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①

WATCH LOG Ewing 91-01 (Julian Day 32)

1 February, 1991

- 1530 Z Depart the dock, Punta Arenas. En route to the eastern end of the Straits of Magellan. Streamer work will begin after breakfast tomorrow.
- 1723 Z 1st 12-N watch begun, John McGinnis ^{Stacy} ~~3.5~~ bathy recorder up and running during initial transit
32 ~~Hydrosweep~~ running
- 1900 Z 4-8 shift of Steffen & Tim H. Problems with GPS 1 ~ speed of 40+ knots - don't think so. Rob is working on it. Some discrepancy between Furuno & GPS 2 which has good DOP (all < 2.0) eg. Furuno 50°, GPS 2 18.6°
- 1930 Z GPS 2 & Furuno Agree, GPS 1 still unreliable. Rob said to still believe the Furuno for course, speed, pit log, MANOVI Time mark. ~ AT 19:30:00 there was no AUTO MARK ~
- 2000 Z All NAVIGATION now Agrees. Switched ^{SWATHMAP} Hydrosweep over to GPS FROM SATDR
- procedure to switch is:
1) CTRL-Z
2) RETURN
3) ~~space~~ 3 ~~RETURN~~ → type in new source Prom option 1st
4) 1 RETURN → (returns)
page 3 of watch bible on URI-1
- IT is preferred for hydrosweep to be on GPS but when GPS goes away switch over to SATDR
- 2030 Z Manual Trigger necessary (only works on the hour?)
- 2115 Noticed Tape drive for Hydrosweep was still at BOT., Rob took care of it ~ Tape 032 @ 2114

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Feb 1st cont'd 1032

2136

Furuno Alarm went off (steady high pitched Alarm) because we were going 16.0 knots & Alarm is set at 14.9. We are running with a 6 knot current. Hit Alarm reset & called bridge to verify speed.

2208Z

Bridge advise that pilot boat is coming alongside. Small black-and-white porpoises playing around the ship. (Commerson's Dolphins)

2225Z

Pilot off; underway again -- we were doing 10 knots with the engines off!

2230Z

8-12 shift is on. Serin & Rob. L. Furuno Alarm went off several times.

0038Z

URI-1 doesn't seem to have changed since ⁰³²21:28:19. Shef waked on it and said it should catch up in a couple of hours.

0145Z

Light on fan tail turned off. Video camera view of fantail gone.

2300

New shift: STACY & JOHN

2354

COURSE A to 136

0405

GPS DOPS INTO 20s & 30s. SWITCHED HYDRO TO SATDR. N-S direction bad. ALSO CHANGED TO TRANSIT ON "OLIVE"

2413

Deleted SAT #15 AND RETURNED TO GPS. DOPS now ~ 1-2, should check GPS #2 @ ~ 0600E to see how its working, may then want to recall #15.

2424

True time clock #2 went down, was reset. SAT #15 SETTLED OVER THE HORIZON,

Feb 2 (cont) J033

0621Z URI and Olive changed to TRANSIT for NAV, GPS fixes had too high DOP (R from 40-50)

0633Z URI and Olive returned to GPS NAV DOP's from 0.8 to 2.5.

* When GPS fixes were no good, Bridge took a TRANSIT fix but did NOT revert to GPS when better fixes came up. Called bridge to ask them to return to GPS. (The logging computer showed the TRANSIT fix at "Fix 20" which was the fix displayed on TRANSIT monitor #2.

0700 Tim & Steffan take control. heh, heh heh.

0800 ~ STARTING TO get light enough TO use cameras on deck again
local time ~ 5 AM

0850 GPS #1 DOP numbers getting high (5, 10, and 50); able to improve GPS #2. Switch URI and hydrosweep now to DR in order to tweak GPS #1.

0855 switched BACK TO GPS on URI & hydrosweep

0905 slowing down for streamer deployment & testing (next 36 hours.)

0910 Ian did not notify me that he was slowing down, though about 10 min earlier he asked what the plans were for today. He says he will run out of room for a 36 hr streamer party, though he also thinks we will have to head eastward when we actually begin streamer work. I asked him to check these things with the scientist on watch before he makes such decisions in the future. Tom

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Feb 02 (cont'd) J033

~~1015E~~

1100Z 8-12 shift. Sevin & Rob L.

122730 Bridge called, wants to change. Furuno to water track, Joe S. will do it. Called Bridge back to inform them.

1248Z Buoy launched from Fantail

1250 Furuno changed to "water track"
1300 Streamer being deployed. Tail float over the side

1434Z BRIDGE CALLED FOR WATER TEMPERATURE (9.1)

1430Z GPS#2 returned to natural health. Rob^B says that if the DOP is about the same, to return GPS#1 to natural health.

1500Z 12-4 sh. ft. Everything returns to normal.

1510Z NOTICED TAPE COMPLETED ON HYDROSWEEP. FOR HOW LONG?, WHO KNOWS?

1530Z streamer deployment still underway @ ~3.0 kts

1534Z Disparity between 3.5 kHz depth: Hydrosweep noted @ ~10m which is attributed to the draft or possibly some sediment penetration

1730Z End initial streamer deployment. All that remains on the drum is 100m leader, 100m dead and 50m stretch. We will add a 50m stretch to the inboard end.

Feb 2 (Mon 4) J033

1747 NAV. TO TRANSIT. EAST COMPONENT
> 5. VERT. > 8.

1816 NAV BACK TO GPS. EXCLUDED SAT #3
REDUCED $N \Rightarrow 1.2$ & $E \Rightarrow 2.3$

1839 NAV TO TRANSIT

1849 TRANSIT to GPS on URI & OLIVE

1900 Tim & Steffen on watch

Furuno measurements (speed ~ 1.5 ish) \neq GPS (3.0 ish)
Annotated Furuno

2025 \rightarrow when Furuno is in water column mode it is a better measure
of how Streamer is reacting relative to water column.
GPS is measuring Absolute speed pos. etc.

* - GOT Lowdown from Rod on GPS & what to do when DOP's go
bad (no real definition of "bad" exists yet.)

- 1) Try "NAT" to let GPS try it's hand AT picking best on GPS 2
- 2) If that doesn't help try excluding "Exc" satellites one
AT A TIME.
- 3) When GPS 2 looks OK. SET URI-1 & OLIVE TO SATDR
UNTIL GPS 1 is looking good
- 4) SET URI-1 & OLIVE BACK TO GPS

2230 and all's well. Streamer work still
going on. GPS course and speed
fluctuate greatly because of our
low speed (1-2 knots).

2300 Sevin & Rob. L. on shift now. Rob. L. to deck duty. ^{Pantail}

Feb 2. Cont. JO33

335
2340 Noted that true time 2 on logging Computer shut down (got logging) at 21:18 today. Apparently someone did something to a window? Watch out Watchstanders!

0345 3 February, 1991

0025 Bridge (Mark) called, suggests switching GPS #1 over to #2, off 10° latitude

GPS #1 Speed at 386... ~~Call~~ Sheef changed URI-1 to SAT DIR. Rob reinitialized GPS #1 and then GPS #1 was up again. Returned URI-1 to GPS #1.

0048 GPS #1 Speed & Course change rapidly due to low speeds.

0100 Rob. L. off fantail, back in e-lab.

0137 Start turn to port by 10°-15°

0300 12-4 WATCH REPORTS FOR DUTY.

0401 A NAV TO TRANSIT. NORTH COMPONENT > 20

0410 Returned to GPS

0622 A NAV to transit L DOPS > 40

0630 A NAV to GPS

0700 A watch Tim & Stephen

→ 0930Z Streamer fabricated. Electrical problem, probably in the reel.
055 A watch to Sevin & Rob. L.

Feb 3 cont. J034

EW91-01 WATCH LOG

1158Z Rob. L. to back deck.

1215Z Still working on electrical problem.
Wind 25-30 kts from the N, seas building,
~ 8'.

1313 - Turning into wind. Bridge (Mark) called, will increase speed ~ 300° cse

1310 - Scrapping the streamer activity. we are bugging out. GPS went wacko. Seems like this time of day it does that. DOP went up to 19.6, but is now decreasing. Will let it decrease until better value, then switch.

Changed URI-1 to SAT DR, until DOPS ^{↑ goes} down.

1330 - Called Bridge for wind speed = 35-40 kts ^{from NW}
WATCHSTANDERS CALL EACH ~~direction~~ SHIFT FOR WIND/WEATHER REPORT!

- Fantail activity - pulled in streamer, tail buoy approaching

1337 - pulling buoy in

1341 - Changing URI-1 and Olive to GPS. Dops down to 3.2. having problem w/URI-1 setup. Finally set at 14:12.

- Hydrosweep looks like it has missing sections in cross section.

1323 - noticed change in course ~ 150° (Furuno)
Speed ~ 7 kts

Feb 3 34 J

(8)

1500

A shift to TPM & SAT. Onion soup for lunch

~1600

Hydrosweep obviously having display probs in rough weather. Many segments missing across cross-profile

1620

- Bridge called. We are heaving-to for safety reasons. Apparently, will be too rough in the straights.

1700

- Course approx 300° ; speed. approx. 1.5 kts. Weather's pretty rough. Winds 50 kts sustained. Seas 30' and larger.

1730

Hydrosweep is worthless at this point

1803

NAV TO TRANSIT. E > 8

1845

NAV RETURNED TO GPS

1900

Tim + Steffen, the A-Team take control. Weather's still rough, but we're not pukin'. GPS course, speed and Hydrosweep still having problems.

