y/N) Y	If no, comment:
Batteries ok? (Y/N) Y	If no, comment:

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion 25	25
ProgName Pamichtuk_2017	PAMICHTUK 2017
StartTime 6/27/2017 11:16	6/27/2017 11:16 Same
12 V Battery Voltage 13.6	13.6
Panel Temperature 7.3	7.3
Watchdog Errors 0	0
Lithium Batt Volt 3.4	3.4
Low 12V Batt Count 0	0
Skipped Scan 0	0
Reset if >0	Reset if >0
Replace if <2.9	Replace if <2.9
Reset if >0	Reset if >0
Reset if >0	Reset if >0

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data Y	RNIN 1.18
RNIN before program update 1.15	WSM 3.8
SR50 height before 80.5	WDD 125.5
Upload new program N	ATF_109 45.7
Re-enter RNIN after 1.18	FTF 1.2
Measure and re-enter Sr50a 122	RHP 83
Clean rain gage 122	BVV 13.6
Clean temp shield 122	WDDP 5.2
Level solar sensor 122	WSMPH 1.2
Wipe out enclosure 122	SDI 0.4
Replace dessicant 122	SRW 6.2
Test guy wires, tighten 122	AT1H 1.2
Tighten bolts and guy wires 122	AT1L 1.2
Clean battery terminals 122	STF 39.2

Clear snow depth area	☒	STF2	38.9	
Brush station vicinity	☒	STF3	31.5	
Take site photos	☒	Const SR50_ht=		
Swap SD Card in Camera	☒	ATF_ThermX	46.5	
Electric Fence Rehab	☒	ATF_HMP45	51.2	

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	D3520076	HMP45	A220055		
Solar Radiation	LI200X	43089	LI200X	60172		
Wind Speed/Dir	5103	53109	5103	58427	95219(10)	
Snow depth				↑		
Soil Temp 1				BAD SENSORS, SWAPPED AGAIN		
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

To do:

Assess camera condition ☒ Swap SD card on camera ☒ Repair Fence ☒

Swap HMP45 ☒ Swap LI200X ☒ Swap Wind ☒ Check ST1 ☒

Swapped AT/RH, WS, + SOLAR. SWIND WS'S BAD SO SWAPPED FOR SPARE 05103. REPLACED CAMERA CARD.

REPAIRED FENCE.

SOIL SENSORS LOOKED GOOD - LEFT AS IS.

RAINED HARD WHILE AT SITE. * NOTE: WS MOUNTED 180° OFF, BOX FACING NORTH. TURNED IT 180° FOR FIX.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken

Cabinet Interior: ☐

Arrow represents position and aiming direction

Key	Camera Image #	Direction	Comp. Image #
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

ARC N Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARC N Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Ram Creek	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/11/2018	phone: (757) 824-7450	phone: (208) 387-5475
Operators	Ken Hill, Pam Sousanes	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather'-->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
Fence	Transmitter	N	
	Battery	N	

Record Site Conditions

Time visit begins:	11:30	Time visit ends:	15:40
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	25
ProgName	Ram2017
StartTime	6/27/18 12:42 PM
12 V Battery Voltage	13.5
Panel Temperature	16.6
Watchdog Errors	0
Lithium Batt Volt	3.05
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	0
Replace if <2.9	3.05
Reset if >0	0
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data	Y	
RNIN before program update	1.00	
SR50 height before	76	
Upload new program	N	
Re-enter RNIN after	1.00	
Measure and re-enter Sr50a	76	
Clean rain gage	Good	
Clean temp shield	Good	
Level solar sensor	Good	
Wipe out enclosure	Good	
Replace dessicant	✓	
Test guy wires, tighten	Good	
Tighten bolts and guy wires	Good	
Clean battery terminals	N	
Clear snow depth area	Good	
Brush station vicinity	NA	
Take site photos	Y	
Tighten elements on YAGI	Y / Good	
	RNIN	1.0
	WSM	6.7
	WDD	2.05
	ATF_109	46.9
	FTF	—
	RHP	37.2
	BVV	13.6
	WDDP	2.05
	WSMPH	0.6
	SDI	0
	SRW	1050
	AT1H	
	AT1L	
	STF	42.6
	STF2	41.7
	STF3	37.2
	Const SR50_ht=	76
	ATF_ThermX	49.3
	(4 mps)	47.5

