

DEPLOYMENT RECORD

Project Name: Effingham Inlet Start Date: Oct. 2006 End Date: May 2007
 Mooring Name: EFO4-A Station Name: EFO4

Geog. Desc.: Effingham Inlet Tide: +2.2m Franklin River
 Latitude: 49° 03.793' Longitude: 125° 09.088'
 Water Depth: 83m datum Ice Thickness:
 Magnetic decl: Time Zone: PDT Anchor Type: 1 wheel 870 lbs
 Date: Oct. 13 2006 Time Anchor Dropped: 1052 PDT Date:
 Remarks: - lost bow thruster on approach to tow mooring to site ended up shallower by app. 5m.

RECOVERY RECORD

Date: May 15, 2007 Time Anchor Released: 0837 PDT
 Remarks: - without incident

INSTRUMENTS (Start at TOP)

Type	Serial #	Depth	Time in	Time Out	Notes
<u>SBE37</u>	<u>3501</u>	<u>33m</u>			<u>pressure</u>
<u>SBE37</u>	<u>1537</u>	<u>63m</u>			
<u>INH300</u>	<u>2281</u>	<u>78m</u>	<u>1052 PDT</u>		<u>upward-internal batt. - ext'd frame</u>
<u>SBE37</u>	<u>1614</u>	<u>80m</u>			

NB: No Argos

Release	Serial	Code	Code	Freq	On/Off	B0	B1	Aux Codes
<u>AR191</u>	<u>16U</u>	<u>RLS</u>	<u>RNG</u>	<u>3533</u>	<u>FRI</u>	<u>TT301</u>	<u>*81</u>	
Finger 1	Type	Serial	Finger 2	Type	Serial	Battery Volt		
<u>OML</u>	<u>1/4x27</u>	<u>680</u>	<u>Helle</u>	<u>1/4x27</u>	<u>7423</u>	<u>18.9</u>	<u>19.3</u>	

V100

FLOTATION

Type	Serial #	Size	Colour
<u>SS30</u>	<u>2592</u>	<u>30"</u>	<u>yellow</u>
<u>ADCP</u>	<u>Foam</u>	<u>24"x12"</u>	<u>yellow</u>
		<u>22"x8"</u>	<u>"</u>
		<u>22"x8"</u>	<u>"</u>
<u>(3 collars on ext'd frame)</u>			

Type	Serial #	Size	Colour

Data Entry by:

ADCP Deployment Sheet

Instrument:

Serial Number: 2281

Pressure Sensor: YES

Model: WH 300

Depth Rating: 1000 m

Batteries: REBATTERIED INSTRUMENT IN LAB

Parameters:

Number of Pings (WP): 46

Bin Size (WS): 4m

Ensemble Interval (TE): 15

Number of Bins (WN): 21

Time between Pings (TP): 2:00 S

Mode 1 Bandwidth (WB): WB0

Profiling Mode (WM): 1

Pre-deployment tests: YES

Time Zone: UTC

Compass Calibration: NO

Start (TF): 0930, 13 OCTOBER 2006 UTC

Deployment:

Station: EF04-A

Cruise Number: 2006-33

Latitude: 49°03.793' N

Water Depth: 83m. datum.

Longitude: 125 09.088' W

Instrument Depth: 85m 78m

Time and Date in Water: 1052, 13 OCTOBER 2006 PDT
1752 UTC

Comments:

SET-UP LATE AT NIGHT AFTER 20 H DAY
SFM

PlanADCP (Basic) : [Dpl2]

BackToSC Settings View Help

ADVANCED settings changed.

Cell Size 4.00m

First Cell 6.06m

Max Range 153.05m

Last Cell 122.06m

Proposed Setup:

Deployment Duration: 240 days

Ensemble Interval: 00:20:00

Salinity: 32 ppt

Temperature: 5 °C

Water Pings: 50

Number of Depth Cells: 30

Depth Cell Size: 4 m

Deployment Consequences:

First Cell Range: 6.06 m

Last Cell Range: 122.06 m

Max Range: 153.05 m

Standard Deviation: 0.89 cm/s

Ensemble Size: 748 bytes

Storage Required: 12.33 MB

Power Usage: 416.61 Wh

Battery Pack Usage: 0.9

Notes

EF04-A
2281
Start: Dec10, 2006 @1200PST
CR1
CF11101
EA0

Workhorse Sentinel: 300 kHz/ Long Range/ 1 Battery Pack/ Memory: 96 MB

NUM

Congratulations!

You have successfully configured the ADCP for deployment.