2255

Changed Hydrosweep Tape

2300

Changed shift to Bilir & LARTER

15

FEB. 04, 1991

2011

Bridge called for seawater temp (8.6°C)

034 J FEB, 4, 1991

EW91-01 Watch log (9)

- 0145 GPS#1 std going up. DOP up. Testing #2 GPS. (4.9) NORTH DOP
GPS#1 better DOP 0.7 North. Speed on GPS#1
much higher than Ferret's speed.
- 0253 GPS#1 STD ^{went} go very real high ~~std~~ (15-20) but low DOPS,
then back down to low std's.
- 0300 BRIDGE CALLED FOR TEMP. (8.2°C)
0315 chg. course TO 150, 130 RPM (As per Ian via Tim @ 0931)
0348 NAV TO TRANSIT due to NORTH DOP > 20
- 0403 Returned to GPS. Also, seem to out of the
worst of our storm. CALMING DOWN
- 0613 Δ NAV to transit
- 0630 Δ NAV to GPS
- 0700 Steffen / Tim on watch. Now doing about
8 knots @ 150°.
- 0957 Noticed a barrel (?) of sorts rolling about on Panthail. It wasn't
rolling 5-10 minutes ago. called bridge.
- 1024 ~~SEAS~~ weather getting rougher, barrel still bearing stuff up on Panthail
chairs & stuff sliding 10-15' across room.
- 1100 BLAIR / CARTER ON WATCH. Entering the
Strait of Le Maire.
- ~1300 Approaching bad satellite coverage, will let it
decrease on it's own once it goes bad.
Changing course to the west — will
run in towards Mitre Peninsula to
complete streamer work (balancing / towing
configuration).

035 Feb. 8, 1991

EW91-01

(10)

- 1308 GPS #1 out again Std. at 58, DOP to high for screen (***) Changed URI-1 to OUIVE to Transit (SATDR). Informed Bridge.
- 1327 Bridge called. Said that would be another 25 min til. parallel to Coastline. Deployment can begin then.
- 1342 6 min ^{turn to} Star and slowing down for deployment
- 1356 Switch URI-1 to OUIVE back to GPS #1
- 1400 Deploying of Streamer begins.
- 1446 End of Hydrosweep tape no 4 (wound off spool!)
- 1450 Tail buoy in water
- 1500 New Shift reports
- 1508 Loaded next hydrosweep tape (#5)
- 1603 Δ NAV GPS to TRANSIT [N DOP > 10]
- 1616 Δ NAV TRANSIT to GPS
- 1746 Δ NAV to TRANSIT [E DOP > 6]
- 1831 Returned to GPS
- 1844 Joe called from Fan-tail - switch on +48 volt panel and key in button on the rack under the printer

035 Feb 04th 1991

(11)

1900

Tim & Steffen ~ Steffen on streamer work

2050 Bridge alerts us that we'll be turning to about 210° at about 2110. Course is now 30°

2106 Starting to turn to port.

2120 Turn complete. New course 210°.

2155 ~ slowing to 80 RPM

2300 Shift change to Bilir & Larter

036J = Feb 5th 1991

0030 Streamer being pulled in, as the weather & seas have gotten worse. Water in tail continuously.

0145 GPS #1 really off on speed/course. Stats are high, but DOP good.

0230 Streamer brought in, tail buoy still out. Rough seas - flooded decks

0300 Δ of shift to SAT & JPM

0600 Δ GPS to TRANSIT

0630 Δ NAV to GPS

0700 Shift Δ Tim & Steffen

0740 course Δ to 200

0800 course Δ to 195

0805 change scale on hydrosweep to range 200, range end 400

To do this use keypad on right bottom.

- 5 return 1) hit return ~ should light up range
- 6 return 2) type in width (right justified)
- 3) return
- 4) type in end. depth (right just.

036 Feb 5th

WATCH Log EW 91-01

(12)

1030

Start turn. New course 185°.

1100

New watch - Sevin & Rep. L.

1130

Starting to pull tail buoy in. (Crew)

Switched program (from TR to TTRR) on line recorder (TTRR for depths 1500-2250m)

1200

line recorder recorded smaller ^{width} time ~~between~~ between 2 measurements. Perhaps due to switching to TTRR?

1205

Tail buoy recovered (on deck) ~~in~~ ^{irreversible} ~~on~~ ~~the~~ ~~deck~~ ~~com~~

1212

Switched program on line recorder to TR.

Tom S. says leave on TR until the data is ~~near~~ near the dark swath at the top. 3.5 KHz only records when pings & doesn't ping every second now.

1230

Switch line recorder to TTRR since it is near the black swath at the 1500 mark. When program is off, it produces the dark swath. (when on cycle 4, TTRR)

1240

Speed increasing to ~8 Kts. Antarctica here we come. Speed & course on GPS still questionable.

1300

- GPS #1/2 going up in std (40) & DOP (15.3) on North & East DOPS. Will wait for DOPS & STD to decrease. Does this everyday at ~1300Z

- return recorder to TR

1330

- Switch line recorder to TTTTRR (>2250m) very faint line on scarp (program on)

- DOPS & STD looking better (2.5, 6) on GPS #1

036J Feb. 5th, 91 Watch log EW91-01 (13)

1350 Switched line recorder to TTTT RRRR ~~at~~ depth. (3000-3750m)
 in swath area,

1400 " " " TR

1429 Switched " " TTTTT RRRR
 Stylus changed - making dark image.

1430 Magnetometer annotation begins
 Magnetometer printout is under the 2 left seismic
 recorders. When 1/2 hr occurs mark value seen on
 the magnetometer reading ^{er} by underneath speaker.
 Also mark all data seen on line recorder.
 The red line on right of recorder ^{mag} should have
 a little mark when the mark occurs.

1500 New shift (12-4)

1603 Δ GPS to TRANSIT [N DOP > 20]

1614 Δ TRANSIT to GPS

1756 Δ GPS to TRANSIT [E DOP > 7]

1823 Δ NAV GPS → TRANSIT

1850 - notice blue line on line recorder
 → indicates need for paper change
 in about 8 hrs

1900 Tim & Steffen shift.

2130 New Roll of paper on 3.5 kHz.

036 J 5 Feb 1991 Watch Log EW 91-01 (14)

2210 Increase speed to 160 RPM.

2215 New course 160°.

2300 - Switched ~~to~~ URT-1 f OLIVE to SATDR (STD way High)
- new watch BILIR f CARTER

2325 - ~~TRANSIT~~ back to GPS

~~2340~~ NOTICED gravity not logging since 16⁰⁰ hour, apparently does not like bad weather.

037J FEB. 6, 1991

0010 - ~~Bridge called to say that~~ Bridge called to say that we are turning ~~to~~ 150° in order to make good 145°

0035 GRAVITY WORKING AGAIN.

0146 GPS#1 & #2 Acting up. Speed, STD, f DOPS up, but DOPS & STD Returned to normal range quickly. Speed 14.8 KTS on GPS (Furuno 9.4)

0300 New shift

0346 Δ NAV GPS → TRANSIT

0347 Δ NAV TRANSIT → GPS

0350 Δ 3.5 KHz to TTTT RRRR. Depths ~~at~~ < 3750m

0408 Δ 3.5 KHz to TTTT RRRR depths > 3750m

0600 Δ NAV TO TRANSIT [N → 00]

0557 Timing mark automatically put on to 3.5 kHz. Why?

(15)

0606 Returned to GPS

0612 another random mark on the 3.5 KHz
→ are marking ^{as} event markers* POSSIBLE CAUSED BY A SHORT. NEED TO
NOTIFY JOC OR TIM WHEN THEY WAKE
BUT DON'T WAKE THEM JUST FOR THIS

0700 A O' the watch Tim & Steffen.

0900 ~ confusion about depth at this point. The hydroweep is
clear at 2950 m but the 3.5 KHz is unclear due to the
"wraparound" nature of the display.

* 1100 New watch, BILIR & LARTER

1152 ^{8am} { 10 Kts → at 23:50 to start deployment
11 Kts → at 22:25Bridge called to say when we will beat the
point of streamer deployment1230 BRIDGE CALLED TO SAY WE ARE
INCREASING SPEED.

1255 STD's & DOP's up on GPS, Move to transit.

1257 Switched Line Recorder to Long transmit,
Couldn't read the depth or outline.

1338 Fantail activity - dumping the defective tail buoy

1342 Switch @ back to GPS from ~~to~~ transit

1519 Δ NAV GPS → TRANSIT

 $[N > 20, E DOP > 20]$

037J Feb. 6, 1991

EW9101

11

(16)

1609 RETURNED TO GPS NAV

1800 EVENT marker now gives a mark on the hour and $\frac{1}{2}$ hour. Some event markers were made and have been annotated as such.

1822 Δ NAV TO TRANSIT $\begin{cases} E DOP > 5 \\ N DOP > 5 \end{cases}$

1835 Returned to GPS

1900 Tim + Steffen

- the $\frac{1}{2}$ hour event marker officially is fixed & re-racked.
Thanks Avie.

2300 New Watch. Billie & KARTER

2336 BRIDGE CALLED. WE WILL BE SLOWING TO MINIMUM STEERING SPEED AT 2340Z

~~2357~~
~~240000~~
TAIL BOY deployed

038J FEBRUARY 07, 1991

0010 - Streamer deployment beginning

- Speed & Course on GPS #1 unreliable

0030 - Magnetometer turned off by Tim Smith. No more mag. until told.

0051 Sea water temp 2.3, reported to Bridge

0145 - Δ GPS \rightarrow TRANSIT (STD 720, DOP 760)
0148 - BACK to GPS (TRANSIT way off & DOP's decreased rapidly.)

WATCH LOG EW 91-01

038J FEB 7 CONT..

(17)

0553

() Δ NAV GPS \rightarrow TRANSIT DOP > 15 0555 Joe called bridge asking 2.5 kts hump. 9
to facilitate streamer deployment

0617

 Δ NAV TRANSIT to GPS
 \rightarrow eliminate satellite 19 from the
GPS every morning @ about 5:45,
it is breaking NOC.0700 Δ sh. Pt.0710 ~ Tone from RDF Radio Direction Finder from Buoy
cable looks deep in middle (~160m)

0730 ~ slowed to 60 RPM to make 2.5 KTS

() Cable coming in

0942 Streamer in; tail buoy just off stern.

0945 Change course to 330° . (begin turn)

0957 Turn complete.

1100 New Watch, Bilir & LARTER

1200 Position $60^\circ 28.7'S$ $58^\circ 38.1'W$ 1240 Mark called from bridge. All watchkeepers please note:
NO GARBAGE TO BE DUMPED OVER THE SIDE
WHILE SOUTH OF $60^\circ S$.~1400 Streamer telemetry now OK. Starting streamer recovery
() so it can be deployed with birds.1543 Δ NAV GPS \rightarrow TRANSIT DOP > 6 1610 Δ NAV GPS \rightarrow TRANSIT~~1800 Δ NAV \rightarrow NAV~~

WATCH 108 EN9101

038 J February 7 1991

(18)

1700 - Tail buoy gone submarine, rescue boat launched to search - Attach Norwegian Buoy.