Electric Fence Rehab

ATE_HMP45

d Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	F4010006	HMP45	4210024		
Solar Radiation						
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

To do:

Swap HMP45 ☒ Check Lithium Battery at 3.0 last year ☒ Repair Fence ☒

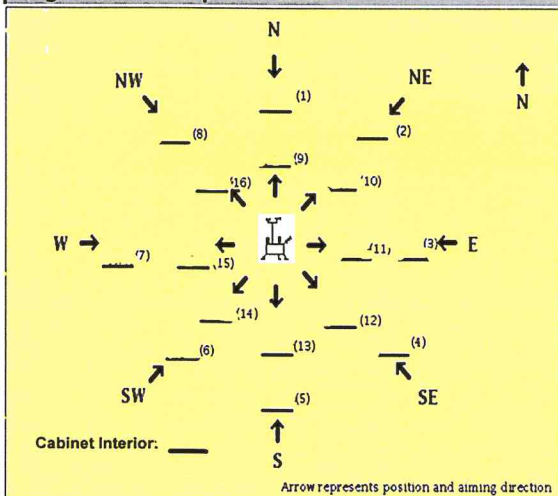
3.05.

- Lithium battery not replaced. Continue to monitor and replace if $< 2.7V$ according to CR1000 manual.
- one fence connector was damaged and replaced.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



Key	Camera Image #	Direction	Comp. Image #
1		N Towards	
2		NE Towards	
3		E Towards	
4		SE Towards	
5		South Towards	
6		SW Towards	
7		W Towards	
8		NW Towards	
9		North Away	
10		NE Away	
11		E Away	
12		SE Away	
13		S Away	
14		SW Away	
15		W Away	
16		NW Away	
17		Enclosure	

ARCNC Weather & Climate Monitoring

Site Visit Worksheet

Version: 8 March 2017

ARCNC Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Salmon River	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/12/2017	phone: (757) 824-7450	phone: (208) 387-5475
Operators	1111 + SOUSANES	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather' -->'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude 67 27.5940	Temp	N	
Longitude 159 50.4750	Temp/RH	Y	HMP155
NESDIS ID 3960F688	Solar Radiation	Y	
Tx Time (mm:ss) 0:38:30	Wind Speed/Dir	N	
Tx Channel 152	Snow Depth	N	
Antenna Azimuth (Deg Mag) 138	Soil Temp 1	N	
Antenna Elev. (Deg.) 12	Soil Temp 2	N	
Currently activated? Y	Soil Temp 3	N	
Currently transmitting? Y	Precipitation	N	
NWS Site ID SRWA2	Datalogger	N	
	Transmitter	N	
	Battery	N	
Camera? Y			

Record Site Conditions

Time visit begins: 16:15	Time visit ends: 18:00
Station accessible? (Y/N) Y	If no, comment:
Cables intact? (Y/N) Y	If no, comment:
Power source ok? (Y/N) Y	If no, comment:
Batteries ok? (Y/N) Y	If no, comment:

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion 26	26
ProgName SalmonRiver2017	SALMON RIVER 2017
StartTime 6/28/17 7:08 PM	6/28/17 7:08 PM
12 V Battery Voltage 13.2 13.4	13.2
Panel Temperature 22.5 13.2	21.6
Watchdog Errors 0 0 Reset if >0	0 Reset if >0
Lithium Batt Volt 3.5 3.44 Replace if <2.9	3.5 Replace if <2.9
Low 12V Batt Count 0 0 Reset if >0	0 Reset if >0
Skipped Scan 0 0 Reset if >0	0 Reset if >0

Maintenance Checklist

Completed? (Y/N)	Value	OK? (Y/N)
Download Hourly Data Y	RNIN 2.42	
RNIN before program update 2.42	WSM 6.45	
SR50 height before 84.7 84.7 in 2018	WDD 30.2	
Upload new program N	ATF_109 67.1	
Re-enter RNIN after N	FTF	
Measure and re-enter Sr50a N	RHP 2.7	
Clean rain gage N	BVV 13.3	
Clean temp shield Y - 606 W * HEMAX SHAW	WDDP 33.6	
Level solar sensor Y	WSMPH 9.6	
Wipe out enclosure N	SDI 14	BUCKET WAS UNDER SENSOR
Replace dessicant Y	SRW 56.2	
Test guy wires, tighten Y	AT1H	
Tighten bolts and guy wires Y	AT1L	
Clean battery terminals N	STF 67.7	
Clear snow depth area N	STF2 59.0	
Brush station vicinity NA	STF3 48.9	
Take site photos Y	Const SR50_ht=	

