

## **DARWIN ARCS INSTALLATION SCHEDULE AND TASKING – rev#5**

### **ARC-3 Installation Personnel:**

- TWP Manager: Bill Clements
- TWP Deputy Manager: Larry Jones
- TWP Darwin Installation Director: Larry Jones/Monty Apple
- BOM Darwin Installation Director: Terry Stiles/Tony Baldwin
- Individuals indicated in parentheses below are identified as task leads and will be responsible to assign the appropriate people to do the work from the overall Darwin team.

**General Schedule:** (Pending obtaining permits and instrument and personnel availability)

### **PHASE I (15Jul01 – 14Oct2001) COMPLETED**

- Site prep to be performed entirely by the Australian BOM.
- No USA personnel needed in Darwin.

Expectations:

At the completion of Phase I, the site is to be cleared, fenced, and graded. Conduit is to be installed and the transportainers are to be in place on concrete pads. The instrument concrete pads are to be in place and the walkways and instrument pads raised above the surrounding terrain.

### **PHASE II (15Oct – 11Jan2002) IN PROGRESS**

- Infrastructure Installation by the TWP/BOM/Local utilities personnel team in Darwin.
- Transportainers set, powered up, AC Units installed, instrument stands set up.
- This work needs to be completed before the monsoon season in Nov.

Expectations:

At the end of Phase II, all of the infrastructure and utilities are to be installed. This will involve oversight by Bill Kornke and Matt Gould, but the majority of the work will be accomplished by local Darwin contractors, the electrical company, and the telephone company. Instrument stands will be assembled and the SMET tower erected. A temporary Operations transportable will be on site with power and internet access.

### **PHASE III (04Feb – 22Mar 2002)**

- Data Collection System and Instrument Installation
- TWP/BOM/OIC personnel team in Darwin to complete the site installation and make it operational.

Expectations:

At the end of Phase III, the entire site will be operational with as full a suite of TWP instruments as possible collecting data.

**PHASE I** (Site prep, 15Jul01 – 26Oct2001)

Team at Darwin:

- Gould – Lead
- Pearson – Lead Tech
- Glowacki - Tech
- Culgan - Tech

Task	Responsible party	Complete by
• Provide site layout drawings	TWPPPO(Medina)	08Jun(done)
• Provide utility requirements drawings	TWPPPO(Medina)	08Jun(done)
• Ship ARCS-3 transportainers	TWPPPO(Apple)	25Jun(done)
• Clear ARCS-3 transportainers thru customs	BOM(Gould)	30Jun(done)
• Finalize permission to use site	BOM(Gould)	08Jul(done)
• Provide detailed construction drawings	TWPPPO(Kornke,Reass)	20Jul (done)
• Provide lightning protection drawings	BOM(Gould)	27Jul
• Stake out site perimeter and instrument layout	BOM(Gould)	25Jul(done)
• Ship additional Phase II equipment from USA	TWPPPO(Apple)	09Aug(done)
• Finalize site layout, review plans w/Gould	TWPPPO(Jones,Long)	01Aug(done)
Work to be completed by construction contractor under direction of Gould:		
• Remove trees as necessary	BOM(Gould)	15Aug(done)
• Grade site	BOM(Gould)	15Aug(done)
• Install fence and gates	BOM(Gould)	15Aug(done)
• Berm up walkways and transportainer pad	BOM(Gould)	15Aug(done)
• Trench site	BOM(Gould)	26Oct(done)
• Set conduit in trenches	BOM(Gould)	26Oct(done)
• Install lightning protection/grounding	BOM(Gould)	26Oct(done)
• Fill trenches	BOM(Gould)	26Oct(done)
• Place concrete slabs and equipment pads	BOM(Gould)	26Oct(done)
• Install concrete walkways	BOM(Gould)	26Oct(done)
• Set & level transportainers on site as per drwgs	BOM(Gould)	26Oct(done)

## **PHASE II**

(Infrastructure, Initial Instrument Installation, 29Oct – 15Jan2002)

Team at Darwin:

- Stiles – BOM Admin Lead
- Pearson – BOM Tech Lead
- Glowacki – Tech
- Culgan – Tech
- Local Phone Company – phones
- Local Electrician as needed

Task	Responsible party	Complete by
BOM/Local Darwin utilities personnel/contractors(Directed by Stiles):		
• Weekly reporting	Stiles	Weekly
• Shipping and receiving coordination	Pearson	Daily
• Purchasing	Pearson	Daily
• Provide power drop to fence line	Stiles/BOM	31Dec01
• Provide telephone service box to fence line	Stiles/BOM	31Dec
• Set temporary Operations center building	Stiles/BOM	31Dec(done)
• As-Built drawings complete for Phase I	Stiles/BOM	31Dec
• Anchor Transportainers, stands for Cyclone	Stiles/BOM	31Dec(done)
• Construct canopy in front of transportainers	Stiles/BOM	31Dec
• Pull AC power runs	Stiles/Elec contr.	31Dec
• Fabricate Grnrad arm on SMET tower	BOM	31Dec
• Set up SMET stand	BOM	31Dec
• Set up Skyrad stand	Stiles/BOM	31Dec
• Set up MWR stand, Ceil stand, WSI platform	BOM	31Dec
• Set AC power junction boxes	Stiles/Elec contr.	31Dec
• Power up Transportainers	BOM	31Dec
• Clear equip from in front of AC vents	BOM	31Dec
• Install AC units on Transportainers	BOM	31Dec(done)
• Pull phone runs	Stiles/Darwin Phone Co	31Dec
• Set phone junction boxes	Stiles/Darwin Phone Co	31Dec
• Hook up phones	Stiles/Darwin Phone Co	31Dec
• Lightning Protection/grnding to transportainers	Stiles/BOM	31Dec
• Lightning Protect/grnding to Instr, SMET tower	Stiles/BOM	31Dec
• Install Permanent Ops Center building	Stiles/BOM	31Dec
• Set up internet access at site Ops Center	Stiles	15Jan02
• Mark up "As-Built" drawing set for Phasell	BOM	31Dec

**PHASE III** (Data Collection System and Instrument Installation, 04Feb – 08Mar 2002)  
(Dates pending further assessment of instrument and personnel availability)

Team at Darwin:

- Stiles – BOM Admin Lead
- Apple/Jones – TWPPPO Admin Leads
- Kornke – TWP Tech Lead
- Pearson – BOM Tech Lead
- Glowacki – Tech
- Culgan – Tech
- Morris – MWR, IRT, misc inst.
- Perkins – Laptops, misc inst.
- Doyle or Eagan – ADaM-3
- Widener – MMCR
- Long – TSI, data
- Mather? – QC data
- Reass – as built
- Local Electrician as needed
- Anuma – Training
- Duburiya – Training

Task	Responsible party	Complete by
<i>Preparation</i>		
• Ship MMCR to Darwin via surface	TWPPPO(Apple)	12Oct01(done)
• Submit DOE travel for personnel	TWPPPO(Tapia)	17Dec
• Misc equip arrive SGP for shipment to Darwin	TWPPPO(Apple)	17Dec(done)
• MPL arrive SGP for shipment to Darwin	TWPPPO(Apple)	28Jan02
• ADaM shipment from SGP to Darwin	TWPPPO(Apple)	25Jan02
<del>• CIMEL arrive SGP for shipment to Darwin</del>	<del>TWPPPO(Apple)</del>	<del>28Jan02</del>
• ACCESS parts arrive SGP for shpmnt to Darwin	TWPPPO(Apple)	14Jan02
• First TWP USA personnel depart for Darwin	TWPPPO	04Feb02
<i>04Feb Week                      Unpack, Inventory</i>		
• Daily Reporting	Apple	08Feb
• Unpack Transportainers	Apple/BOM	08Feb
• Set up spares shelves, shipping area	Apple/BOM	08Feb
• Inventory equipment at site(with form)	Apple/BOM	08Feb
• Review and purchase safety equipment	Apple/BOM	08Feb
<i>11Feb Week                      Fiber, DC Power, Stands</i>		
• Daily Reporting	Apple	15Feb
• Install stands	BOM	15Feb
• Pull fiber runs	Kornke/BOM	15Feb
• Set fiber junction boxes	Kornke/BOM	15Feb
• Set DC power boxes at Skyrad, SMET stands	Kornke/BOM	15Feb
<i>18Feb Week                      Access, Loggers, Tracker</i>		
• Daily Reporting	Kornke	22Feb
• Initial install of ACCESS I/O devices	Kornke/BOM	22Feb
• Set and hook up Zeno loggers	Kornke/BOM	22Feb
• Set and hook up Brusag(K&Z) tracker	Kornke/BOM	22Feb