1800 ANAV GPS → TRANSIT DOP's > 5

1810 ANAV TRANSIT → GPS

1816 ANAV GPS → TRANSIT DOP's > 5

1835 ANAV ~~TRANSIT~~ ^{GPS → TRANSIT} DOP's > 15

1838 ANAV TRANSIT → GPS

- lots of fluctuation in DOP's

1842 RESCUE ZODIAC returned after attempting to retrieve. Back up tail buoy. Buoy was damaged and too heavy to tow back to ship so line was cut, buoy went down w/ strobe; GPS.

1900 Timmy + Steffie on watch.

2030 Prime Rib for dinner!

2130 Transit #2 having problems; bridge working on it.

2140 Transit #2 back up.

2225 Starting turn. New course will be 150.

2238 Steady up on 150. Now on course for Line 1.

2249 19 of 20 guns have been sealed.

2300 BILIRGUAETER ON WATCH

~2310 Booms out - and argons being deployed.

039 J February 8, 91 \$

0066 Beginning of argon explosions (#1 & #5 (#8 on Starboard) side.)

039J

Feb 8, 91

EW 91-01 Watch Log

14

19

0013 16 guns firing

0120 Beginning of tape & line 1

0127 Bridge Called, INCREASING SPEED TO 5 KTS.

0207 NAV BLOCKING ON Logging Computer. SP not being recorded. SHORT RECORD ERROR

Re: Data in
 Seg &
 header records
 especially: shot time tag
 is so far recorded
 on the same shot.
 Not one shot later
 as is normal.

X

JOE

0332 20 guns in water and firing
 *Record length is 16secs. / 20 sec. shots

0352 Need to monitor logging computer more closely now. In seismic record window need to see that Gun depths are "goten" and "REQUEST" is "answered" for every shot. If this is not happening, hit ^C, the !! <CR> to reset. Currently Rob and Joe are attempting to remedy the situation which they believe has something to do w/ "TIME TAGS"
 * error appears in upper shot pt record window as NAV BLOCKING INCOMPLETE - Receiving message "Gun Depth Box failed to Respond" many times.

039J Feb 08

EW 9101

15

* * * * *
* * * * *

(20)

Shot time 04:08:47

0410

SP 503 \Rightarrow FILE 504

Shot point time tag functioning properly for the 1st time this line AP-01. Gun depths still not responding.

Shot times being put on following ~~SEGS~~
shots SEG Y HEADER

* * * * *

0548 Δ NAV TO TRANSIT [N DOP > 20, E > 10]

0553 Reduced speed to \approx 4.5 Kts. Due to upkeep? of compressors.

0556 EXCLUDED SAT #19, Returned to GPS

0603 SEISMICS RECORDER #2 running,
hit event marker partly and
= annotate time and watch for
delay changes

~ 0630 SHUT DOWN GUN #12 for Repair

0700 New watch Tim & Steffen

0818 New course 153

0826 changed analog filters on eds to 25-80 Hz (from 30-80 Hz)

0830 ~ish problem with GPS 1 screen garbled - called shelf

0855 ~ GPS 1 fixed & on line

- when WAT depth > 5000 IT hoses hydroswEEP, shelf fixed IT too

(21)

0913 0900 new course 154 → gun 12 up

0918 new course 155

0925 new course 157

0952 changed edo fillus to 20 to 70Hz

1012 new course 158

1045 changed edo delays to 3 to 8 sec

1050 Pod of Dolphins seen on Port side - Bow

1100 A shift to Sevin & Rob L.

1200 Position 61° 07.6' S 57° 49.8' W

1211 gun 1 + 17 not firing 350 + 145 c.i. not fu
this may have been occurring all night1257 GPS #1 STD: DOPS IS INCREASING AS USUAL
AT THIS TIME EACH DAY. WILL WAIT FOR IT
TO RETURN - NOT MOVE TO SAT DR.

1300 3.5 kHz program changed to TTT TTRR

1321 Magnetometer re-tuned.

1337 NavBlock incomplete on logging computer. Joe S.
working on it. Switched to alternate tape.

IF TE (tape errors) show up on seismic window with
NAV BLOCKS, you may want to switch to the other
TAPE WHEN TE'S ARE HIGH (~130). TO DO THIS
YOU MUST PRESS THE "ALT MAG-TAPE" BUTTON ON
THE CONSOLE BELOW THE PRINTER FOR TAPE LABELS.
IT IS LOCATED ON THE FOURTH ~~ROW~~ OF GREEN LITES
FROM THE LEFT. COLUMN

1400 Seismic's #1 NO LONGER MARKING, ARVIE DOING something

1406 BRIDGE CALLED, WANTS TO SPEED UP ~ 5 KTS OVER H2O.
WANTED TO KNOW LIMITS OF SPEED. TOM SAMPLEY
SAYS, OVER GROUND ≤ 5 KTS, OVER H2O 4.5 = 5.5 KTS
JAMIE CAMA & SAN → AIC

1537

 Δ NAV TO TRANSIT [N DOP > 5]

(22)

~~10470~~

16032 logging computer shows error in shot point window and bad time codes in lower MCS window - now it seems to be working OK. If gun depth fail, do the reset w/ 'C, 'L & 'R' if a succession of TE's as well as high TE's come up, do the ALTMAQ

TE =
(TAPE
ERROR)

1639 source enable on MCS console mistakenly switched off. Turned on once I'd off for \approx 3 min.

1640 3.5 KHz battery record roll was moved to recorder #3

1649 * Jamie requests Real calendar time * to be annotated hourly on all records *

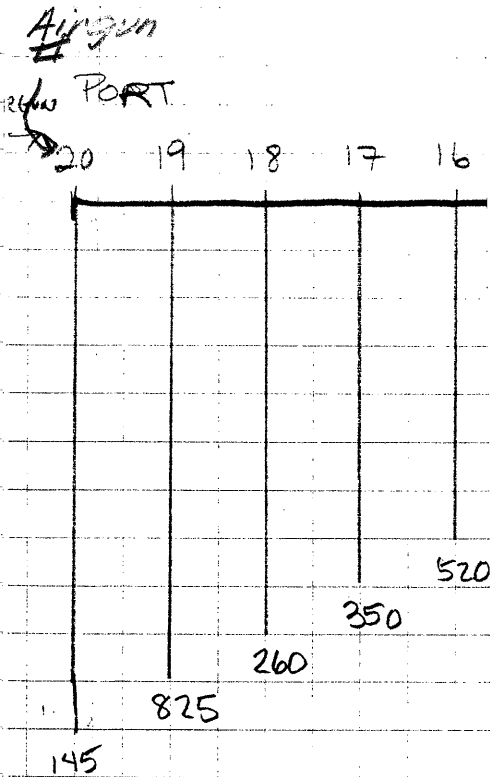
1702 SHOT POINTS RESET TO ZERO DUE TO INCREMENTAL ERROR. SP's had been reducing. Now increasing

1702 - Currently 3.5 KHz running with no program as depths are < 750m, be aware of battery changes to > 750m so program can be reset.

1715 Drive C's being cleaned entirely, in an effort to eliminate TE's.

039 J FEB 8 91

(23)



Values in in^3
Total 8385 in^3

1743 Techs are working on Guns, $\approx 5-10$ of the 20 guns are not indicating pop times \rightarrow they show "N's" on the gun monitor. This maybe related to a timing problem

1744 SP & F field on logging computer shows "AS" code, this is related to a problem with telemetry. No necessary immediate remedy

039 J 8 FEB '91

(24)

1755 * NB: When 'C!!<R>'ing on the logging computer to get rid of incomplete NAV blocks, the system may get hung up. If so, check the uppermost chassis above 'Drive D' the red light should be blinking, ^{even if it is blinking} toggle it. NOT flip the toggle switch to reset. This should then allow you to clear the NAV BLOCKS (The chassis with the light is the time tagger)

1759 ~~ENTER~~ Seismic windows on logging computer may go "out of sync" periodically. At this time, they will "DIE" and the program will need to be restarted. To do so hit !!<R> (DON'T need a ^C)

* Clean tape drive C w/ Texwipes @ event tape Δ. =

A course 1934 149°

2003 Change course to 147.

2100 GPS #1 monitor only went haywire, lost horz &

vert hold — eventually got better (~10 min)

2154 — A course to 148°

2158 — Full Gun system working.

2300 A shift BUR/LARTER

2325 Time tagger fixed — no more 'NAV BLOCK INCOMPLETE' errors on MCS monitor

~~0045~~
040

Feb 91

(25)

0024 Bridge called for DEPTH (995m)

0037 Problem at start of MCS tape 64 - tape had failed to load. 8 shots lost (# 1365 - 1372) while this sorted out.

Tape eventually loaded at 1600 bpi!

0046 Tape 64 rewound. Switch to tape 65 on Pinet

0100 Airgun #9 apparently not firing

Air leak found - switched out

0139 GPS showing high DOP values. Reb B. fixed it by exc'g #14
0140 Sat. 14 excluded - problem solved.

0146 Joe Stenert going to turn streamer drum a little to put strain gauge on.

0156 Strain gauge, now working

0205 'Pressure fault' in digitizing can. Joe says not to worry - usually just a dodgy switch.

- gun #9 online

0320 Deployed sonobuoy on a shake down of analogue recording system. Not logging to tape. Analogue record is on recorder #4.

0324 ΔNAV GPS → TRANSIT DOP > 30

0326 At end of line AP-01, will be hauling streamer in to reconfigure for use with sonobuoy's - ETA @ EDL
09300930

0417 @ SP03825 aborted tape 74 - excessive tape errors on drive C

0413-

0417

TAPE 74 BAD. HAD

10 Parity Errors in 1st 13 shots.

Removed tape and switched to TAPE DRIVE E.

