

NORTH ATLANTIC TRANSECT

1/37

R.V. FRED H. MOORE CRUISE FM 10-3
FM-10-3

SCIENTIFIC PERSONNEL

J.D. PHILLIPS (UTIG) CHIEF SCIENTIST
F. TAYLOR "
J. SALAZAR "
G. PEARCY "
J. MCEVAN "
D. DIVINS "
H. LYNCH "
M. ILTZCHE (HOG-0)
H. VAN SANTFORD "
J. VANG "
J. GUTIERREZ "

WATCH LIST

	8-12	12-4	4-8
LAB {	VANG	MCEVAN	LYNCH
	GUTIERREZ	SALAZAR	VAN SANTFORD
AIRGUNS	PEARLY	DIVINS	ILTZCHE
SCIENTIST	8-2	2-8	
IN	Phillips	TAYLOR	
CHIEF	BLUE - STREAMER	PARTY TEAMS	- GOLD
	VANG		LYNCH
	GUTIERREZ		DIVINS
	SALAZAR	Phillips	ILTZCHE
	PEARCY	S.I.C.	TAYLOR
	MCEVAN		VAN SANTFORD

ALL TIMES GMT (UNLESS NOTED)

TIME 5 OCT SPD / HDG

2230 DEPART SAN JUAN PUERTO RICO PIER 14

245 CLEAR SEA BUOY STEAMING TO STREAMER
DEPLOYMENT SITE FOR LINE 42
19°30'N 65°20'W

6.5/030

FM 10-3

2/37

5 Oct

Time (Z)

SPD/HOG

2300 CHECK OUT SAT NAVIGATION SYSTEM/DOPPLAR SONAR
X-DUCSE Down @ 2310

62/030

2315 DOPPLAR CALIBRATED AGAINST RADAR FIXES 7200 ft/nm

6 OCT 1981

1045 ARRIVE AT DEPLOYMENT SITE 19°31'N 65°20'

1132 BIRDS ON #1 SEC.

1136 2 BIRDS ON ACT. #1

1138 DI ON #1

1204 1st DI seis check OK

1207 reel jumper off - cable going out

1216 bird 2 on section 8

1225 bird 3 on section 16

1238 working on section 24

(1325 section 24 patched

1333 bird on section 32

1345 DI calibration in section 40 (#3)

1351 DI #3 calibrated

1355 seis check on DI #3

1355 #1 - weak #16 - continuous sinewave (60 cycles)

1356 reel jumper disconnected - bird on section 40

1412 bird on section 48

1423 bird on section 56

1428 patching section #57

1434 57 patched + going out

1441 section 64 being birded

1446 section 64 birded

1448 DI calibration on section 65

1451 reel jumper connected - DI #4 calibrating

1453 seis check on DI #4 done + calibrated

1456 reel jumper disconnected - cable going out

(1503 section 72 birded

1517 winch stopped at section 80

1518 bird on sec 80 - going out

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6 Oct 81

time Zhdg/spd

1523 section 85 - DI #5
 reel jumper connected
 1527 seis check + DI#5 calibrated
 1529 reel jumper disconnected
 1635 section 87 patched
 1637 bird on 88
 1648 refill oil of section #91.
 1656 section #91 is going out.
 1701 section #96 - DI #6 Calibrated
 reel jumper connected
 1709 Bird on section #96
 1750 all streamer is in water
 # Winch is secured also.

1800Z turning left to heading 090°
 1900Z gyro repeater error 05.3° low

1913Z dead slow both engines
 1920Z increase speed to 4 kts

1920Z guns firing - Eddie's Logger on line
 + maggie out

2120Z 1ST SHOT TAPE # ~~103001~~ 103001

2125Z C/C to 000 @ 5°/min

2144Z S/C 000

2200Z 1st shot LINE 42

2210 RAYTHEON SINGLE CHAN. MONITOR NOT FUNCTIONING
 7 Oct 81 WILL USE EPC

0019 CHANGE DFS RECORD LENGTH TO 15sec

0057 all towing gear is O.K.