Tighten elements on YAGI
Electric Fence Rehab

Y
Y

ATF_ThermX
ATF_HMP155

67.3
66.3

Record Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP155	F3810051	HMP155	F3810056		
Solar Radiation	L1700X	40546	L1700X	43093		
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

To do:

Swap HMP155 ☒ Swap SD Card in Camera ☒ Repair Fence ☒ Assess Camera Condition ☒

Swap LI200X ☒

On Arrival: HMP155 shield damaged (probably ice, possibly bear)
- one antenna element missing
- HMP155 shield partially blocking camera image
- Fence wire down and many connectors, charger ok.

HMP155 DAMAGED - TIP BROKEN - REPLACED SHIELD W/ ONE FROM KAUOICH W/ NEW SET SCREW
- COAX TAP WAS SHARDED, RECOILED + SECURED TO SOLAR PANEL

- CAMERA IMAGE SHOW DAMAGE HAPPENED IN MAY

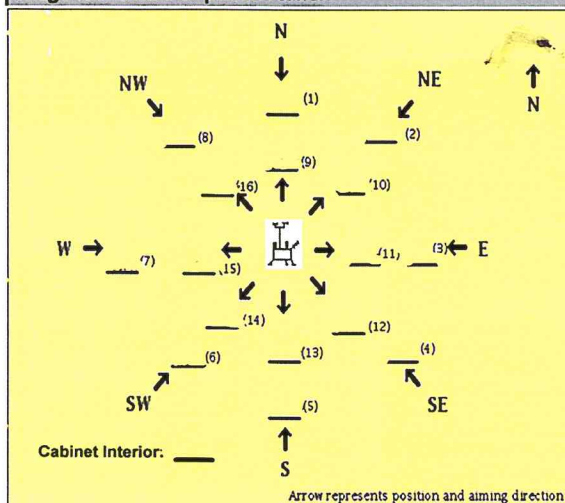
- FOCUSED CAMERA IMAGE
- REPAIRED FENCE POLYWIRE + TWO INSULATORS.

- TAPED CONDUIT FOR CAMERA POWER CABLE AT BOX.

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



#	Direction	Camera Image #	Computer Image #
1	N Towards	N Towards	
2	NE Towards	NE Towards	
3	E Towards	E Towards	
4	SE Towards	SE Towards	
5	South Towards	South Towards	
6	SW Towards	SW Towards	
7	W Towards	W Towards	
8	NW Towards	NW Towards	
9	North Away	North Away	
10	NE Away	NE Away	
11	E Away	E Away	
12	SE Away	SE Away	
13	S Away	S Away	
14	SW Away	SW Away	
15	W Away	W Away	
16	NW Away	NW Away	
17	Enclosure	Enclosure	

ARCN Weather & Climate Monitoring
Site Visit Worksheet
Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907)-455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

RAWS HelpDesk:

phone: (208) 387-5475

Hours: M-F, 6 AM-2:30 PM AST

Site name	Serpentine	DCS - Sat. TX Check
Date of this visit	8/12/2019	phone: (757) 824-7450
Operators	Sousanes	24/7 technical support

Pre-Field Information

(Look up the station: www.nifc.blm.gov --> 'Weather' --> 'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP155
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	N	
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	N	
Currently transmitting?	Precipitation	N	
NWS Site ID	Datalogger	N	
Camera	Transmitter	N	
Fence	Battery	N	Check both station & camera

Record Site Conditions

Time visit begins:	4:45pm	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

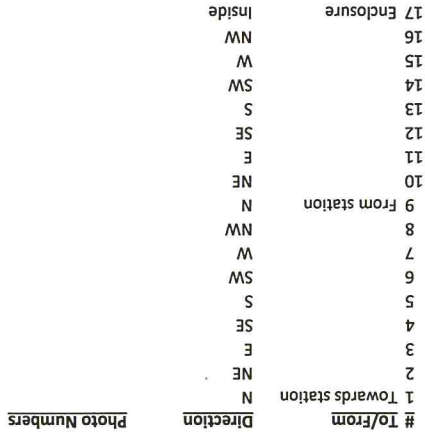
Before Maintenance:	After Maintenance:
OSVersion	15
ProgName	Serpentine_2017
StartTime	7/25/18 3:41 PM
12 V Battery Voltage	13.5
Panel Temperature	14.7
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	
Replace if <2.9	
Reset if >0	
Reset if >0	

