

ARM Nauru Research Station

Site Visit 0406N Report

Visit Duration: 7 June to 11 June

Nauru Island, Republic of Nauru

## SV0406N

<b>Site:</b> Nauru	<b>Proposed Dates on Site:</b> 6/7-6/11
<b>Team Members:</b> Kevin Widener(PNL) on site Rex Pearson	<b>Ship or hand carry prior to SV:</b> MMCR Components CIMEL
	<p><b>Safety:</b> Major Hazards: Caustic chemicals(KOH), Explosive gas(H2), AC electricity.</p> <p>Hazard Controls: ASNZS 4836/2001-Safe Working on LV Electrical Installations, 2 man rule.</p>

### Site Tasks

Priority	System	Date Completed (dd/Month)	Service Time in Hours	Tasks/Assoc Hazards-Controls
For each priority item insert new line(row) for each date/time entry				
1	MMCR			Repair MMCR/Electrical- ASNZS 4836/2001
		27-May-04	3	Checkout spare pulse controller for MMCR - not the same style as unit installed - The connectors do not match.
		31-May-04	8	Continued work on MMCR. Mux unit that was sent from Barrow appears faulty - changing it with the original has allowed that to work. It appears that the GPIB controller on the TWT amplifier is faulty - we have asked Darwin to remove the controller from the TWT there and try to ship to Nauru as soon as possible. It may be possible to run the MMCR without the TWT under the bus control - we are testing that.
		1-Jun-04	0.5	MMCR is still functioning when we arrived this morning, looks like the TWT may have been the culprit.
		1-Jun-04	8	Continued MMCR tests - started a calibration run on the unit.
		2-Jun-04	8	Continued tests and rerun calibration procedures
		3-Jun-04	8	Replaced GBI card in the TWT and restored the MMCR to normal operation, all tested ok. Calibration issues were resolved and MMCR is functioning normally. Replacement UPS installed and tested.
		4-Jun-04	2	Final checks on the MMCR - all going ok
2	CIMEL			Changeout CIMEL w/ New Unit and Ship old unit back to SGP/Electrical- ASNZS 4836/2001
		27-May-04	2	Cimel swapped out. Main unit reprogrammed with Nauru parameters and alignment checked. Data verification required.
				Cimel main unit WD24860 Sn0 99 - Head WD35512 removed from service
				Cimel main unit WD35519 Sno 168 - Head WD35518 installed as replacement.

Priority	System	Date Completed (dd/Month)	Service Time in Hours	Tasks/Assoc Hazards-Controls
				For each priority item insert new line(row) for each date/time entry
3	HVAC			Inspect all vans to ensure that there are no digital thermostats in use/None
		27-May-04	1	Vans check and all are "manual" controls
4	MFRSR			Head and Board assess for possible change-out/None
		28-May-04	1.5	Checked equipment on site.
				RSR logger board 9CC1 and memory card 175
				RSR logger board B540 and memory card 78
				No RSR heads found on site
5	MMCR			Change out Fan for Radian Receiver/None
		3-Jul-04	0.5	Kevin advised there was no requirement to change out the fan as the whole receiver would be replaced as part of the upgrade. Fan is in good condition.
6	MPL			Change out Timer Shutter Batteries (AA)/None
		28-May-04	0.5	Batteries changed out and time settings checked
7	MWR			Change out Teflon Window/None
		29-May-04	1	MWR out of service 2220z. Telfon window replaced and debris cleaned out of MWR enclosure. MWR back in service 2320z
8	SMET			Assess/Inspect hand held probe for possible change out/None
		28-May-04	1	TRH probe T1120020 <b>out of date</b> cal was due 19March02
				TRH probe W4630003 <b>out of date</b> cal was due 4Feb04
				TRH probe W0120003 <b>out of date</b> cal was due 27March04
				Suggest 2 of the oldest out of date probes be sent back for cal then returned to Nauru. Changeout of probe can then occur during the logger changeout. Then the remaining out of cal probe can be sent back for cal leaving a calibrated probe on site.
		3-Jul-04	0.5	Identified TRH probes for shipping and gave to observers to ship to SGP
9	WSI			Download WSI cal data files from WSI cpu and forward to J Shields. /None
		27-May-04	0.5	Confirmed data files still exist on the WSI. Will download tomorrow.
		28-May-04	1.5	WSI data files retrieved with a binary transfer. A copy of two files were emailed to Janet and Bill Porch for testing to see if they were ok.
		30-May-04	0.5	Janet Shields confirmed the binary transfer worked - have all the files on my laptop to burn in Darwin
10	BBSS			Retrieve config files from BBSS
		28-May-04	2.5	BBSS config and sysgen files retrieved from the Digicora and the spare. Files sent to Bill Porch and Barry.
11	BBSS			Check - re upgrade of Digicora2 to Digicora3
		28-May-04	2	Initial check of spare Digicora unit against the upgrade instructions do not initially appear that there will be any unexpected problems in the unit upgrades. I have sent Barry Lesht the serial number of the antenna to confirm there are no upgrade issues with the antenna.
		29-May-04	2	Completed checks -
12				Tidy up SDS rack
		29-May-04	3	Tidy up of cabling on the SDS rack

