

Mooring Deployment Record

Project Name: <i>Aquaculture</i>	
Project Area: <i>Discovery + Islands - Nodulos Channel</i>	
Mooring Name: <i>NCT-B</i>	Station Name: <i>NCT</i>
Latitude: <i>50° 24.116</i>	Longitude: <i>125° 19.886</i>
Depth: <i>262</i>	Tide:
Mag. Declination:	Time Zone: <i>UTC</i>
Date: <i>April 30, 2010</i>	Time: <i>0200</i>
Remarks:	

Recovery

Date: <i>16/09/2010</i>	Time: <i>0745 PDT 1545 UTC</i>
Remarks:	

Instruments

Type	Serial #	Depth	Time In:	Time Out	Notes
WH300	5588	40	0156		← plastic case w/external plastic battery case.
WH150	7592	250	0203?		
					shorter 150 takes 2x 6051 Bats in blue cage.

Releases

Release	Serial #	Range:	Release	Freq	Other
<i>AR 861</i>	<i>736</i>	<i>1636</i>	<i>+1655</i>	<i>12</i>	<i>F1649</i>

Pingers

Pinger	Serial #	Voltage	Freq
<i>Helle</i>	<i>7980</i>	<i>13.7 V.00</i>	<i>27</i>
<i>RJE</i>		<i>6.3 V</i>	

Flotation

Type	Serial #	Size	Colour	Type	Serial #	Size	Colour
<i>8XViny</i>		<i>13</i>	<i>Orange</i>				
<i>5537</i>	<i>2588</i>	<i>37</i>	<i>Yellow</i>				
<i>FT1545</i>		<i>45</i>					

PlanADCP (Advanced) : [Dpl1]
 BackToSC Settings View Help

CAUTION: Not enough battery packs for the deployment.

Basic Advanced Expert

Environmental Setup:	Profiling Setup:	Deployment Consequences
Transducer Depth: 50 m	Pings Per Ensemble: 150	First Cell Range: 2.72 m
Salinity: 31 ppt	Number of Depth Cells: 100	Last Cell Range: 52.22 m
Magnetic Variation: 0 °	Depth Cell Size: 0.5 m	Max Range: 77.52 m
Temperature: 7 °C	Mode: 1	Standard Deviation: 2.28 cm/s
		Ensemble Size: 2154 bytes
		Storage Required: 35.99 MB
		Power Usage: 916.15 Wh
		Battery Pack Usage: 2.0

Deployment Timing Setup:

Duration: 365 days

Ensemble Interval: 00:30:00.00

Ping Int. (☒ Auto): 00:00:12.00

☐ Ping Immediately After Deployment

First Ping Date and Time:

30-Apr-2010 01:00:00

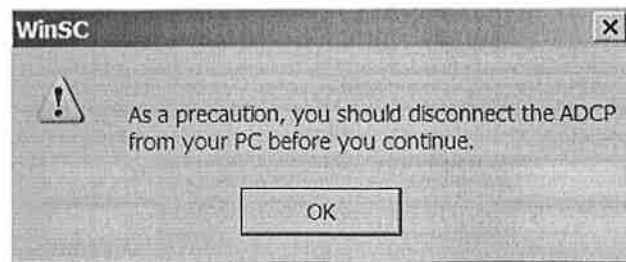
Notes:

5588-NC1-B
 Plastic case with plastic External housing
 Start April 30 0100 UTC

Workhorse Sentinel: 300 kHz/ High Res./ 2 Battery Packs/ Memory: 100 MB

CR1
 CF11101
 EA0
 EB0
 ED500
 ES31
 EX11111
 EZ1111111
 WA50
 WB0
 WD111100000
 WF176
 WN100
 WP150
 WS50
 WV175
 TE00:30:00.00
 TP00:12.00
 TF10/04/30 01:00:00
 CK

CS



>>>>> Function starting 04/29/10 23:05:43 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>TS100429230545
>CZ

Powering Down

>>>>> Function starting 04/29/10 23:05:50 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>DEPLOY?