0536 Bridge called to ask if it is OK to turn on their depth profiler, John M. said OK & will monitor our records and look for anomalies. Bridge does not know frequency of the sounder. They are concerned about approaching depths shallower than 200m so watch should keep them updated

0542 Turned off 1st SONOBuoy Recorder

0624 Bridge noticed lab of course Δ $\sim 10^\circ$ to port to avoid ice.

0634 - 0639 - Tape did NOT load correctly 5 minutes of data lost, - 9 shots not recorded. - Tape was on drive E, once drive C was reloaded shots began recording there NB* Odd # tapes \therefore will now be running on C drive

0653 - Changing course to 155 $^\circ$

- bridge is maneuvering through ice, and making C/C \pm every 3 mins. ~~the~~ bridge will call down on each change. 155 $^\circ$ is the base heading, changes will be w/in 10° to port or starboard

0656 C/C to 158 $^\circ$

EE

09 Feb 1991

040 J

EW9101

(27)

0723 END LINE 1 ~~R~~

0740 STARTING Turn TO LEFT

0824 Finished Turn new heading 307°

0836 C/C TO 315°

0910 C/C TO 318°

0937 START shooting line 2, timing probs bringing everything down,
rewinding All (only one actually) TAPES TO BOT

S 62 24.7661

W 56 08.9907

@ 0948:50

START of line 2 (2nd time)

62 24 0731

56 09 6300

@

9:58:50 SP 3051 F001

missed shot 4
3056 F005Hydrosweep went down @ 0854 ~ noticed then, Rob still working
on it @ 10:22

1100 Δ shift

1112 ~~SP~~ MCS recording system refusing to select a
tape drive.There are ~~not~~ no tapes 89-92.

1121 Tape drive (selected, tape # 93)

1213 Will be increasing to about 5 Kts (bridge)
Charged 3.5 kHz from short to medium pulse

09 FEB 1991 040J EW9101

1300 Switched GPS^{#2} by exc.
#12 satellite. Dops | Std high (40%)

1325 Called Bridge to check average speed
over ground = 5.0 KTS

1335 Switched GPS^{#2} to Nat. Dops & STDs were
good

- Course has been off between the Furuno &
GPS by about 5-10°, Speed seems to
be okay. We are recording the
Furuno Speed/Course as usual.

1507 - NO tapes

105
106
~~107~~

#106 is probably on
#107.

1522 → Currently we are using recertified
tapes on drive C as it has been
very problematic

1532 Reset battery 3.5 kHz program @ TR
program had been set but not
switched on.

1547 Tape[#] 111 started on drive C

1629 - 2 @ 1530, Stylus 2 on Seismico[#] 1
popped out, is not marking on
every third sweep. Stylus 2's
situation remedied

1634 Now using only ONE TAPE DRIVE [E]
due to ignorant problems with the
remaining.

040J Feb, 9, 91

EW9101

SUPER-LOG

29

1650 Ding course to 305° 1654 NB* → Record M/S Tape
File # on SONARBOY LOGS!1724 Bridge called down to Nobly
turning in 1 hour, it EOL, and
are turning on their Autonomer1725 - 3.5 kHz battery recorder no longer
recording, is marking w/d divisions
and events but no depth, currently
seeking a remedy,1736 Above situation remedied by setting
program @ 1 R Cycle length 11744 - Bridge calling @ end of ~~EOL~~
waypt ≈ 10 min ^{to EOL}, then turning
to port ≈ 10 min after will begin
turn - call Smith ~~the~~ waypt1811 - Before stopping or starting
guns → @ least 5 min before -
call engine room @ 1131837 currently on turn Sei officer working
on Drive C, will be trying a
different brand of tape = 3M/Blackwater1843 bridge called w/ C/S to slower
be aware of streamer1855 - final course for waypoint on
AP-03 will be 140° 1 to crab back
 ≈ 10 min after XNC → start new
line. final course made good will be 155°

EW 9101 WATCH LOG 040j 09 Feb 1991

(30)

- 2030 Bridge calls; we'll be in position for line 3 in about 30 minutes.
working on TAPE drives from EOL 2 to now
- 2104 c/c to 170°
- 2108 Begin Line AP-03.
- 2124 Bridge reports streamer straight behind us.

2145 c/c to 172°

2157 Everything working well so far on line 3 & oh that
it always happens that way.

2300 A shift BLUR / CARTER

2310 Gun #2 going down. Will be taken out of water for short while.

2321 Gun #2 back on line

2329 Bridge called. At 167° now. will go to 161° in 20 minutes. Then a final move to 155°

2330 ~~After~~ Bridge called no course Aft. Not enough room to get 6° turn. will call back (move 5° westward to track line)

2341 Bridge called
Turn to 160° at 2345Z

EW 9101 WATCH LOG

Feb. 9, 91

041

~~040J~~

(31)

- 0017: Bridge Called
in 0018 making 158° on course
- 0036 3.5 kHz program Δ to TTR
- 0038 Sonobug #3 launched
- 0135 ~~BRIDGE CALLED~~
~~0136~~ Δ course to 154°
- 0136 ~~AGPS~~ → GPS Freaked out. Exc 14 on
#2. Switched URI-1 & OLIVE to SATDR.
Switched GPS #1 to EXC of #14 satellite.
0140 Switched URI-1 & OLIVE BACK to GPS #1
Put GPS #2 to Nat. state
- 0148 Ice avoidance %c 152°
- 0149 Switched URI-1 & OLIVE to SATDR
Switched GPS #1 to NAT
Switched URI-1 & OLIVE BACK to GPS #1
- 0155 Bridge called
New Course At 0156Z to 149°
- 0213 Bridge called, Δ course at 0215Z to 155°
- 0239 " Δ course 0240Z to 158°
- 0330J noticed @ event marker that
sonobug recorder paper not
advancing treated rapid advance
toggle & loaded into action -
data gap of unknown time.
- 0343J Same problem as @ 0330J -
same remedy - should seek
* correction before launching next sonobug

EW9101

WATCH LOG

27

041 J

10 FEBRUARY 1991

32

0352Z Gun #2 coming in for repair

Gun #1 also came out

0404Z called bridge to check on status of ice as we are @ the same latitude where encountered ice on line AP-01. Bridge says ice not yet a problem but possibly in an hour or so. Also gave them depth @ 400m, they will turn bathometer on soon

0440 Guns 1 & 2 BROUGHT BACK ON-LINE

0504 Hydrosweep experiencing difficulties in shallower waters. Depth below center beam not given. System not switching from deep sea search to shallow water survey. Remedy being sought.

0551 C/C 4° to port to avoid ice

0610 C/C to 145° ~~due~~ to ice

0627 EOL AP-03
+ turn 2 45min

0637 NB* → if TE (parity errors) are appearing for tape in drive C, checked the Telex panel that is pulled out under the last drive. On the green board are 2 rows of red lights. See if the 2nd row lights up when TE's appear. Notify James

EW9101

WATCH HOG

28

041J

10 Feb, 91

33

Beginning of Line

62 42 ~~7664~~ 7384

AP-04

@ 041 0721:52 GMT

56 29. ~~8703~~ 9022

0810 c/c To 310

0822 c/c To 305 (dodge an iceberg)

0825 c/c To 310 ~ done dodging

0835 c/c To 315 ~ big iceberg

0857 c/c To 309 To get back on track

~ 1040 Guns not firing - recording system down

1044 Back up; firing + recording.

1048 c/c to 304 - dodgin' ice.

1100 - a/c to 301° / A shift BLUE + LATER
- waywatch not ~~waiting~~ on this track. on 3.

#1136 Bridge temp will turn to 307° @ 1138

1206 @ 1207Z c/c 311°

1215 New 3 1/2 kHz roll

1306 Switched URI-1 & Olive to satdr (Dops high Gps)
Switched GPS to exc #12
Switched GPS #1
Switched URI-1 & Olive to GPS #11332 ~~GPS exc GPS #2~~ GPS #2 better (NAT)
Switched URI-1 & Olive to satdr
" GPS #1 to NAT
" URI-1 & Olive to GPS #1

10 Feb. 91 041J EW9101 Watchlog

(34)

~1345 Seismic LSR1 polarity reversed.

1400 turned waywatch back to track 4

WAYWATCH INFO...

Rob

TO ADD WAYPOINTS OR TRACKS... See Sevin for verbal explanation
 WHEN in "X-term" window, want to get into VI so type "Q". this will give you a "popeye%" prompt at this point type \Rightarrow vi -w, 24, 9101. bransfield
 Space Space Space

this will produce a ^{file} screen in VI with the way points latitudes and longitudes.
 ie.

56	41.3 S	41-40.5 W	1
59	20.1 S	45 40.5 W	2
:	:	:	:

use VI to insert waypoints (ask someone who knows when you do it for the first time).

when finished, "esc" and type :x to save. then type ww at popeye% prompt.

This brings you back to waywatch. We probably won't have to do this, ~~we~~ we only know because the bridge didn't update it, ... or something. Like that. Rob B is supposed to update it. I think.
 Sevin

433

c/c 307° - Bridge called

500

A watch Stacey / John

Feb. 10, 91

041J

EW 9101 Watch log

(35)

1525 Δ NAV TO TRANSIT [N DOP > 6]1542 Δ NAV TRANSIT \rightarrow GPS

1750 Course adjustment for current to 295

1756 Δ NAV GPS \rightarrow TRANSIT DOP > 20

1819 EYC SAT #16. Returned to GPS

1840 Bridge called to inform that turn would begin @ about 1915Z we'll be completing a 90min turn to allow engine room to perform maintenance

1915 ~ EOL AP-04 @ $562^{\circ} 14.2431'$ @ 19:14:54
 $W 58^{\circ} 15.1788'$

2023 Begin turn to 153° . Turn will take approx. 1 hour.

2122 ~ START LINE AP-05 @ $562^{\circ} 15.318'$
 $W 58^{\circ} 13.087'$

2212Z Launch SB #4. Carrier wave, but initially no signal.

