94031
HXP 104911
94-12

94031qmp

R/V CAPE HENLOPEN
94-12

LOGBOOK
24-30 May, 1994
Twichell + Parolski

7530 - 00 - 286 - 6952
FEDERAL SUPPLY SERVICE

R/V CAPE HENLOPEN

Cruise 94-12

CRUISE LOG

24-30 May, 1994

USGS Cruise personnel

Dave Twichell
Ken Parolski

Univ Delaware: Mohsen Badiey - chief scientist

Survey area & purpose:

Side scan sonar & bathymetry survey of the LEO-15 sand ridge study area off Little Egg Inlet, NJ. Area originally surveyed in 1991 & this is a resurvey to see how the area has changed.

24 May, 1994

08:00 Load ship

Gunips + sidescan seem OK

Problems with Nav, but got it going except for repeater on bridge - logged data all night + everything looks good.

Video deliver box for repeater on bridge is fried - being resourceful to see what we can come up with.

DEC station + stroker up + running. Booted right up, but some trouble with the network, but by end of day even that was sorted out.

21:00 (EDT) departed dock at Lewes, DE.

24:00 called it quits for the day.

25 May, 1994

0600 EDT - On station - deploying anchors for 3 point mooring.

3-point Mooring site 39° 28.3516
74° 15.3218

2136 Z - ~~PST~~ UPDATE NSF'

w = 3.13
y = 2.08

2 RKS XPONDER XMITS AT 23 KHZ
RCVRS @ 17 KHZ

15 MS DELAY

26 MAY 1994

0012 E STORM LOST NAV LOST DGPS
LC WARNING

26 May

0042Z sidescan in water but problems

0435Z sidescan in water but only getting one channel have port which is connected to trigger box, but no starboard - w/o trigger

0514 problems with QMIPS - sidescan good on Klein paper but now just getting noise on both channels - Sop possible data overrun.
Possible data overrun in DSP 0X280(90) flg=11
pip/sec 51.1
thru-put 7 (3)
Failed dsp test
Array processor - Error #4 ZOPEN UNABLE TO OPEN DEVICE
DSP - problems accessing DSP #1 at address 0x300'

Range - channel 1 = 100 channel 2 = 0

Set to half wave rectify

DSP.DAT default thru put - 99

DIGITAL	1	0
SPUS	1	0
T916 CHAN	1	0

26 May, 94

2218 - casting off 3 point mooring & getting ready to try sidescan.

2220 - FINISH ASF 9.82 / 1.99

2359Z Fish in water - getting QMIPS going. Nav OK even though in thunder storms.

27 May, 1994

0005Z QMIPS problems - rebooting for the 3rd time - each time something different.
(1) doesn't come up at all
(2) Trigger screwed up - range varying from 9-100 m
(3) sporadic data intermittent with mostly noise

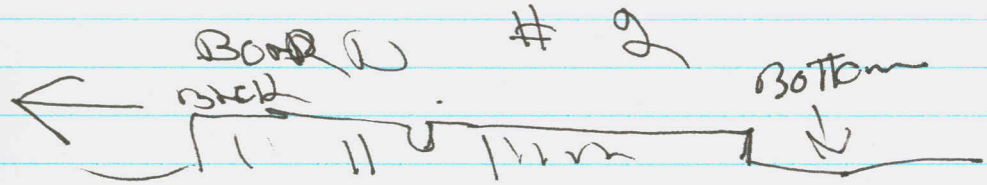
0009 Getting port channel pretty much, but no stbd - Ken thinks it is a timing problem