Deployment Commands:

RE ----- Recorder ErAsE
RN ----- Set Deployment Name

WD = 111 100 000 ----- Data Out (Vel,Cor,Amp; PG,St,P0; P1,P2,P3)
WF = 0176 ----- Blank After Transmit (cm)
WN = 110 ----- Number of depth cells (1-128)
WP = 00160 ----- Pings per Ensemble (0-16384)
WS = 0050 ----- Depth Cell Size (cm)
WV = 175 ----- Mode 1 Ambiguity Vel (cm/s radial)

TE = 00:15:00.00 ----- Time per Ensemble (hrs:min:sec.sec/100)
TF = **/**/**, **: **: ** --- Time of First Ping (yr/mon/day, hour:min:sec)
TP = 00:05.62 ----- Time per Ping (min:sec.sec/100)
TS = 10/04/29,23:05:51 --- Time Set (yr/mon/day, hour:min:sec)

EA = +00000 ----- Heading Alignment (1/100 deg)
EB = +00000 ----- Heading Bias (1/100 deg)
ED = 00000 ----- Transducer Depth (0 - 65535 dm)
ES = 31 ----- Salinity (0-40 pp thousand)
EX = 11111 ----- Coord Transform (Xform: Type,Tilts,3 Bm,Map)
EZ = 1111101 ----- Sensor Source (C,D,H,P,R,S,T)

Press any key to continue

CF = 11101 ----- Flow

Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)

CK ----- Keep Parameters as USER Defaults
CR # ----- Retrieve Parameters (0 = USER, 1 = FACTORY)
CS ----- Start Deployment

>SYSTEM?

System Control, Data Recovery and Testing Commands:

AC ----- Output Active Fluxgate & Tilt Calibration data
AF ----- Field calibrate to remove hard/soft iron error
AR ----- Restore factory fluxgate calibration data
AX ----- Examine compass performance
AZ ----- Zero pressure reading

CB = 811 ----- Serial Port Control (Baud; Par; Stop)

CP # ----- Polled Mode (0 = NORMAL, 1 = POLLED)
CZ ----- Power Down Instrument

FC ----- Clear Fault Log
FD ----- Display Fault Log

OL ----- Display Features List

PA ----- Pre-Deployment Tests
PC1 ----- Beam Continuity
PC2 ----- Sensor Data
PS0 ----- System Configuration
PS3 ----- Transformation Matrices

RR ----- Recorder Directory

Press any key to continue

RF -----

Recorder Space used/free (bytes)

RY ----- Upload Recorder Files to Host

>TS?

TS = 10/04/29,23:05:53 --- Time Set (yr/mon/day,hour:min:sec)

>PS0

Instrument S/N: 5588

Frequency: 307200 HZ

Configuration: 4 BEAM, JANUS

Match Layer: 10

Beam Angle: 20 DEGREES

Beam Pattern: CONVEX

Orientation: UP

Sensor(s): HEADING TILT 1 TILT 2 TEMPERATURE

Temp Sens Offset: -0.30 degrees C

CPU Firmware: 16.21 [0]

Boot Code Ver: Required: 1.13 Actual: 1.13

DEM0D #1 Ver: ad48, Type: 1f

DEM0D #2 Ver: ad48, Type: 1f

PWRTIMG Ver: 85d3, Type: 4

Board Serial Number Data:

2A 00 00 03 AC E5 90 09 DSP727-2001-04G

F8 00 00 03 A4 82 4D 09 REC727-1000-04E

EB 00 00 03 A4 9D 4D 09 CPU727-2000-00J

80 00 00 03 A4 50 63 09 PIO727-3000-04C

>PA

PRE-DEPLOYMENT TESTS

CPU TESTS:

RTC.....PASS

RAM.....PASS

ROM.....PASS

RECORDER TESTS:

PC Card #0.....DETECTED

Card Detect.....PASS

Communication.....PASS

DOS Structure.....PASS

Sector Test (short).....PASS

```

PC Card #1.....DETECTED
Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS

```

DSP TESTS:

```

Timing RAM.....PASS
Demod RAM.....PASS
Demod REG.....PASS
FIFOs.....PASS

```

SYSTEM TESTS:

```

XILINX Interrupts... IRQ3  IRQ3  IRQ3 ...PASS
Receive Loop-Back.....PASS
Wide Bandwidth.....PASS
Narrow Bandwidth.....PASS
RSSI Filter.....PASS
Transmit.....PASS

```

SENSOR TESTS:

```

H/W Operation.....***FAIL***

```

>PC2

Press any key to quit sensor display ...