2215Z Sonobuoy #4 OK.

* 2221Z FOR AP-05 The on-line recorders are monitoring Trace 120 ~ The near Trace. They were monitoring Trace 108

Feb 10 1991

041 J

31

EW9101

(36)

2245 c/c to 168 ~ current pushing off course

2300 A shift to BUR/LARTER

2316 c/c to 116°

2345 c/c to 164°

11 February 042J

0015 c/c to 162° . Speed up to @ about 5.2 kts.

0047 c/c to 160°

0117 c/c to 158°

0128 EXC satellite ^{#14} GPS #2

0145 c/c to 156°

0342 Gun tech notified watch that gun #13 to work on; possibly #14 if necessary

0351 Gun's [#]13 & [#]14 back in water - no problems

0422 c/c 10° port to ~ 148

~~(0450 c/c 10° port to ~ 148)~~

0531 ANAV GPS → TRANSIT VDOP > 30

0533 ANAV TRANSIT → GPS

0533:55 2 shoots missed, tape not on line

0600 - watched green board in Telex panels @ TE's on drive C. The following sequence appears →

11 FEB 1991 EW9101 WATCHLOG
043J

37

→ con't from previous page

Normal status lights are lit then abnormal status lights at light labelled COR. Then Under Error Byte 2, the light labelled DTP lights. The TE then appears on the following record on the logging computer.

Also ^{→ panel on} C Drive is hanging loose on its hinges
0648

TAPE 203 mounted on C drive is last of a set of new tapes - beginning a series of recertified tapes now.

0725 Drive 'rejects' reels 204, 205, 206. Reel 207 OK. 204-206 do not exist. Approx 16 shots missed between 0725 and 0732. File 1810 = SP 1817 is last on Reel 203. File 1814 = SP 1831 is first on 207. Write ~~was~~ ring missing on tape 204 started problem

0920 EOL AP-05

0956 Hard left to avoid ice. Stbd gun array runs over small piece of ice.

1030 BOL AP-06. Course is now 322.

1100 A'd waywatch to new track

EW 9101 WATCH LOG 11 Feb, 91 042J

(38)

1140 Streamer front sinking, told bridge to increase speed. 0.5 Kt. speeds questionable

1154 C/C 316°

1245-1330 GPS #1 exc #12 satellite - Dops/Std high

1254 C/C 5° left

1256 BACK on Course 316°

1259 C/C 321°

1332 C/C 316°

1430 Temp's (beats) gave up (out of anomalous area). Turn no speeds are coming up. Do we want to slow down? Ground speed is slowing. ~ 5.4

1455 C/C 318°

1613 Bridge C/S down ~ 1.5 Kt to 4.0 Kt to maneuver around ice

1753 Δ NAV TO TRANSIT

1808 Δ NAV TO GPS {Deleted SAT 16}

1834 Deploying sonobuoy #5 off of ~~Starboard~~ gun door

1852 Sonobuoy #5 with no antenna, lost signal quickly. Deployed Sonobuoy #5A

EW 9101 WATCH HOG 11 Feb 91 042J

(39)

1930Z

- Noticed an "AS 0010" after SP# on logging monitor
 I went back as far as logged ~ don't know when it
 started ~ it is a bad channel ~ unknown #.

Birds 8, 9, 18 give varying depths (± 20) and are generally
 shallow or off scale. Joe says not to trust 'em

2020 ~ c/c to 324

203857 bad channel seems OK now

2105 c/c to 318

2322 c/c to 315°

~~0000~~ start turn 4°/min to the right (Bridge)

2359:57 End of Line AP 06 . guns &
 tape recording turned off.

043J Feb 12, 91

0102 drop to 5 ^{KTS} through H₂O (Bridge)
 was at 5.2 KTS.

0104:57 Start Auzens / Recording Track 07

0124 Exc #14 from GPS #1

0133 $\frac{1}{2}$ 135°0145 $\frac{1}{2}$ 140°

0150 de 152°

0212 $\frac{1}{2}$ 155°

0231 speed about the same for that ground.
 Keep at same ~ 5.1 $\frac{1}{2}$ H₂O.

EW 9101 WATCHLOG 12 Feb, 91 043J

(40)

0338Z - Lost 29 shot points, snook appeared to not be logging on logging computer. Tried switching drives didn't work called Joe who "C'd and corrected" problem. TAPES 255 & 256 CD NOT EXIST.

1025Z - Lost 8 shots due to Operator screwup -- we left a piece of alcohol wipe in the drive.
 EOT 275 = File 1684, SP 1683
 BOT 276 = File 1685, SP 1692

1111 EOL T (but started turning at 1105)

1120 C/c → 275°

1209 Starting turn onto line (410 mi.) 308°

1226 Beginning of line APQB

1241 Slowing from 5.5 kts ground speed to 5 kts

1300 Exclude #12 Satellite - GPS#1

1309 " " 13 " " " " , Include #12

1313 C/c 314°

1350 OK, FINALLY THE POOP ON TAPES. JAMIE & TOMMY... USE NEW ONES OVER USED ONES. SO USE RECERTIFIED (1 Box) ONES (with low errors) every fourth box of new tapes.

1430 CC 318°

1517 Δ NAV GPS → TRANSIT POP > 5

1536 Δ NAV TRANSIT → GPS

ELU9101 Watch 10x

36
(41)

0435 12 February 1991

1603 - Not going to mark reworder 4 any longer because it is causing a jam, & paper not advancing

1602 GPS #1 screen display massively distorted

1741 Deploying Sonobuoy #6 to port

1751 ΔNAV GPS → TRANSIT

1807 Δ NAV TRANS GPS

1809 Sonobuoy #6 ~~deploy~~ 6 got caught on tail buoy, no longer functional - will be tossing another

1816 Deployed Sonobuoy 6A to Port

1934 Channel 73 is low amplitude. S/N looks OK. How long?

2300 ΔWATCH

2313 start turn to finish upon ~~line~~ line (Bridge)

445 13 Feb. 1991

0007 c/c 167°

0123 c/c 162°

0120 Exc #14 on GPS #1

0525 Exc #19 on GPS #1

0612 ΔNAV GPS → TRANSIT DOPS > 8

0616 Δ NAV TRANSIT to GPS

044 J 13 Feb 91

0755 Course is now 302. Speed is 95 rpm

0815 BOL AP-10. Course is 302;
Speed is 4.2 kts.
63° 09.6073' S
58° 02.6151' W

0828 c/c to 306°

0850 c/c to 311° ~ RPM = 100

0934 Channels 29, 32 appear to have been
bad since start of AP-10.
Reel 317 - 29, 32 are ok
330 - 29, 32 bad.

1125 c/c 315°

1336 Bridge called - unit slow down to
about 5.0 kts

1351 c/c 311°

1430 c/c 307°

1512 Δ NAV GPS → TRANSIT

1534 Δ NAV TRANSIT → GPS

1612 E EOL AP-10 @ SP 1506

1646 SOL AP-11

1730 Deployed sonobuoy #7

1755 Bridge wanted to c/c to 157
to crab back to intended readings of
145. LAB asked to hold off for ~
20 min as sonobuoy still in H₂O

EW 9101

WATCH HOG

38
43

0445

13, Feb, 91

1811 - WAYPOINT 13 @ 63 00.8 S
60 30 00 W
has been entered on Olive

2337 c/c 152° to avoid ice

2342 c/c 154°

045 0010 c/c 159°

0048 c/c 162°

0059 c/c 157°

0103 c/c 154°

0140

0233 c/c 310 on course EOL AP 11

045 J 14 Feb 91

0308 SOL Line AP-12

0322 101a generator streamer
swimming low and pressure
gauge on streamer low ~1500 lbs
Speed pick up to 9.2 to bring
streamer up

Briefly streamer tension → went
to 4000 PSI

0400 currently pressure to guns has
been running low ~1850 & generally
<2000. Engine Room attempting
to remedy

0406 c/c increase to 75kts

0424 c/c to 304 from ~318

0447 c/c put to 295

EW9101 Watch Log
045J 14 February 1991

44

0510 Found true time 2 to be
10 min off actual time
- logging incorrectly on seismic
loop logged end of tape 381
(0500Z

0527 Bridge notified c/c coming
back to starboard. We may
be bobbing and weaving but
will consistently be coming
back to the right

0551 Tim checking guns 12:13
to make sure they are not crossing
0551 / → shot off on 12

0624 - Tape drive E did a funky
thing and didn't unload all
the way

0638 WENT Right 6° & returned left 6°

0650 TAPE drive E went wrong again
tape 386 did not appear to
be being written too. Tape was
spinning before shot & far more
rapidly than usual. Answer
maybe that tape was on wrong
density, attempt to check - it was

0730 c/c to 3190

0845 c/c to 3140

0930 c/c to 308 ~ strong currents

1043 ~ START TURN

63° 00.85 1384
60° 30.00

EW 9101 WATCH LOR

40

045 J ~~14~~ FEB 1991 ~~14~~

45

1045 EOL AP-12.

1050 Engine room wants warning immediately before stopping firing (right before last shot) as well as 5-10 minute warning.

1156 \approx 172 to straighten up on new line (AP-13)

1218 Increase speed a little to bring ground speed up to 5kts.

1248 \approx 166°

1310 \approx 161°

1335 \approx 158°

1508 ANAV GPS \rightarrow TRANSIT N DOP 7.5

1519 ANAV TRANSIT GPS

1535 \approx 4° to Left (154)

1633 EOL AP-13

- guns left on 13 min longer will be turning for about 1 hr to permit a gun check

1905 BOL AP-14.

1910Z Guns #13 and #14 off-line — harnesses tangled.

1914Z #13 & #14 back on line.

1920Z Gun #13 auto-firing. Coming off-line.

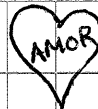
EW 9101 WATCH LOG

41

045 J



14 FEB 1991



46

2347 Engineering problems solved - increasing speed so ground speed \rightarrow 5 kts (was $\sim 4\frac{1}{2}$ kts)

0017 C/C 3321°

0059 S/C 334°

0220 C/C 330°

0404:25Z EOL AP-14

0440:30Z SOL AP-15

0450 Guns 1, 2 pulled and off to clear a possible tangle

0620 Logging computer is under much stress on the CPU as ASCII codes are being compressed to binary for backup, it would be fortuitous to check the logging window periodically to see that it is logging correctly.