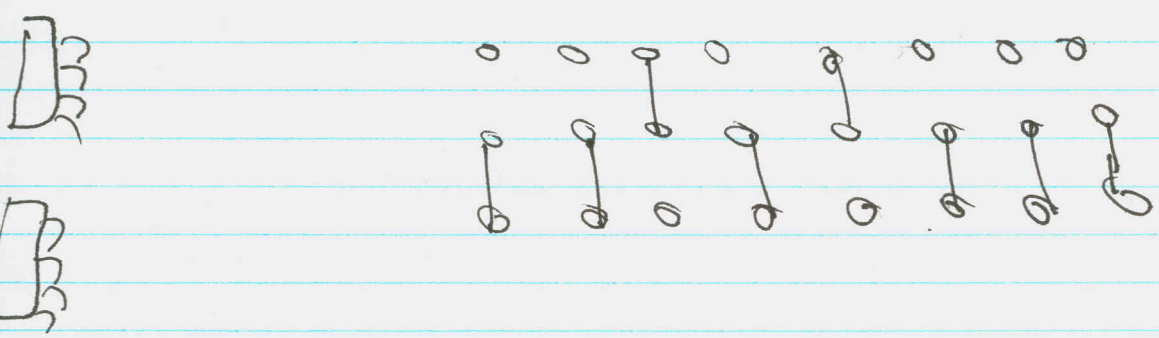
0338 Talked to Tom O'B + have port channel running well, but no stbd channel

0600Z Changed stbd dsp board, ~~but~~

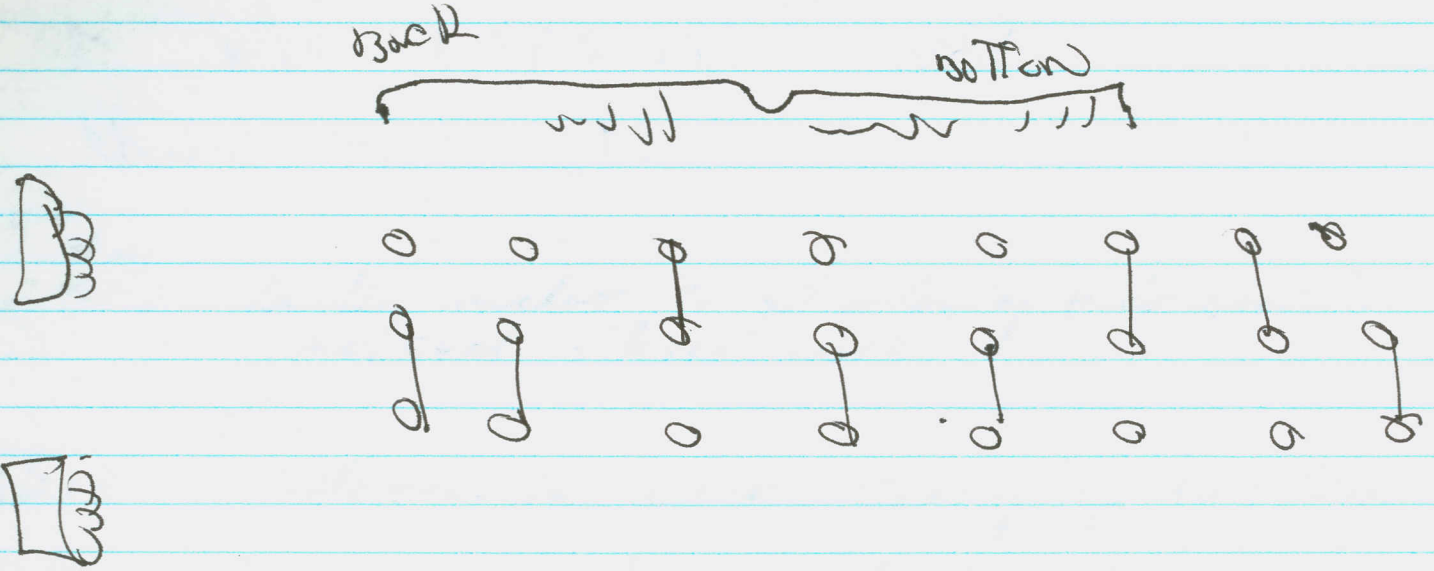
DSP BOARD # 2

ALL JUMPER CONNECTIONS THIS SAME FOR DSP BD # 2 AND BOARD # 3 EXCEPT FOR 8 SET GANG LOCATED BETWEEN IC 74910 AND IC 74036 ON BD # 2 AND BETWEEN 74046 AND 9023 ON BD 3





DSP Board #3



26 May

SEE FILE LOG3.DAT FOR CHANNEL DOG INFO

27 May

2141Z Hauling anchor to get underway + do some one eyed sidescan work.