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data	Value OK? (Y/N)
RNIN before program update	Const SR50_ht= 87
SR50 height before	RNIN 3.47
Upload new program	WSM 9.7
Re-enter RNIN after	WDD 200
Measure and re-enter Sr50a	ATF_109 56.0
Clean rain gage	RHP 50.4
Clean temp shield	BVV 13.5
Level solar sensor	WSMPH 13.2
Wipe out enclosure	WDDP 2.02
Replace dessicant	SRW 195
Tighten bolts and guy wires	SDI
Clean battery terminals	STF 51.7
Clear snow depth area	STF2 50.2
Brush station vicinity	STF3 50.4
Take site photos	STF4
Tighten elements on YAGI	ATF_HMP155 56.3
Electric Fence Rehab	ATF_ThermX 55.7

88 in 2018
Change to
87.0 *

Just replaced



Repair visit 9/22
Replaced Transmission. Her station wasn't transmitting
Tailgate was tripped
Downloaded data
checked CCSWAP. Images look good.

WFM Maintenance Narrative

- STATION LOGGED BACK
- SWAPPED TX312 FOR TX321, CHECKED MV. COINTE FOR GPS FIX AND STANS.
- SWAPPED HMP155
- CHARGED SAT. VOLTAGE OF CAMERA BATTERY — GOOD.
- CHARGED SAT. HIGHT TO 87 INCHES
- FLIPPED CAMERA — COULD NOT DOUBLE CAMERA ON. CHECKED IMAGS + TRY STOPPED ON 7/13. SET UP WITH CAMERA W/ SEPARATE SD CARDS STOPPED, SATAS AS NARR.

Comments

Record Sensor Configuration Changes				
Temp/RH	HMP155	F3810054	HMP155	5001883
Solar Radiation				
Wind Speed/Dir				
Snow depth				
Soil Temp 1				
Soil Temp 2				
Soil Temp 3				
Precipitation				
Barometric pressure				
Datalogger				
Temp 1				

ARCN Weather & Climate Monitoring
Site Visit Worksheet
Version: 8 March 2017

ARCN Program Contact:

Pam Sousanes/Ken Hill

phone: (907) 455-0677/(907) 455-0678

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

Site name	Sisiak	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	6/12/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	Hill, Sousanes	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov --> Login --> 'Weather' --> 'Select Station')

GOES Information:	Sensors	Swap? (Y/N)	Changes/Recent error events?
Latitude	Temp	N	
Longitude	Temp/RH	Y	HMP45
NESDIS ID	Solar Radiation	N	
Tx Time (mm:ss)	Wind Speed/Dir	N	
Tx Channel	Snow Depth	Noisy	Remove
Antenna Azimuth (Deg Mag)	Soil Temp 1	N	
Antenna Elev. (Deg.)	Soil Temp 2	N	
Currently activated?	Soil Temp 3	?	No tx since Aug, except for a few da
Currently transmitting?	Precipitation	?	Only a few tips
NWS Site ID	Datalogger	N	
Fence	Transmitter	N	
	Battery	N	

Record Site Conditions

Time visit begins:	14:00	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	out of level
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(WMD: PConnectCE-->Connect Button-->Measurements Tab-->'Select 'Status' from Table Drop-Down Box)
(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

Before Maintenance:	After Maintenance:
OSVersion	26
ProgName	sisiak_2017
StartTime	7/26/17 2:05 PM
12 V Battery Voltage	13.3
Panel Temperature	21.2
Watchdog Errors	0
Lithium Batt Volt	3.5
Low 12V Batt Count	0
Skipped Scan	0
Reset if >0	0
Replace if <2.9	3.5
Reset if >0	0
Reset if >0	0