0654 - gun pressure seems low - consistently 1930-1960

0710 ~ Guns 1, 2 back online ~ for how long who knows.

0730 C/C TO 094°

0805 C/C TO 098°

0832 C/C TO 092°

0908 - Drive 'C' set to wrong density. Shot/File 805 and 806 missed. No reel 450.

EW9101 WATCH LOG

046 J 15 February 1991

48

1751 DEPLOYED SONOB^{uo}BOY #101951 Deployed Sonob^{uo}BOY ~~#11~~2152 Sonob^{uo}BOY #12A launched2217 Sonob^{uo}BOY #12A Aborted

2219 " #12 launched

Time 142

62° 36.239 S 1672m

58° 24.097 W ch#8

1625.4 pit file 1210 reel 479

2321 c/c 81°

2353z SB# 13 in the water and functioning. (Sonobuoy is spelled "uo", not "ou"!)

0200 SB# 14. Sonobuoys being deployed on the hour now.

0505 c/c 4° to port from Heading 77.8

0508 Sonobuoy #15 deployed

20620 signal strength of sonobuoy decreased greatly

0640 end sonobuoy #15 record

0650 c/c to 071 from ~ 068.

0659 deployed sonobuoy #16, however recorder ~~did~~ is not printing a record.0703 streamer channel recording
Sonobuoy just kicked in 30 →

EW9101 Watch 108

047J 16 Feb 91

49

- Not certain the time @ which signal began recording

0810 - Channels 30, 31 appear to be dead on Reel 495 (from shot gather)

0905 - Soudbury #17 launched
Rec 1 d18

1109 c/c 074°

1139 c/c 077

1156 Eugene Room called, said good chance we will lose one of the compressors

lost compressor end of line AP16

1157 began turn to next WP about 2 miles early @ 1157z

1205 start turn to left to line up for next MCS line

1225 Bridge says at 9:30am will be on time
1230z

1238 c/c 007°

1705 Bridge called to inform that current is incredibly strong making c/c 110° Starboard to regain course

1808 10° c/c back to left due to really like-varying currents.

047 16 Feb 91

1945Z — Line AP-17. Joe Stennett informs the co-Chief that the gun booms hit the water on a recent roll. No damage.

2042 C/L TO 0020

2110 Z EOL AP-17 561° 31.6174 @ 210950

2114 C/L TO 006° W 5608. 5380 Tape 538

2140 STARTING TURN TO LEFT

2240 COURSE SET 150° 90RPM

2300 C/L TO 156°

2319 Start MCS Line AP-18

2322 Launch sonobuoy 18

Feb. 17, 1991

048 0000 Start course change to starboard in small increments to ~~stop~~ stop drifting off line — do not want to turn too quickly because of sonobuoy

0005 % 158°

0025 % 160°

0039 % 162°

0042 GPS#2 showing real high ALT (~120-140)

0049 C/L 1640

0051 Bridge — knocking speed down just atad was 6.2 - 5.6 kts.

0103 % 166°

048J

- 0120 Engine Room reporting one of compressors overheating. Brought down pressure slightly. 2002 Will keep an eye on it.
- 0258 EEZING to the left (port) to stay on course
- 0712 C/L to 173°
- 0724 C/L to 176°
- 0800 C/L to 172°
- 0824 Starting Turn to right
- 082511 Ended Line AP-18
- 0845 Finished Turn course = 255°
RPM = 100
- 0907 Begin Line AP-19
- 0940 Toss Sonobuoy 19
- 1015:51 No longer Recording; guns still firing. Recording system hung. Not recording 1014 Z - 1027 Z. File # reset to 0 1027 Z. Shotpoint 209-247 missed.
- 1125 C/L 252°
- 1200 Speed (5.8Kts) being reduced to (5.5Kts)
- 1236 Bridge says we dipped the port boom. We can't see the edges on the video.

EW9101 Watch log
Feb 17, 91/048J

- 1418 Noticed that gun #9 off at times. Joe S. checking on it. Broken air hose being repaired. (1429Z)
- 1432 Speed up (5.8Kb), will decrease a bit.
- 1528 Gun #9 back on line
- 1651 attempted to deepen outboard cable by setting birds to 40' (from 30').
- 1910Z SB# 20 and SB# 21 end. Continuing Line AP-19.
- 2203Z Start SB# 22. Trace 141 (receiver #1)
- 2327Z $\approx 253^\circ$
- 00003 $\approx 251^\circ$ ~~Hydro sweep~~
- 0052 System stopped logging because synchronizer accidentally switched off
- 0110 Logging restored.
- 0800 sandbox #23 deployed
- 0312 Compressor pressure running low @ 1840 @ the pop - engine room is attempting to remedy the situation,
- 0322 loss of pressure may be due to leak in gun 19, gun being pulled for repair

ENV9101 Lab Watch Log
049/FEB 1991

49

0353 pressures on compressors are back up
@ > 2000.

0430 gun 19 back in and popping

0500 sonobuoy 23 off

0508 Bridge called w/ 4° to port + c/c
to avoid shoals of 2 fathoms -
holding off on sonobuoy deployment
for this reason.

06 57 Bridge called for speed
check, will hold @ 5.0 kts for
sonobuoy deployment

0659 Bridge called making good
course of 258 to return to course
for waypoint

0719 Sonobuoy # 24 Deployed S 63° 04. 7891
reel 627 file 3756 W 59° 19. 9584

0840 c/c to 258°

0900 c/c to 256°

0918 Sonobuoy # 24 shut down ~ profiler looks BAD (w/last 20 min)
reel 632 file 4114 63° 07. 9459
59° 39. 7310

1205 c/c 255°

1245 Bridge called. Says we will pass the way-
point at 10:33 (1333 Z). We can
End line then. Streamer will
be pulled past waypoint by then.

- 1312 Called Air Gunners: Engine Room to notify will be Ending Line in 30 minutes
- 1324 Bridge Confirmed EOL time 1033am (1333Z)
Will be taking slow turn to right. Turn will be ~ 20 hours long
- 1335 End MCS Line AP-19.
Start slow turn to stbd.
- 1545 still working on guns, going around again
- 1708 Gun #1315 being replaced from a 540 → 466 chamber size
- 1839 Streamer riding very high at further sections, bridge bringing speed up slightly in an attempt to remedy. Streamer strain > 2800, at times @ 3700 lbs
- 1843 expected to be @ waypt @ 1915, will probably begin shockins at that time
- 1914 Start Line AP-20. Gun Pressure is 1985 at fire point.
- 1924 Reduce speed to 90 RPM.
- 1930 %180°
- 1925 Streamer shallow - Tim S. programmed it to dive down.
- 1937 Looks better (Streamer depth 15-32ft)

049J Feb 18, 1991

1935 Speed increased to 75 rpm - ^{Bridge} Finicallal

2010 ~~Start~~ Enatic fire on 18-19 Augurs. AS U.S. ^{Bridge}

2012 Streamer activity - Sinusoidal wave (IT's waving at us)

2045 C/C 184

2120 C/C 188

2215 Reduce speed to 90 RPM.

2241 Bridge called - Will end line in 20 minutes.
(On the hour - 2300Z) AP-20

2300 - EOL AP 20/1054 (2257:56Z)

- Bridge starting turn
- On Turn, gunners are polling #19 and fixing it on the turn. #18 will be worked on on the next line.

2314 Start line AP 21/1055

Gnr #19 still not firing (apparently)

- but air gunners say it is really

050 191ED Gnr #18 still being fixed

0019 Bridge called. Steering 340° to make 322° true.

0036 Gnr 19 is firing but has a solderoid problem, so cannot be precisely synchronized

0120 Gnr #18 temporarily redeployed, but soon recovered again because it was leaking and autofiring.

0145 Chamber changed on gnr #16
from 520 to 466

EW9101

050J Feb 19 1991

0124 \angle 335°

0200 c/s down SRPM

0204 gun 18 in & firing SP 330

0206 gun 19 out

0223 \angle 340°0242 \angle 343°0304 \angle 317° (~5° to n. fit)0517 Engine room, 10 & a compressor
2 gun's are out, possibly @
pressure below 1500 consistently0522 All guns popping, @ 4-7
at any one pop0533 JOC shutdown 2nd half of
the guns 11-20.0533 Tape 6 to on drive C began recording
@ incorrect density tape switched
automatically to drive ~~B~~ after
manually attempting to force it to
record @ correct density0544 All guns are up again, compressor
is up, firing w/ 1850 ~~0~~ → 2000 PSI0807 Streamer rising in front, strain ~3500,
Called Bridge to slow down. Is taking
it back to 95 rpm

1428 ~ cameras getting snow-clogged

EUN9101 WATCH 109

050 J 19 February 1991

1545 c/c 4° to starboard

1703 Guns 4° S out of water to
in target

1715 guns back in water

1731 - Began using delay on
seismic recorders 1:2

1940 c/c 337

change to 4.5 sec

2000 c/c to 334

2100 c/c to 330

2125 c/c to 328

2115 Switched firing lines #16+18

2145 c/c 325

2215 c/c ~~323~~ 3202240 Gun #18 going off line - changing
solenoid.