OK Cancel

>>>>> Function starting 10/06/06 14:17:59 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.20
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>TS061006141801
>CZ

Powering Down

>>>>> Function starting 10/06/06 14:18:10 >>>>>

[BREAK Wakeup A]

WorkHorse Broadband ADCP Version 16.20

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>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 = 030 ----- Number of depth cells (1-128)

WP = 00025 ----- Pings per Ensemble (0-16384)

WS = 0400 ----- Depth Cell Size (cm)

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

BP = 000 ----- Bottom Track Pings per Ensemble

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 = 00:36.00 ----- Time per Ping (min:sec.sec/100)

TS = 06/10/06,14:18:11 --- 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 = 32 ----- Salinity (0-40 pp thousand)

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

Press any key to continue

EZ = 1111111 ----- Sensor Source (C,D,H,P,R,S,T)

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 = 06/10/06,14:18:26 --- Time Set (yr/mon/day,hour:min:sec)

>PS0

Instrument S/N: 2281

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 DEPTH TEMPERATURE PRESSURE

Pressure Sens Coefficients: (c3,c2,c1,offset) -0.00,0.00,0.14,-22.45

Temp Sens Offset: -0.26 degrees C

CPU Firmware: 16.20 [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: 5

Board Serial Number Data:

7C 00 00 03 01 76 76 09 CPU727-2000-00H

2A 00 00 03 01 9B 0D 09 PIO727-3000-04C

23 00 00 03 01 8B 4D 09 REC727-1000-04A

B2 00 00 02 C7 2D 63 09 DSP727-2001-04F

>PA

PRE-DEPLOYMENT TESTS

CPU TESTS:

RTC.....PASS

RAM.....PASS

ROM.....PASS

RECORDER TESTS:

PC Card #0.....NOT DETECTED

PC Card #1.....DETECTED

Card Detect.....PASS

Communication.....PASS

DOS Structure.....PASS

Sector Test (short).....PASS

DSP TESTS:

Timing RAM.....PASS

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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.....PASS
>PC2

```

Press any key to quit sensor display ...

Heading	Pitch	Roll	Up/Down	Attitude Temp	Ambient Temp
PRESSURE					
29.430	0.120	-0.590	Up	22.790C	21.810C
1.9 kPa					
29.340	0.110	-0.600	Up	22.800C	21.830C
3.4 kPa					
29.310	0.120	-0.610	Up	22.790C	21.800C
0.6 kPa					
29.270	0.120	-0.610	Up	22.800C	21.820C
2.2 kPa					
29.360	0.110	-0.600	Up	22.810C	21.820C
3.0 kPa					
30.220	0.170	-0.330	Up	22.810C	21.810C
2.4 kPa					
25.690	-0.050	-0.710	Up	22.790C	21.830C
3.1 kPa					
17.870	-0.080	-0.700	Up	22.800C	21.820C
0.7 kPa					
24.050	-0.200	-1.250	Up	22.810C	21.810C
2.4 kPa					
45.110	0.110	-0.540	Up	22.790C	21.820C
2.1 kPa					
55.530	0.330	-0.550	Up	22.790C	21.810C
4.3 kPa					

```

>RS
RS = 001,091 ----- 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...

[illegible]

38 41 40 43
38 41 40 43
38 41 40 43
38 41 40 43
38 41 40 43
38 41 40 43
38 41 40 43
38 41 40 43

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

>CZ

Powering Down

>>>>> Function starting 10/06/06 14:19:44 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.20
RD Instruments (c) 1996-2001
All Rights Reserved.
>AZ
Pressure Offset Updated in NVRAM.

>CZ

Powering Down

>>>>> Function starting 10/06/06 14:19:53 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.20
RD Instruments (c) 1996-2001
All Rights Reserved.
>RE ErAsE erasing...
Recorder erased.

>CZ

Powering Down

>>>>> Function starting 10/06/06 14:23:21 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.20
RD Instruments (c) 1996-2001
All Rights Reserved.
>RR
Recorder Directory:
Volume serial number for device #1 is 0b55-15d5

No files found.

Bytes used on device #1 = 0
Total capacity = 95854592 bytes
Total bytes used = 0 bytes in 0 files
Total bytes free = 95854592 bytes

>

[BREAK Wakeup A]

WorkHorse Broadband ADCP Version 16.20

RD Instruments (c) 1996-2001

All Rights Reserved.