Maintenance Checklist

Completed? (Y/N)	Check transmitted values:
Download Hourly Data	Value OK? (Y/N)
RNIN before program update	Const SR50_ht= 80.4
SR50 height before	RNIN 1.53
Upload new program	WSM 18
Re-enter RNIN after	WDD 261
Measure and re-enter Sr50a	ATF_109 60.8
Clean rain gage	RHP 43
Clean temp shield	BVV 13.3
Level solar sensor	WSMPH 18
Wipe out enclosure	WDDP 261
Replace dessicant	SDI -
Tighten bolts and guy wires	SRW 769
Clean battery terminals	STF 51.6
Clear snow depth area	STF2 46.4
Brush station vicinity	STF3 43.1
Take site photos	ATF Secondary
Tighten elements on YAGI	ThermX
Electric Fence Rehab	HMP45
	61.1
	61.0
	39.3

d Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	B1240010	HMP45	03620074		
Solar Radiation						
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

Swap HMP45 ☒ Check Precip - Out of Level? ☒ Remove snow ☒
Check STF3 and 4; tx through September, then a few days in early March ST3 replaced

On Arrival: Bear Visit. station out of level and propped up to NW
No sensors damaged, but all sensors out of level.

ST3 was damaged (had been spliced). Reinstalled new ST3 @ 50cm
ST4 added (75cm)

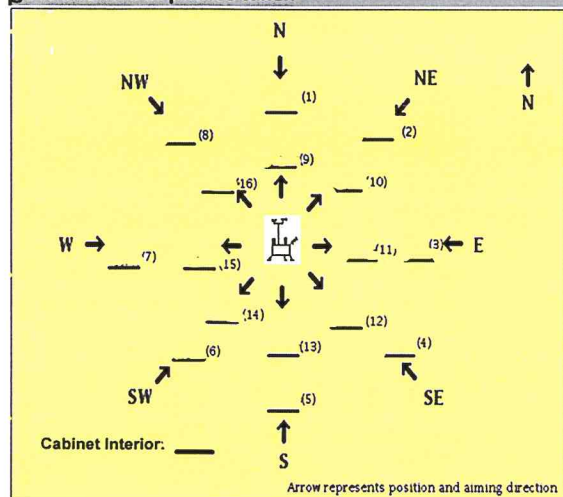
Fence was badly damaged. wire strung out and most posts bent. charger ok.

FMI Maintenance Narrative

AMS post-trip update. Update may contain several station visits.)

- Snow SR50a removed.
- Tipping bucket moved to SW side of tripod (where SR50a used to be).

ge identifiers of photos taken



#	To/From	Direction	Photo Numbers
1	Towards station	N	
2		NE	
3		E	
4		SE	
5		S	
6		SW	
7		W	
8		NW	
9	From station	N	
10		NE	
11		E	
12		SE	
13		S	
14		SW	
15		W	
16		NW	
17	Enclosure	Inside	

Version: 8 March 2017

email: pam_sousanes@nps.gov/kenneth_hill@nps.gov

phone: (208) 387-5475

Hours: M-F, 6 AM-2:30 PM AST

Site name	Tahinichok	DCS - Sat. TX Check	RAWS HelpDesk:
Date of this visit	8/4/2019	phone: (757) 824-7450	phone: (208) 387-5475
Operators	SOUJANES+ KENNEL	24/7 technical support	Hours: M-F, 6 AM-2:30 PM AST

Pre-Field Information

(Look up the station: www.nifc.blm.gov-->Login-->'Weather' -->'Select Station')

GOES Information:		Swap? (Y/N)		Changes/Recent error events?
Latitude	67 33.0090	Temp	N	
Longitude	163 34.0310	Temp/RH	Y	HMP45
NESDIS ID	396147FC	Solar Radiation	Y	LI200X
Tx Time (mm:ss)	0:39:20	Wind Speed/Dir	N	
Tx Channel	152	Snow Depth	N	
Antenna Azimuth (Deg Mag)	137	Soil Temp 1	N	
Antenna Elev. (Deg.)	12	Soil Temp 2	N	
Currently activated?	Y	Soil Temp 3	N	
Currently transmitting?	Y	Precipitation	N	
NWS Site ID	TAHA2	Datalogger	N	
Fence	Y	Transmitter	N	
Camera	N	Battery	N	

Record Site Conditions

Time visit begins:	2:15	Time visit ends:	
Station accessible? (Y/N)	Y	If no, comment:	
Cables intact? (Y/N)	Y	If no, comment:	
Power source ok? (Y/N)	Y	If no, comment:	
Batteries ok? (Y/N)	Y	If no, comment:	