Heading	Pitch	Roll	Up/Down	Attitude Temp	Ambient Temp	PRESSURE
134.670	-2.010	-23.270	Up	18.430C	16.940C	0.0
kPa134.920	-1.960	-23.270	Up	18.420C	16.960C	0.0
kPa134.840	-2.010	-23.270	Up	18.440C	16.950C	0.0
kPa134.760	-1.960	-23.270	Up	18.420C	16.950C	0.0
kPa134.810	-1.940	-23.270	Up	18.420C	16.950C	0.0
kPa134.890	-1.920	-23.270	Up	18.430C	16.950C	0.0

kPa

>RS

RS = 049,052 ----- REC SPACE USED (MB), FREE (MB)

>PC1

BEAM CONTINUITY TEST

When prompted to do so, vigorously rub the selected beam's face.

If a beam does not PASS the test, send any character to the ADCP to automatically select the next beam.

Collecting Statistical Data...

36	40	41	37	36	40	41	37	36	40	40	38	36	39	40	38	36	39	40	38
36	39	39	38	36	39	39	38	36	39	39	38	36	39	39	38	36	39	39	38
36	39	39	38	36	39	39	38	36	39	39	38	36	39	39	38	36	39	39	38
36	39	39	38	36	39	39	38	36	39	39	38	36	39	39	38	36	39	39	38
36	39	39	38	36	39	39	38	36	39	39	38	36	39	40	38	36	39	40	38
36	39	40	38	36	39	40	38	36	39	40	38	36	39	40	38	36	39	40	38
36	39	40	38	36	39	40	38	36	39	40	38	36	39	40	38	36	39	40	38
36	39	40	38	36	39	40	38	36	39	39	38	36	39	39	38	36	39	40	38
36	39	40	38	36	39	40	38	36	39	40	38	36	39	40	38	36	39	40	38

36 39 40 38 36 39 40 38 36 39 40 38 36 39 40 38 36 39 39 38
36 39 40 38 36 39 39 38 36 39 40 38 36 39 40 38 36 39 40 38

Rub Beam 1 = PASS
Rub Beam 2 = PASS
Rub Beam 3 = PASS
Rub Beam 4 = PASS

>CZ

Powering Down

>>>>> Function starting 04/29/10 23:06:54 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>AZERR: No pressure sensor detected.

>CZ

Powering Down

>>>>> Function starting 04/29/10 23:07:02 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>RE ErAsE erasing...
Recorder erased.

>CZ

Powering Down

>>>>> Function starting 04/29/10 23:07:52 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>RR
Recorder Directory:
Volume serial number for device #0 is 1809-0b21

No files found.

Bytes used on device #0 = 0
Volume serial number for device #1 is 193e-1400

No files found.

Bytes used on device #1 = 0
Total capacity = 105695232 bytes
Total bytes used = 0 bytes in 0 files

Total bytes free = 105695232 bytes

```
>
[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>CR1
[Parameters set to FACTORY defaults]
>CF11101
>EA0
>EB0
>ED500
>ES31
>EX11111
>EZ1111111
>WA50
>WB0
>WD111100000
>WF176
>WN100
>WP150
>WS50
>WV175
>TE00:30:00.00
>TP00:12.00
>TF10/04/30 01:00:00
>CK
[Parameters saved as USER defaults]
>The command CS is not allowed in this command file. It has been ignored.
>The following commands are generated by this program:
>CF?
CF = 11101 ----- Flow Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)
>CF11101
>RN 5588_
>CS
```

PlanADCP (Advanced) : [Dpl2]

BackToSC Settings View Help

Basic	Advanced	Expert
Environmental Setup: Transducer Depth: 250 m Salinity: 31 ppt Magnetic Variation: 0 ° Temperature: 7 °C		
Deployment Timing Setup: Duration: 365 days Ensemble Interval: 00:30:00.00 Ping Int(☒ Auto): 00:00:36.73 Min TP ☐ Ping Immediately After Deployment First Ping Date and Time: 30-Apr-2010 02:00:00		
Profiling Setup: Pings Per Ensemble: 49 Number of Depth Cells: 56 Depth Cell Size: 5 m		
Deployment Consequences First Cell Range: 9.28 m Last Cell Range: 284.28 m Max Range: 290.33 m Standard Deviation: 1.60 cm/s Ensemble Size: 1274 bytes Storage Required: 21.29 MB Power Usage: 686.21 Wh Battery Pack Usage: 1.5		
Notes 7592 - nc1-b Start April 30, 2010 @ 0200UTC 2x6051 batts		

Workhorse Sentinel: 150 kHz/ Long Range/ 2 Battery Packs/ Memory: 75 MB

CR1
 CF11101
 EA0
 EB0
 ED2500
 ES31
 EX11111
 EZ1111111
 WA50
 WB1
 WD111100000
 WF352
 WN56
 WP49
 WS500
 WV175
 TE00:30:00.00
 TP00:36.73
 TF10/04/30 02:00:00
 CK
 CS



>>>>> Function starting 04/30/10 01:19:04 >>>>>

àÀÀÀ

>>>>> Function starting 04/30/10 01:19:32 >>>>>

[BREAK Wakeup A]

WorkHorse Broadband ADCP Version 16.28

RD Instruments (c) 1996-2005

All Rights Reserved.