>CR1

[Parameters set to FACTORY defaults]

>CF11101

>EA0

>EB0

>ED0

>ES32

>EX11111

>EZ1111111

>WA50

>WB1

>WD111100000

>WF176

>WN30

>WP50

>WS400

>WV175

>TE00:20:00.00

>TP00:24.00

>TF06/10/10 12:00:00

>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 2281_

>CS

MicroCat SBE 37 Deployment Sheet

Instrument:

Serial Number: 3501

Sensors (C,T,P): C, T, + P

Firmware Version: _____

Depth Rating: Shallow

Parameters:

SampleNum: 0

Storetime: _____ Y

Interval: 120 s

Syncmode: _____ N

Navg/Ncycles: 1

Txrealtime: _____ N

Reference pressure*: —

OutputSV: _____ N

Time Zone: UTC

OutputSal: _____ Y

Start: _____

*only needed if there is no pressure sensor for the salinity calculation

Deployment:

Station: EFO4-A

Cruise Number: 2006-33

Latitude: 49°03.793'

Water Depth: 83 m datum

Longitude: 125°09.088'

Instrument Depth: 40m 33 m

Time and Date in Water: 1752 UTC 13 OCT 2006 *use this instrument to set depth*

Comments:

Instrument Setup Data

Mooring: ~~ER03-NN-PST~~

EF04-A

Depth: ~~40m~~ 33 m

Water Temp: 4-9

In Date: Tuesday - ~~September 21, 2004~~ Oct. 13, 2006

Out Date: Mid May/2005

SBE Microcats

3501

From Page 13 of new manuals

Sampling Time (with pressure and NAVG = 4)

1.55seconds + (NAVG x 1.26)

1.55s + (4 x 1.26) = 6.59s/sample

Current Consumption on 10 min sample

Ion = .025A x 6.59s/sample = 0.16As/sample x 6 samples/hour = 0.9885As/hour

Iquiescent = 10uA x 3600s/hour = 0.036As/hour

Ion + Iquiescent = 1.0245As/hour

Capacity

(5Ah x 3600s/hour)/1.0245As/hour = 17569hours = 732days = 2.00years

SBE 37 Microcat

Logging operation for the SBE 37 Microcat:

Wake up SBE37. Initialize logging to overwrite previous data in memory. Take 1 sample every 2 mins with 1 averaging cycle. Do not transmit in real time. Set up with a start date of Monday September 21, 2004 at 12:00:00 PST. Verify setup with status (DS) Command. Send power-off command.

S>FORMAT=1

S>SAMPLENUM=0//Initialize pointer to data cell

S>INTERVAL=120//2mins

S>NAVG=1 //1 averaging samples

S>TXREALTIME=N //don't transmit real time data

S>STARTMMDDYY=

S>STARTHHMMSS=

S>STARTLATER //Initiate Delayed Start

S>DS //To verify setup

S>QS //Go to sleep

3501-~~A1-QQ~~.cap

EF04-A

Original Setup

ds

SBE37-SM V 2.5 SERIAL NO. 3501 01 Jan 1980 00:00:50

Time off because batteries replaced

logging not started

sample interval = 900 seconds

samplenum = 35631, free = 155019

do not transmit real-time data

output salinity with each sample

do not output sound velocity with each sample

store time with each sample

number of samples to average = 4

serial sync mode disabled

wait time after serial sync sampling = 30 seconds

temperature = 17.37 deg C

S>navg=1

S>interval=120

S>samplenum=0

S>ddmmyy=1306□□1006

S>hhmmss=031200

S>ds

SBE37-SM V 2.5 SERIAL NO. 3501 13 Oct 2006 03:12:07

logging not started

sample interval = 120 seconds

samplenum = 0, free = 190650

do not transmit real-time data

output salinity with each sample

do not output sound velocity with each sample

store time with each sample

number of samples to average = 1

serial sync mode disabled

wait time after serial sync sampling = 30 seconds

temperature = 17.27 deg C

S>startddmmyy=131006

S>starthhmmss=032000

start time = 13 Oct 2006 03:20:00

S>startlater

start time = 13 Oct 2006 03:20:00

S SBE 37-SM

S>t□□t□□ SBE 37-SM

S>

S>

ds

SBE37-SM V 2.5 SERIAL NO. 3501 13 Oct 2006 03:20:55

logging data
sample interval = 120 seconds
samplenumbers = 1, free = 190649
do not transmit real-time data
output salinity with each sample
do not output sound velocity with each sample
store time with each sample
number of samples to average = 1
serial sync mode disabled
wait time after serial sync sampling = 30 seconds
temperature = 17.43 deg C
S>

MicroCat SBE 37 Deployment Sheet

Instrument:

Serial Number: 1537 + 1614

Sensors (C,T,P): No P

Firmware Version: _____

Depth Rating: Deep

Parameters:

SampleNum: 0

Storetime: _____ Y

Interval: 600

Syncmode: _____ N

Navg/Ncycles: 4

Txrealtime: _____ N

Reference pressure*: —

OutputSV: _____ N

Time Zone: UTC

OutputSal: _____ Y

Start: _____

*only needed if there is no pressure sensor for the salinity calculation

Deployment:

Station: EFO4-A

Cruise Number: 2006-33

Latitude: 49° 3.793' N

Water Depth: ~~90-85~~ 83 m datum.