2213 Sidescan in water - turning up for SOL 1

2224 Sidescan + bathy being logged on Barry Watt + QMIPS

2245 SOL 1 spd 4.1 (5.1) kt heading ~ 029°

2246 lowered fish - 6.2-5.7 m off bottom

2331 EOL 1

2339 SOL 2 course 209° spd 5.4 → 3.4 kts

28 May

0000Z QMIPS crashed - rebooting

0018 Raise fish ~ 2 m

0028 END LINE 2

0039 SOL 3 lower fish

0128 EOL 3

0136 SOL 4

0139 Raise fish ~ 3 m

0225 EOL 4

0231 SOL 5

0236 Lower fish ~ 3 m

video bill $29.55

28 May, 1994

0322Z END LINE 5 - ripples near N end of this line

0327Z START LINE 6

0415 END LINE 6

0422 SOL 7 (7F).DAT

0506 EOL 7 parts of this line were a bit fast (5.8 kt) but look good

0511 SOL 8

0557 END LINE 8 (SW trending line)

0606 Start Line 9
0654 EOL 9
0659 Start Line 10
0744 EOL 10 - end of shoreward part of survey.
0804 SOL 11
Bathy bias 1m added to it, but may need another meter added to it - deeper ~ 2m below sea surface.
0845 EOL 11
0856 SOL 12
0940 END LINE 12 - end evening of one eyed surveying

28 May, 1994

2244 Sidescan in water - turning things up.
2316 Now, sidescan + OMIPS working with all eyes - heading to start of line 13

2322 SOL 13
2335 Raise fish ~ 2m

28 ~~April~~ May, 1994

2357 - get water tracking to work

29 May, 1994

0006 EOL 13 - during canoe charge paid wire out ~ 6 ft
0016 SOL 14
~0020 wire out ~ 12 ft
0110 EOL 14
0120 SOL 15
0138 wire in ~ 6 ft
0144 alter course to pass oceanography buoy to port.
0147 passed buoy - saw tripod & some drag marks.
0206 EOL 15
0218 SOL 16
0220 lower fish ~ 15 ft
0305 EOL 16
0318 SOL 17
0335 Wire in ~ 9 ft - blew circuit too
0400 EOL 17
0412 SOL 18
0503 EOL 18
0512 SOL 19
0535 raise fish ~ 10 ft - breaker blew again
0546 Nav off line
0549 On again
0552 Bridge nav on again - ~ 300 m off line
0600 EOL 19
0610 SOL 20
0704 EOL 20
0715 SOL 21 - some wiggles in line because clutch problems (slipping)
0758 EOL 21
0807 SOL 22
0857 EOL 22 - Haul gear

30 May, 1994

0150Z	Anchors aboard, heading for start of line 23 to deploy gear.
0215	Fish in water
0224	Start line 23. Fish Alt did not work the 1st night. It tracked the bottom, but there was a 2nd red line at nadir - on XSONAR only saw nadir red line.
0228	2.73, 1.24 new ASFs entered into nav.
0230	Doing Fish Alt on Chan 2 (did Chan 1 last night) to see if it does any better. Had to reboot Q144PS when first put fish in water because when we turned it on there were diagonal lines on the stbd side. Happened last night too, but after reboot they went away.
0315	EOL 23
0320	SOL 24
0408	EOL 24
0416	SOL 25
0453	EOL 25 Shortening lines to make up time
0459	SOL 26
0541	EOL 26
0548	SOL 27
0627	EOL 27
0728	SOL 28
0740	Fish down ~ 6 ft - fish down ~ 5.5m in 13.8m water
0755	Lower fish ~ 10 ft fish down ~ 8m in 12-13m water
0813	EOL 29
0825	SOL 25
0853	Passed anchor.
0900	Raised fish ~ 10 FT.

0901 - Rutgers imaging site
0912 - EdL 30

0917 SoL 31

1001 EOL 31 - end of mosaic survey - heading off to sidescan for last anchor!