<i>25Feb Week</i>	<i>ADaM, Small Instruments</i>		
• Daily Reporting		Perkins	01Mar
• Complete ACCESS I/O device installation		Kornke/BOM	01Mar
• Install ADaM-3		TWP(Eagan or Doyle)	01Mar
• Set and hook up radiometers on Skyrad stand		Morris/BOM	01Mar
• Set and hook up MFRSR on Skyrad stand		Morris/BOM	01Mar
• Set and hook up met instruments on SMET		Morris/BOM	01Mar
• Set and hook up grnrd rads on SMET tower		Morris/BOM	01Mar
• Complete ACCESS/SAM install		TWP/BOM(Kornke)	01Mar
<i>04Mar Week</i>	<i>Big instruments</i>		
• Daily Reporting		Perkins	08Mar
• Set and hook up Ceil to collect data on PC		Morris/BOM	08Mar
• Set and hook up MWR to collect data on PC		Morris/BOM	08Mar
• Set and hook up WSI		Kornke/BOM	08Mar
• Install TSI		Long/BOM	08Mar
• Install Laptops w/CPCC		Perkins/BOM	08Mar
• Install SAT phone		Perkins/BOM	08Mar
• Install MMCR		TWP/BOM(Widener)	08Mar
• Install MPL		TWP/BOM	08Mar
• <del>Install CIMEL</del>		<del>TWP/BOM</del>	<del>08Mar</del>
• Install H&S on Internet		TWP(Eagan or Doyle)	08Mar
• Hook up Sat phone to ADaM		TWP(Eagan or Doyle)	08Mar
• Inventory Site equipment, systems		TWP/BOM(Reass)	08Mar
<i>11Mar Week</i>	<i>Run, document site</i>		
• Daily Reporting		Reass	15Mar
• Mark up "As-Built" drawing set		TWP/BOM(Reass)	15Mar
• Review Technical Manuals w/BOM		TWP/BOM(Reass)	15Mar
• Establish Cyclone response plan		TWP/BOM(Pearson)	15Mar
<i>18Mar Week</i>	<i>Training, Operations begins</i>		
• Daily Reporting		Reass	22Mar
• Calibration?			
• Train Observers		TWP/OICs(LJ,FA,ND)	22Mar
• Start ARCS-3 Operations		BOM(Pearsn)	22Mar

<b>WEEK BEGINNING</b>	<b>MAIN TASKS</b>	<b>PERSONNEL</b>	<b>NOTES</b>
<b>04Feb</b>	Unpack, Inventory	<b>Apple</b>	
<b>11Feb</b>	Fiber, DC Power, Stands	<b>Kornke, Apple</b>	
<b>18Feb</b>	Access, Loggers, Tracker	Kornke	
<b>25Feb</b>	ADaM, Small Instruments	<b>Eagan or Doyle, Morris, Perkins, Kornke</b>	
<b>04Mar</b>	Big instruments	<b>Widener?</b> Eagan or Doyle, Morris, Perkins	
<b>11Mar</b>	Run, document site	<b>Reass, Jones, Mather?</b> Widener?	
<b>18Mar</b>	Training, begin operations	<b>Anuma, Duburiya, Clements, others,</b> Reass, Jones, Mather?	