Longitude: 125° 9.0881 W

Instrument Depth: 70 m (1537) 63 m.

Time and Date in Water: 1752 UTC 13 Oct 2006

87.5 m (1614) 80.5 m.

*need to check depth
from ADCP post recovery*

Comments:

Instrument Setup Data

Mooring: EF04-A-UTC

Depth: 70m(1537), 87m(1614)

Water Temp: 4-9

In Date: 1052 Oct13, 2006 PDT

Out Date: Mid May/2006

63m + 80.5 respectively.

SBE Microcat

1) 1537

2) 1614

From Page 13 of new manuals

Sampling Time (with pressure and NAVG = 4)

1.55seconds + (NAVG x 1.26)

1.55s + (4 x 1.26) = 6.59s/sample

Current Consumption on 10 min sample

Ion = .025A x 6.59s/sample = 0.16As/sample x 6 samples/hour = 0.9885As/hour

Iquiescent = 10uA x 3600s/hour = 0.036As/hour

Ion + Iquiescent = 1.0245As/hour

Capacity

(5Ah x 3600s/hour)/1.0245As/hour=17569hours=732days=2.00years

SBE 37 Microcat

Logging operation for the SBE 37 Microcat:

Wake up SBE37. Initialize logging to overwrite previous data in memory. Take 1 sample every 10 mins with 4 averaging cycles. Do not transmit in real time. Set up with a start date shown below in UTC. Verify setup with status (DS) Command. Send power-off command.

S>FORMAT=1

S>SAMPLENUM=0//Initialize pointer to data cell

S>INTERVAL=600//10mins

S>NCYCLES=4 //4 averaging samples

S>TXREALTIME=N //don't transmit real time data

S>STARTMMDDYY=

S>STARTHHMMSS=

S>STARTLATER //Initiate Delayed Start

S>DS //To verify setup

S>QS //Go to sleep

Original Lucius Setup

SBE37-SM V 2.2 SERIAL NO. 1537 12 Oct 2006 18:55:28

logging data

sample interval = 600 seconds

samplenum = 330, free = 232686

do not transmit real-time data

store time with each sample

A/D cycles to average = 4

reference pressure = 2238.0 db

serial sync mode disabled

wait time after serial sync sampling = 30 seconds

temperature = 16.53 deg C

S>

mmddyy=131006

cmd not allowed while logging

□^□^□^□^□^□^□^□^□^□^stop

cmd not allowed while logging

stop

S>

ds

SBE37-SM V 2.2 SERIAL NO. 1537 12 Oct 2006 18:56:31

not logging: received stop command

sample interval = 600 seconds

samplenum = 330, free = 232686

do not transmit real-time data

store time with each sample

A/D cycles to average = 4

reference pressure = 2238.0 db

serial sync mode disabled

wait time after serial sync sampling = 30 seconds

temperature = 16.53 deg C

Reset time to UTC

S>ddmmyy=131006

S>hhmmss=025900□□□800

S>ds

SBE37-SM V 2.2 SERIAL NO. 1537 13 Oct 2006 02:58:04

not logging: received stop command

sample interval = 600 seconds

samplenum = 330, free = 232686

do not transmit real-time data

store time with each sample

A/D cycles to average = 4

reference pressure = 2238.0 db

serial sync mode disabled

wait time after serial sync sampling = 30 seconds

temperature = 16.52 deg C

S>startddmmyy=131006
S>starthhmmss=025□□30000=□
start time = 13 Oct 2006 03:00:00

Startlater time seemed to have been surpassed.

S>startlater
start now
S SBE 37-SM
S>□□ds

Check

SBE37-SM V 2.2 SERIAL NO. 1537 13 Oct 2006 03:00:20
logging data
sample interval = 600 seconds
samplenumber = 331, free = 232685
do not transmit real-time data
store time with each sample
A/D cycles to average = 4
reference pressure = 2238.0 db
serial sync mode disabled
wait time after serial sync sampling = 30 seconds
temperature = 16.62 deg C
S>

Set-up by Dave Spear

ds

SBE37-SM V 2.2 SERIAL NO. 1614 13 Oct 2006 02:51:55

logging data

sample interval = 600 seconds

samplenumber = 329, free = 232232

do not transmit real-time data

store time with each sample

A/D cycles to average = 4

reference pressure = 2164.0 db

serial sync mode disabled

wait time after serial sync sampling = 30 seconds

temperature = 16.58 deg C

S>

Set-up was supposed to be changed to UTC I am quite certain (SFM) that it was, but it is not clear from this capture. Set-up by Dave Spear