Record Station Status Table Values

(Laptop: Device config utility-->Select DataLogger CR1000 -->Connect Button-->Data Monitor tab-->Status table)

	Before Maintenance:		After Maintenance:	
OSVersion	26		26	
ProgName	Tahinichok_2017		Tahinichok_2017	
StartTime	7/22/18 6:40 PM		7/22/18 6:40 PM	
12 V Battery Voltage	13.6		13.5	
Panel Temperature	13.6		13.9	
Watchdog Errors	0	Reset if >0	0	Reset if >0
Lithium Batt Volt	3.4	Replace if <2.9	3.4	Replace if <2.9
Low 12V Batt Count	0	Reset if >0	0	Reset if >0
Skipped Scan	0	Reset if >0	0	Reset if >0

Maintenance Checklist

Completed? (Y/N)		Value	OK? (Y/N)
Download Hourly Data	Y		
RNIN before program update	8.19	RNIN	8.19
SR50 height before	49.5	WSM	9.2
Upload new program	N	WDD	32.7
Re-enter RNIN after	N	ATF_109	53.1
Measure and re-enter Sr50a	48.5	RHP	54.5
Clean rain gage	N	BVV	13.5
Clean temp shield	N	WSMPH	10.6
Level solar sensor	Y	WDDP	6.1
Wipe out enclosure	Y	SRW	68.3
Replace dessicant	Y	SDI	1.0
Tighten bolts and guy wires	Y	STF	51.9
Clean battery terminals	N	STF2	48.2
Clear snow depth area	NA	STF3	46.2
Brush station vicinity	NA	STF4	44.4
Take site photos		ATF_HMP45	54.4
Tighten elements on YAGI		ATF_ThermX	56.8
Electric Fence Rehab			

d Sensor Configuration Changes

	Model # out	Serial# out	Model # in	Serial# in	(ft)	(in)
Temp/RH	HMP45	X3410052	HMP45	X3410056		
Solar Radiation	LI200X		LI200X			
Wind Speed/Dir						
Snow depth						
Soil Temp 1						
Soil Temp 2						
Soil Temp 3						
Precipitation						
Barometric pressure						
Datalogger						
Temp 1						

Comments

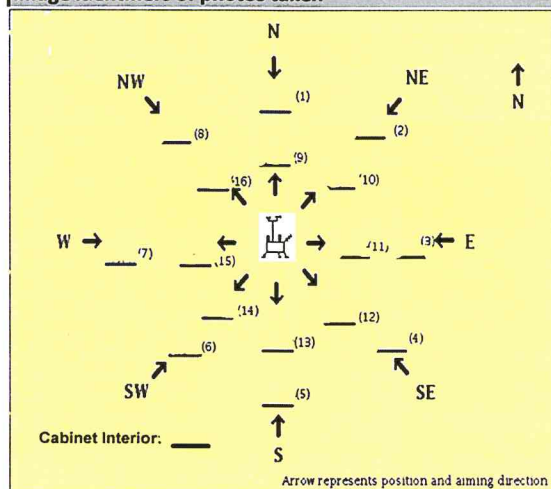
Swap HMP45 ☒ Swap LI200X ☒ Check/Repair Fence

- TB / SNOW CROSSARM SUGGING OUT OF LEVEL; LEVELLED
- POLY WIRE ON FENCE NEARBY TO BE RESOLVING. (DAN TRAPED)
- SMALL SET SCREW FOR SN MOUNT IS STRIPPED. COULD NOT GET OUT DID NOT HAVE SPACE MOUNTING LEVEL BASE. LEFT THE OLD LI200X IN PLACE. REPLACE NEXT YEAR - BRING MOUNTING BASE.
- SWAPPED HMP45
- REPLACED GUY WIRE
- SDI IS 48.5 IN.; REENTERED NEW VALUE
- BRING SMALL SHIELD FOR THERM-X

WFMI Maintenance Narrative

(Fill out prior to submission of NAMS post-trip update. Update may contain several station visits.)

Image identifiers of photos taken



# To/From	Direction	Photo Numbers
1 Towards station	N	
2	NE	
3	E	
4	SE	
5	S	
6	SW	
7	W	
8	NW	
9 From station	N	
10	NE	
11	E	
12	SE	
13	S	
14	SW	
15	W	
16	NW	
17 Enclosure	Inside	