2313 Gun #18 back in the water and firing

Day
051 0018 $\approx 318^\circ$ 0105 Increasing speed by about $\frac{1}{2}$ kt \rightarrow Skits over ground0209 $\approx 314^\circ$

0323 EDL AP 21

0715 c/c 103

0840 Bridges called.
turning to get lined up. Ready to start line 6 AM
~~3000m~~ ~~1000m~~ ~~1000m~~

EW 9101 Watch log
Feb 20, 91 0515

- 0854 Bridge Called - Will be at point @ 630 Am
(0930Z)
- 0858 Finished turn. Course is 155°. Will be
Ready @ 0945Z
- 0944 C/C 158°
- 0950 SOL AP-22
- 1000 C/C 160°
- 1017 Streamer just a tad low, Called
Bridge to increase speed.
Now SMO = 4.6 Kts. Request to
go to 5.0 Kts.
- 1116 C/C 157°
- 1250 C/C 153°
- 1341 Reduce speed a little (doing 5.4 over ground
at present)
- 1453 C/C ~~153°~~ 156°
- 1639 Pulling guns 1&2 to untangle
- 1652 Guns back in water (1&2)
- 1809 NB Seismics #1, when going
to 0 delay, switch delay off with
the toggle switch in upper right
hand corner. On recorder #2
just leave 2 seconds on ~~toggle~~ wheel
and use toggle switch to turn delay
off because there is some
problem with seismics #2

EW9101

WATCH LOG

051J

Feb 20, 1991

945 C/C 147°

2015 EOL AP22

2037 Bridge Scup will take ~ 20 min to straighten out

2041 SOL AP23

2240 Sonobuoy #25 deployed

252
0031 Hydrosweep tape 11 ended
Hydrosweep tape 12 loaded.

0114 C/C 063°

0321-16 Sonobuoy 25 off

0409 EOL AP-23/1057 - keeping guns on through the turn

0447 SOL AP-24/1058 tape 1773

0511 called bridge to request increase speed, streamer hanging low
avg speeds west 4.5-4.7

0715
0825
0912
1042

C/C 326
C/C 323
C/C 328
C/C 325

1109 ^{really!} c/c - c/c 329

1153 Guns 3/4 are out

1221 Guns 3/4 back on (for how long?)

1444 EOL AP-24
Start turn to starboard

1517 Bridge called to check streamer tension - 2 2900 - 3100 waywatch speeds show average @ 6.2 50 slowing slightly to lower strain

1913Z Start turn 1950Z, try to finish turn 2015Z and start ~~turn~~ guns

1944 Turn starts 1945Z

~~1915~~ 2015 bridge called. will straighten up and speed up

2021 SOL AP25 Bridge turning 6° to right -
2130 Guns @ 8385 in³ - 520 in³ chamber back on gun #16
c/c 162

2200 c/c 159°

2240 4c 155°

2500 GPS 2 out, switched hydro sweep to GPS

0512 GPS 2 is back up, switched hydro sweep back to GPS 1

0750 c/c to 158°

Feb 22, 91

0805 c/c 154°

0810 #8 Argon is back in the boat firing

0830 c/c 150°

0920 GPS^{#1} reinitialized. It wandered off into the ocean.

0945 c/c 148°

1033 c/c 144°

1045 Reduce speed to 90 RPM

1217 c/c 148°

1336 Start slow turn to starboard

1341 End MCS Line AP-25

1401 Start MCS Line AP-26 (but turn not quite complete)

1412 On new course 035° (end of turn)

1447 Sondruoy 26 launched

1449 c/c 039°

1456 c/c 043°

#1500 Bridge says we need to alter course to starboard to stay on line. I requested that changes be made in 2° increments over a period of time to avoid major effect on sondruoy.

1658 GPS 1 and 2 are down with repairs being attempted called bridge to notify that we'll be fixing off of transit temporarily.

1708 GPS 1 back up.

1714 GPS 1 down again back to transit

ELU9101 Watch log

22 Feb. 1991 053J (Unit)

1714 pulling in guns 3 $\frac{1}{4}$ for maintenance.1723 Guns 3 $\frac{1}{4}$ back on line

1738 GPS 1 back up switch from trans

1918 Start turn. - Bridge called.

1918:26 EOL AP26

1935 Finish turn, Course 342°

1945:2 SOL AP 27

1950 c/speed 90rpm

2030 c/c 347°

2052 c/c 353°

2340 c/c 348°

0213 c/c 343

0301 Gun shop shutting off 3 $\frac{1}{4}$ to Untargile

0317 Guns back in and up

0333 Gun 12 not firing, notified gun shop

0700 EOL AP27

0715 finished turn, new Course 070°, Speed to 90 RPM

11010 Speed to 90rpm

1034 Start turn at 8:06, finish @ 8:20, start guns. go few miles

CW 9101

WATCH LOG

23 Feb 1991

0545 &

11
1108

Start turn onto new line

1131

End of turn. On line, steering 170°

1136

Start recording. MCS line AP-28

1542

alarm in tension too high of the speed up to get streamer down

1543

DSS system went down, rebooting

1545

eol and restart, slowed down a lot ship rolling and ~~over~~ dipping booms some

1546

~~end~~ streamer alarm on tension because of broken cable on tension meter and then the streamer reel began to slowly let out more leader. It wasn't chained - correct John Diab^{del} say a shackle must have broke.

system has been up & down because of slipping problems

1545 DEPTH ~~at~~ alarm 2980 on 3.5 kHz RL

1548 61 14 304S, 58 27 489W

1st long closest to when failure occurred

1609 61 15 241, 58 26 201

time @ which turned guns off again. Attempting to determine status of the situation.
No data collection for MCS

1627 able to communicate w/ streamer again. Determined section which needs repair. Working to remedy

EW9101 Watch log (Elab)
0545 23 February 1991 (cont)

1631 Captain~~ed~~ notified P.I.'s that weather was going to continue to be heavy and the gun booms must be brought in.

1700 URI Hydroseep logger crashed

- guns are being pulled in to allow booms to be swung back
magnetometer also being retrieved

1709 URI back up

1705 Magnetometer recorder off

1714 A NAV to GPS \rightarrow TRANSIT DOPs 7.6

1715 Bridge maintaining course @ 110°
guns ^{retrieved} recovered, bringing in booms.

1726 Starboard boom in, guns still in water

TADE
1738 Drives B & E are Not on line,
NEXT watch needs to load them
before bringing SURVEY again

1742 monitoring streamer depth closely
- PI requested power up on speed
from bridge @ 3.9 increasing
to about 4.5
pad for tensioner is being welded
on fantail

1745 streamer equilibrate @ shallow depths
~ 3 ft. PI request decrease of speed
to 3.0 kts @ start to bring
streamer back down

EW 9101 Watch Log

61

23 February 1991 0545 (cont)

1747 → On following watches chain on drum wheel will be checked hourly

1750 A NAV TRANSIT → GPS

1822 Returned speed to steerage (~ 3 kts)

1835 A course to $\sim 165^\circ$

1842 Increase speed $\frac{1}{2}$ kt to 3.5 kts

1855 Increase speed $\frac{1}{2}$ kt to 4

1907 Increase speed $\frac{1}{4}$ kt

1945 Front end streamer high - asked Bridge to slow down

2004Z Starting slow turn to port to head back for end of line AP-28 (position @ approximately 1500Z).

~~2100~~ 2100 Finished turn. Steer to 330° . Returning to EOL 284

2105 4 hrs to turn point. $1\frac{1}{2}$ hours for air gun deployment

2108 Increase speed $\frac{1}{2}$ kt

2210 Bad can 34. Talk of working on streamer. * Speed to stay about the same. (4/4 kts)

2326 $\approx 340^\circ$

* (replaced armored leader with 100m passive section. Removed can #34. Same (~) near-trace distance)

WATCH LOG
EW 91-01

62

055J / 24 February 1991

0115 Start turn to get on course for BuMCS Line
0208 Turn complete
0210 Start of gun re-deployment
0226 Starboard gun boom swinging out.
0250 Port gun boom swinging out.

0323 Guns are in water except for
GUN 19 which flooded, Maggie in water

0334 SOL AD286/10626 @ 1.2 nm
before the point actually logged
as the EOL of AD28/1062

0333 Gun 19 in water

0343 Streamer strain 1876 - 2100 recorded
on @ 0343

0635 Dr. John checked the chain
"chain check" affirmative

0730 C/C 156°

0740 C/C 160°

0800 C/C 154°

0807 C/speed 87rpm

0930 C/C 150°

1006 Turn at 0837^{slip time} (1137Z)

1018 C/C 156°

EW 9101 WATCH DOG
055J Feb 24, 1991

63

~~10300~~ ~~Start~~

1040 158° $\frac{1}{2}$

1107 162° $\frac{1}{2}$

1131 Start turn at end of MCS Line AP 28 B

1137 EOL

61° 47.15' N
57° 54.14' W @ 11:39:10 SP 1471 File 1470

(STREAMER probably still STRAIGHT)

→ 61° 47.34' S 57° 53.71' W For final shot
coords.

1200 Start MCS Line AP 29

1227 $\frac{1}{2}$ 070°

1335 $\frac{1}{2}$ 065°

1444 $\frac{1}{2}$ 070°

1533 - launched sonobuoys #27a / aborted
channel 10 - possibly a dud,
no strong signal

1544 launched sonobuoys #27
channel 19, Strong signal
return

1611 Guns #19 & 20 tangled so brought in and
shut down

1621 Guns 19 & 20 ON LINE

EW9101 Watch 105
 OSSJ 24 February PPA1 (COO 'L)

1709 A NAV GPS → TRANSIT (DET 10 min)

1714 Streamer strain low &
 steady

1730 GPS reinitialized A NAV TRANSIT → GPS

1900 6° to 081 heading

1925 c/c 087°

1940 Speed up to 95 RPM

1950 c/c to 081°

2005 c/c to 186°

2012 speed up to 100 RPM

2040 c/c 091°

2120 c/c 085°

2153 Gun #13 not firing. Joe & Jim working on it.
 Electrical problem.

2157 Gun #13 fixed.

2230 ~~at~~ end line, Well turn left

223011 EOL AP29 - Starting turn

2252 Final Course 345°, Reduce speed to 85 rpm

230011 SOL AP30

056
 25 Feb 0005 c/c 350
 0008 c/c 355
 0052 c/c 359

Rob L's B'day

EWING 9101 WATCH Smog

056 February 25th, 1991Rob Lartens
"Birthday of Doom"

0219 Increase speed to try and get ground speed up to 5 kts.

0403 Chain check positive

0405 o/c 5° to 10°

0530 Streamer towing @

30, 32, 31, 33, 32, 30, 32, 39, 31, 29, 31, 35, 27
despite 30-35 knot winds @
506 5.0 streamer strain 2800-3500 lb,
looks quite good despite the weather
conditions.