271°/4.0

088°/3.8
088°/00

357°/5.1

FM 10-3
7 Oct 81

4

Time Z

hdg/spd

0251Z

Tape Drive #2 has been down SINCE
BEGINNING OF LINE 42

000/5.0

0400

McEwen, Salazar, Phillips ON WATCH

0415

CHECKED ALL TOWING DECK GEAR

003/5.1

0530

TP DRIVE #2 STILL DOWN

0620Z

checked all towing deck gear 002/5.1

* 0700

EPC SINGLE CH MONITOR NOW RECORDING ON 8 SEC SWEEP SCALE

0801Z

check out towing gear - OLC 358°/4.8

0845Z

TRACE #26 is not functioning according to
the CAMERA RECORDS - WEAK
TRACE #1 WEAK TRACE #16 - 60 cycle

0903Z

TOWS ARE OK

357°/4.7

1030Z

TOWS ARE OK

003°/4.7

1200Z

Phillips, Yang, Gutierrez on watch

1312Z

TOWS ARE OK

001°/4.8

1410Z

TOWS ARE OK

001°/4.7

1450

3.5 E/S NOW OPERATING - 2400-2800 fm

Depth Interval @ 8 ms pulse

5 L GAIN

0db POWER OUTPUT

1600Z

Phillips, Salazar + McEwen on watch

1736Z

all towing gear checked out OK

1800

DEEP HYDROPHONE NOW TOWING FROM

STB T-BEAM. ATTEMPTING

TO SET UP RECORDING ON DFS AX4
AND TRACE 16

FM 10-3

7/8 Oct 81

Time Zhdg/spd1830 MAGNETOMETER OFF TO REPAIR
REEL JUMPER CABLE CONNECTOR

000/5.0

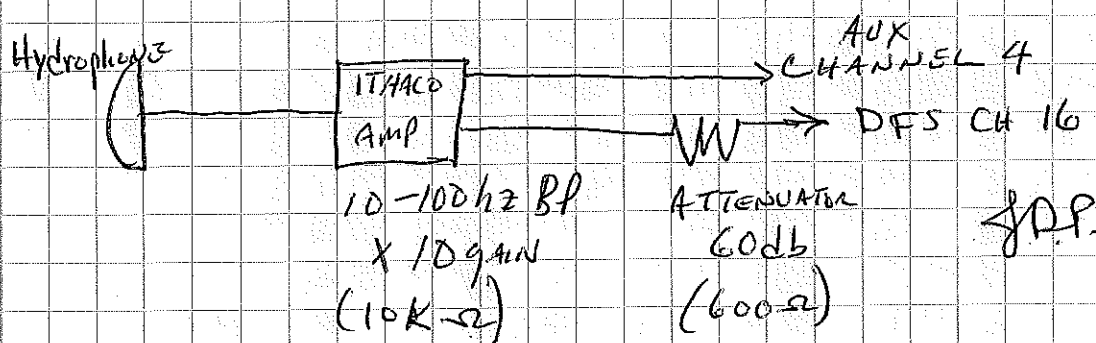
2000 LYNCH, VAN SANFORD, PHILLIPS ON WATCH

2100 AIR GUN #3 OFF FOR REPAIR NOT FIRING
SINCE ~20302345Z GUN NO. 3 (466 in³) JACK IN WATER
& FUNCTIONINGOct 8. 0000 Z

Taylor, Yang, & Gutierrez on watch

DEEP HYDROPHONE NOW BEING RECORDED
ON DFS CHANNEL 16 AND AUX CHANNEL 4

WITH FOLLOWING INPUT CONFIGURATION



0258Z TOWS ARE O.K.

355°/4.7

0400Z McEwen, Salazar & Taylor
on watch0415Z Tossing Sonobuoy 23
22° 04.979N 065° 29.129Wsb# 1 ch# 23
freq 167.125 MHz

0429Z TOWS ARE O.K.