<b>Priority</b>	<b>System</b>	<b>Date Completed (dd/Month)</b>	<b>Service Time in Hours</b>	<b>Tasks/Assoc Hazards-Controls</b>
		30-May-04	3	Completed tidy up - updated switch assignment record for Richard Eagan and emailed to him.
13	Tasks			Additional tasks as per L. Jones
		29-May-04	3	Commenced additional tasks as per emails from Larry Jones
		30-May-04	2	Continued tasks
		31-May-04	3	Continued tasks
14	Camera			Install new camera software and train observers on it's use
		30-May-04	1	Camera software installed on observer PC and Frank trained on its use
15	Observer PC			Check operation, clean and update software
		30-May-04	2	Noticed lots of popups occurring on the observer PC. Removed spyware installed on PC and cleaned system. Checked for Windows updates and ensured anti-virus software was updating. Completed defrag of hard drive.
16	Logger changeout			Prep for logger changeout
		31-May-04	2	Installed Loggernet PC in D Van and connected to the network, cleaned off the bench in D Van and tidied up the cabling
		1-Jun-04	2	Setup Gndrad logger for testing Loggernet PC and connectivity.
		2-Jun-04	1	Put PSP and PIR onto the gndrad logger under test conditions and created a RTMC screen for the observers to get used to before the operational system is installed.
17	ARCS3 AERI install			Prep for ACRS3 Aeri install - Measure equipment requirements etc
		1-Jun-04	2	Aeri enclosure measured and photographed and basic drawings done to allow construction of the Darwin enclosure
		2-Jun-04	1	Completed additional measurements of AERI enclosure
		3-Jun-04	1	Changed out desiccant again and monitored humidity levels in the AERI.
18	Vehicle			Replace vehicle clutch master cylinder kit
		27-May-04	1	Master cylinder kit replaced and site vehicle is operational again
19	OH&S			Skyrad/gndrad stands
		1-Jun-04	1	The fibreglass box sections (top rail) on the gndrad/skyrad stand have loose fibreglass fibers on them due to the degradation of the surface. I am not sure but suspect this could pose a health hazard if the glass fibers are ingested whilst working near the stands. There may be a suitable product that could be painted on the surfaces to help stabilise the degradation and remove the potential safety issue. As an intirum measure I have advised the observers they must use hazard masks when working near the stands. I need confirmation/or otherwise this poses a safety issue.
20				Replace SNMP card in SDs UPS
		2-Jun-04	2	Replaced SNMP card and reconfigure switch assignments in conjunction with Richard Eagan. Confirm APC now reporting status to the DSView page.

<b>Priority</b>	<b>System</b>	<b>Date Completed (dd/Month)</b>	<b>Service Time in Hours</b>	<b>Tasks/Assoc Hazards-Controls</b>
		4-Jun-04	1.5	Additional changes to the switch connections and re-ip of the genset mon PC
21	VoIP phone			Install VoIP handset in D Van and label
		3-Jun-04		Installed a parallel VoIP handset into the D Van to allow calls to be made to/from the D van and labeled all phone handsets and internet connection cables
22	SHIPPING			List items to be shipped following visit/ None
				Cimel to SGP
				TRH probes to SGP
				Mux and ADC from MMCR
23	FUTURE NEEDS			List items needed for future visits (spares, etc)/ None
				Spare RSR head