>TS100430011939

>CZ

Powering Down

>>>>> Function starting 04/30/10 01:19:44 >>>>>

[BREAK Wakeup A]

WorkHorse Broadband ADCP Version 16.28

RD Instruments (c) 1996-2005

All Rights Reserved.

>DEPLOY?

Deployment Commands:

RE ----- Recorder ErAsE

RN ----- Set Deployment Name

WD = 111 100 000 ----- Data Out (Vel,Cor,Amp; PG,St,P0; P1,P2,P3)

WF = 0352 ----- Blank After Transmit (cm)

WN = 056 ----- Number of depth cells (1-128)

WP = 00049 ----- Pings per Ensemble (0-16384)

WS = 0500 ----- Depth Cell Size (cm)

WV = 175 ----- Mode 1 Ambiguity Vel (cm/s radial)

TE = 00:15:00.00 ----- Time per Ensemble (hrs:min:sec.sec/100)

TF = **/**/**, **: **: ** ----- Time of First Ping (yr/mon/day, hour:min:sec)

TP = 00:18.36 ----- Time per Ping (min:sec.sec/100)

TS = 10/04/30,01:19:47 --- Time Set (yr/mon/day, hour:min:sec)

EA = +00000 ----- Heading Alignment (1/100 deg)

EB = +00000 ----- Heading Bias (1/100 deg)

ED = 05000 ----- Transducer Depth (0 - 65535 dm)

ES = 31 ----- Salinity (0-40 pp thousand)

EX = 11111 ----- Coord Transform (Xform: Type,Tilts,3 Bm,Map)

EZ = 1111101 ----- Sensor Source (C,D,H,P,R,S,T)

Press any key to continue

CF = 11101 ----- Flow

Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)

CK ----- Keep Parameters as USER Defaults

CR # ----- Retrieve Parameters (0 = USER, 1 = FACTORY)

CS ----- Start Deployment

>SYSTEM?

System Control, Data Recovery and Testing Commands:

AC ----- Output Active Fluxgate & Tilt Calibration data

AF ----- Field calibrate to remove hard/soft iron error

AR ----- Restore factory fluxgate calibration data

AX ----- Examine compass performance

AZ ----- Zero pressure reading

CB = 811 ----- Serial Port Control (Baud; Par; Stop)
CP # ----- Polled Mode (0 = NORMAL, 1 = POLLED)
CZ ----- Power Down Instrument

FC ----- Clear Fault Log
FD ----- Display Fault Log

OL ----- Display Features List

PA ----- Pre-Deployment Tests
PC1 ----- Beam Continuity
PC2 ----- Sensor Data
PS0 ----- System Configuration
PS3 ----- Transformation Matrices

RR ----- Recorder Directory

Press any key to continue

RF -----

Recorder Space used/free (bytes)

RY ----- Upload Recorder Files to Host

>TS?

TS = 10/04/30,01:19:50 --- Time Set (yr/mon/day,hour:min:sec)

>PS0

Instrument S/N: 7592

Frequency: 153600 HZ

Configuration: 4 BEAM, JANUS

Match Layer: 10

Beam Angle: 20 DEGREES

Beam Pattern: CONVEX

Orientation: DOWN

Sensor(s): HEADING TILT 1 TILT 2 DEPTH TEMPERATURE PRESSURE

Pressure Sens Coefficients:

c3 = -1.490503E-144

c2 = -5.656558E-08

c1 = +5.733202E-01

Offset = +4.212214E+01

Temp Sens Offset: -0.19 degrees C

CPU Firmware: 16.28 [0]

Boot Code Ver: Required: 1.13 Actual: 1.13

DEM0D #1 Ver: ad48, Type: 1f

DEM0D #2 Ver: ad48, Type: 1f

PWRTIMG Ver: 85d3, Type: 4

Board Serial Number Data:

43 00 00 03 B4 CB B8 09 TUN727-1005-05A

D2 00 00 00 8D 85 C4 09 REC727-1004-05A

DB 00 00 00 7E A7 BA 09 CPU727-2000-00J

D2 00 00 00 D8 57 46 09 DSP727-2001-05G

13 00 00 00 7E 9B 2E 09 HPI727-3007-00A

CC 00 00 00 7E 9C F3 09 HPA727-3009-02A

>PA

PRE-DEPLOYMENT TESTS

CPU TESTS:

RTC.....PASS
RAM.....PASS
ROM.....PASS

RECORDER TESTS:

PC Card #0.....DETECTED
Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS
PC Card #1.....DETECTED
Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS

DSP TESTS:

Timing RAM.....PASS
Demod RAM.....PASS
Demod REG.....PASS
FIFOs.....PASS

SYSTEM TESTS:

XILINX Interrupts... IRQ3 IRQ3 IRQ3...PASS
Wide Bandwidth.....***FAIL***
Narrow Bandwidth.....PASS
RSSI Filter.....PASS
Transmit.....PASS

SENSOR TESTS:

H/W Operation.....PASS

>PC2

Press any key to quit sensor display ...

All Sensors are Internal Only.

Heading	Pitch	Roll	Up/Down	Attitude Temp	Ambient Temp	PRESSURE
77.67ø	-2.45ø	1.30ø	Down	17.23øC	16.56øC	-23.8 kPa
78.42ø	-2.46ø	1.31ø	Down	17.24øC	16.56øC	-1.3 kPa
78.28ø	-2.45ø	1.30ø	Down	17.23øC	16.56øC	-12.5 kPa

>RS

RS = 033,043 ----- REC SPACE USED (MB), FREE (MB)

>PC1

BEAM CONTINUITY TEST

When prompted to do so, vigorously rub the selected beam's face.

If a beam does not PASS the test, send any character to the ADCP to automatically select the next beam.

Collecting Statistical Data...

35	39	31	34	35	39	32	35	35	38	31	35	35	38	31	34	35	38	31	34
35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34
35	38	31	34	35	38	31	34	35	38	32	34	35	38	32	34	35	38	32	34
35	38	32	34	35	38	31	34	35	38	31	34	34	38	31	34	34	38	31	34
35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34

35	38	32	34	35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34
35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34
35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34	35	38	31	34
35	38	31	34	35	38	32	34	35	38	32	34	35	38	31	34	35	38	32	34
35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34
35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34
35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34
35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34	35	38	32	34

Rub Beam 1 = PASS
 Rub Beam 2 = PASS
 Rub Beam 3 = PASS
 Rub Beam 4 = PASS

>CZ

Powering Down

>>>>> Function starting 04/30/10 01:21:05 >>>>>

[BREAK Wakeup A]
 WorkHorse Broadband ADCP Version 16.28
 RD Instruments (c) 1996-2005
 All Rights Reserved.
 >AZ
 Pressure Offset Updated in NVRAM.

>CZ . .

Powering Down

>>>>> Function starting 04/30/10 01:21:14 >>>>>

[BREAK Wakeup A]
 WorkHorse Broadband ADCP Version 16.28
 RD Instruments (c) 1996-2005
 All Rights Reserved.
 >RE ErAsE erasing...
 Recorder erased.

>CZ

Powering Down

>>>>> Function starting 04/30/10 01:21:36 >>>>>

[BREAK Wakeup A]
 WorkHorse Broadband ADCP Version 16.28
 RD Instruments (c) 1996-2005
 All Rights Reserved.
 >RR
 Recorder Directory:
 Volume serial number for device #0 is c497-71b7

No files found.

Bytes used on device #0 = 0

Volume serial number for device #1 is 065b-10ef

No files found.

Bytes used on device #1 = 0
Total capacity = 79654912 bytes
Total bytes used = 0 bytes in 0 files
Total bytes free = 79654912 bytes

>

[BREAK Wakeup A]

WorkHorse Broadband ADCP Version 16.28

RD Instruments (c) 1996-2005

All Rights Reserved.

>CR1

[Parameters set to FACTORY defaults]

>CF11101

>EA0

>EB0

>ED2500

>ES31

>EX11111

>EZ1111111

>WA50

>WB1

>WD111100000

>WF352

>WN56

>WP49

>WS500

>WV175

>TE00:30:00.00

>TP00:36.73

>TF10/04/30 02:00:00

>CK

[Parameters saved as USER defaults]

>The command CS is not allowed in this command file. It has been ignored.

>The following commands are generated by this program:

>CF?

CF = 11101 ----- Flow Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)

>CF11101

>RN 7592_

>CS