0600 streamer strain 3311 → 3522 / 5.5 (from 11.5 SE)
- despite high winds (> 40 kts) 506 5.3 kts
not too much roll, boom not dipping
but gun is 9-12 fowed aft or
taking a beating from the waves.
Wind speed increasing streamer
depth good except for very high streamer
section which periodically is running
considerably more shallow @ 14' to
32' of all the following sections.
This causes a periodic fluctuation where
streamer looks to come up but regains
its depth.

0743 Streamer strain increasing to about 2700-3600
at times. Called bridge to slow down 1/2 kt.

0825 o/c 349° o/speed 9.3 rpm

EW 9101 WATCH LOGGIE
Feb 25, 91 056J

66

0840 Seas picking up. Steamer decides to go up after tow. Steamer is doing the wave.

0850 ϕ 354°

0908 The steamer is down and quiet @ ~ 30'.

0930 ϕ /c 358°

0937 Steamer acting up again. Booms dipping.

0955 Steamer much better. @ 30'

1020 ϕ /c 355°

1030 Booms still dipping (for over 1 Hr) Have been pitching & rolling for over 2 hours, constantly.

1037 Marty from

1041 EOL AP30

1054 down to 40 rpm. Can't go any slower. Steamer shot up at front to near surface @ 1045 Z

1213 going to pull the booms in, Maggie as well

2258 Steamer ~~at~~ finally below surface and waving. Fish tail has been under water sporadically since 1200 Z today. We are still heading NW, away from waypoint.

057J

0146

heading to next waypoint

At current speed should be there by 7 AM

EW9101 Watch 109
26 February 1991, 0515 (Lan It)

0309 Wind speed decreasing, ^{poor} conditions abating. Expect to begin surveying sometime after 0800 local time today. Streamer behaving strain @ $\pm 2500 \pm 200$ lbs @ 506 4.4 kts. Streamer depth R from 27-39 except section closest to ship @ 117

0339 KSS30 Gravity meter is now up and running and logging

0607 Bridge called to indicate that our speed has been slowly creeping up to 4.515. Asked if this has caused any problems. No problems thus far, streamer is behaving @

30, 32, 28, 31, 30, 34, 39, 36, 34, 32, 38, 41, 22
and streamer strain @ 2200 - 2500 lbs will keep an eye on it & will notify bridge

0721 Slow down to 80 rpm

0740 Gunners up and about, beginning to deploy guns.

0800 H Sweep not ~~as~~ showing merge on URI-1

0835 Port boom deployed

0847 Starboard boom deployed

0857 1/2 speed 90 RPM

0907 1/2 speed 90 RPM, speed decreased from air gun usage

EWING 9101

WATCH SMOG

Feb 26, 91

057J

0955:15 SOL AP 3-1

0920:55 Maggie is on.

0927 Now on line.

1057 $\angle C$ 162° 1135 $\angle C$ 159°

1225 Guns #1 & 2 tangled

1247 guns back in water

1405 $\angle C$ 156°

1458 'Tightening up line' on gun #2

1545 logging computer down, noticed
Rob Blair

1545 - 1553 - gap in all data
 * logging to LAMONT logging computer
 i.e., GPS, TRANSIT, MAGGIE, Gravim
 Seismics etc.

1534 EOL AP 31/1064

* 1607 NAB1 - ~~on tapes for AP 31/1065~~
~~all tape labels are correct but~~
~~AP 31/1064~~
~~1064 is line~~
AP 31/1064

EWING 91-01

69

26 Feb 91 0575

1619:16 SOL AP32 / ¹⁰⁶⁴~~1065~~ Strike line along ~ 1500m isobath

1625 Streamer strain 3100-3400 @ 5.1 kts
depths @ # 22-40

~~1630~~

~~1640~~

1950 c/c to 257.

2021Z c/c to 259° (SB# 28 still in the water.)

2116 Slow down 1/2 kt. Streamer front at 15 ft.

2155 c/c 255

~~2200~~
2225 c/c 250° c/speed 80 rpm

2250 c/c 248°

2327 c/c 241° Drop speed a few revs to
still front DT of streamer
(had risen to 10 ft)

2335 Streamer depth control problem persists:
DT's 12-22 at surface!

0000 Streamer under control ~ Jamie said not
bad enough to re-do line.

0045 middle of streamer only went to ^{surface}~~streamer~~
DT's 20-22 rippling to end

0110 end of streamer now normal

EWING 9101

27 Feb 91

058J

0140Z SHOT 1686 DT 20 AT SURFACE
 0149Z 1711 DT 12 AT SURFACE
 0156Z 1733 DT 4 AT SURFACE
 0208Z 1769 STREAMER NORMAL
 0308Z 1947 DT 4 @ SURFACE
 0313Z 1962 STREAMER NORMAL
 0342Z 2050 STREAMER STABLE, REQUEST THAT BRIDGE
 NOT A SPEED.
 0405 2116 DT @ SURFACE
 - decreasing speed 0.5 kt.
 2407 2122 DT @ SURFACE
 DT 3 propagating down
 0414 2143 request bridge Δ speed 0.5 kts

0430 ↑ began recording above entries
to seismic tape logs

0830 c/c 241°
 0850 c/c 245°
 0910 c/s speed to 80 rpm - streamer end up a bit
 0918 c/s to 75 RPM
 Streamer front popped up
 0958 c/s 85-83 RPM
 1000 c/s 70 RPM
 1006 c/c 240°
 1032 c/c 237°
 1035 c/s 75 RPM
 1035 Sonobuoy #29 deployed

EW 9101 WATCH CLOG

71

058J Feb. 27, 91

1043 steamer came back to surface @ about 1000z,
still trying to get it down again

1653 Gun 4 down because of tangles

1656 Gun 3 down

1707 Gun 3 on, 1st down

1714 Gun 3 on

1715 Gun 2 on

2002 Sonobuoy #30 deployed

3000 Bbm gravity wasn't logged from 0500Z
today. At 1030Z it was turned on
again, but still has not logged
data since then. POB B. Checked
on it and said the gravimeter is
down. Will use KSS-33 gravity as usual.

22020 The Truetime was being logged incorrectly
on Files 5018-5051 on TAPES 1023 & 1024.
AT 2023:39, this was ~~to~~ returned to correct
date. time.

2148 ~~Speed~~ 85 rpm. Going at the fast.

2215Z End analog recording, SB#30.

2237 Sonobuoy #31 deployed

2315Z Gun #1 auto-firing. Out of the
water for repair.

0108 $\approx 251^\circ$

EW 9101 WATCH LOG
059 J 28 Feb 1991

0137 Gun #1 back in water with new O-rings fitted. Appears to be firing, but still showing 'N's' (for not firing) on most shots on CRT monitor. Showing 'E' for 'early' or 'L' for 'late' on a minority of shots.

0300 Gun #1 working OK now - did not see when it came back on line.

0326 58 62 19 810
62 13 572
true time clock & out /

0630. #02 EDL AP-33/1066
end of AP-Bransfield Straits
Survey @ 62 25.935 S
62 39.001 W
tapes 1-1045

0630 - EDL'd on logging computer, guns are still popping, attempts to SOL have failed, science officer working on problem.

For beginning of South Antarctic Peninsula Part (SAP) portion of cruise

- Sea State ≈ 3 wind
- water temp 0.6
- air compressor @ > 3000 psi
- streamer strain 3000 lbs \pm 300 lbs
- streamer towing well

0700 guns stopped firing momentarily

EW 9101 WATCH 109
059J 28 FEBRUARY 1991 (0000 't)

BEGIN SOUTH ANTARCTIC Peninsula
portion of cruise

0706.59 SOL SAP-1A/1067

@ ~~62 28~~

62 28 .396 S, 62 43 .862 W
TARE #1046

GUNS 5 & 6 being worked on

0725 C/C 217°

0727 5/6 Argons back on #4
OFF

0735 #4 Argon back on

0752 C/S 90 rpm. Streamer front up to 19 ft.

0801 C/S to 4.7 Kts

0809 C/S to 4.9 Kts

0840 C/C to 220

~~0900~~ ~~C/C~~

1000 C/C to 216°

1157 End of MCS Line SAP1A/1067

2032 C/C to ~~216°~~ 216°

2035 slowing down just a bit. Streamer front at 12 ft

2000-2100 GPS #1/2 high DOPs/STD due to
connect problem with satellites from our course

EW 9101 WATCH CLOG

74

059J 28 Feb 91 - 060J 1 March 1991

2118 C/C 212°

2300 C/A 4.5 kts, Winds blowing 30 kts

2303 C/C 215°

060

1 March 0145 C/C 218°

1991

0211 C/C 221°

0343 C/C 214

0435 Logging computer was reading
gun depth for gun 1 @ 302. Switch
gun box off on panel under
this recorder 3

060 0504 Δ NAV GPS → TRANSIT

0506 Shutting down guns 1 & 2 to untangle
Δ NAV TRANSIT → GPS

0515 Guns 1 & 2 back up

0831 Sonobuoy #33 deployed

1351 Gun #s 1 and 2 off to untangle them.

1357 Guns #s 1 and 2 firing again

1648 Δ NAV TO TRANSIT

1703 Returned to GPS

1910 C/C 227°

WATCH LOG EW9101 (MARCH 1991) (60J)

72284.0

1935 c/s to 85 RPM, Slowing down from 5.4 KTS

1955 c/c 225°

2112 c/c 223°

2240 c/c 225°

2325 c/c 223°

061 0224 Guns #s 3 and 4 off.

0230 Guns #s 3 and 4 firing again

035405 Deployed Sonobuoy #35

0451 Δ NAV TO TRANSIT

0454 Returned TO GPS (RMVd SAT 1943)

0723 c/c to 217°

0855 c/c to 212°

1130 c/c 216°

1254 crept up to 5.7 KTS backing off to 5.0 KTS

1440 c/c 218°

1816 deployed Sonobuoy #36
(#36a was aborted @ ± 1805)

2100 c/c 221°

2200 will be at waypoint

2204 EOL SAP-1B