355°/5.0

FM10-3

8 Oct 81

time zhdg / spd

0640z Checked perimeter; All secure. JPS

0827z TOUR of TOWS - All OK

0844z Commence Left Turn At 5°/min

0846z Guns off for AN oil Change
Last shot line # 42 is 4170

0853z Left Turn changed Rate to 3°/min

0922z Steady ON 275°
Guns Not Ready

S/C 275°

0934:00z Begin Line # 43 At shot pt. 025

1101z Decrease Speed to ~4.8 Kts through
the water

1116z c/c to 270°

S/C 270°

1200 Phillips, YANG, ~~PH~~ GUTIERREZ ON WATCH

1307z Three guns shooting now

4.8 / 265°

Two	1000 in ³	guns	NOW FIRING
One	466 in ³	gun	

1200

ALL SYSTEM NORMAL EXCEPT

TAPE DRIVE # DOWN & NO RAYTHEON MONITOR
(USING EPC WITH MAX 8.0 SEC SWEEP)

N.B.

AUX 1

BLAST PHASE

GUN 1

2

" "

GUN 2

3

SONOBUOY

4

DEEP HYDROPHONE

2)° C

FM10-3

8/9 Oct 81

time Z

hdg/spd

1600Z McEuen, Salazar → Phillips on watch

1758Z all towing gear checked out ok

1928Z turning right 8° to avoid ship 277°/5.0

2004:00 LAST SHOT ON LINE 43

2005 C/C @ 3°/min to 180

2050 S/C 180 WITH STREAMER ASTERN

2053 1ST SHOT LINE 44

2045 DOPPLER SONAR READING HIGH 22.0 Kts!!

2115

DOPPLER OK NOW
SHOT OFF/ON

22° 24.830 N
66° 31.520 W

OVERHEATING
ALARM ON

2111

ALL GUNS OFF - PRESSURE/ALARM ON
COMPRESSOR OVERHEATING

2129:30 RESUME SHOOTING

2302 SB #2 CH 13

22 16.165
66 26.266

Oct. 9 0000Z Taylor, Yang & Gutierrez on watch

0318Z TOUR of the Tows OK

0400Z Julie & John on watch

0459 00Z SB #3 CH 18

163.375

Lat. N 21. 42.447
Long. W 066 28.841

180°/4.7

0530Z C/C 180

0535Z TOUR of Tows OK

FM 10-3

time Z

9 Oct. 81

tdg / spr

0557 Z C/S to 4.2 thru the water

180/4.2

0711 Z all gear towing ok

186/4.4

0842 Z HARRY Adjusting tape drive
PUT IN NEW T-BAR RELAY~~0900:30 Z~~

0900 Z

First shot after Adjustments

0907 Z SONOBuoy SB # 4 over

CHAN 29

~ LAT N 21° 23.560

~ Long -066° 31.816

1145 Z

TOWS ARE OK

169°

1204 Z

C/C 180°

180°/4.5
4.8

1200 Z

Phillips, Yang & Gutierrez on watch.

1300 Z

BATTERY to 2 sec Sweep scale

13:2600

SONOBuoy SB # 5 CHAN 20

~ LAT 21° 04.56

~ Long -066° 32.38

NOT RECORDED ON

TAPE !!

1415

AUDIO VOLUME CONTROL ON UT RECK TURNED DOWN
DECK TOWING GEAR CHECKED - OKTHIS AFFECTS
SIGNAL LEVEL GOING
ON DFS

TAPE !!

15:30 Z

SONOBuoy #5 OFF

Agili

This must be
CHANGED

1600 Z

Salazar, McEwen & Phillips on watch

1632:30 Z

SB # 6

Chan 29

~ 20° 50.160 N

~ -66° 32.560 W

1850 Z

all gear towing properly

FM 10-3

9

9 Oct 81

NAT 81-44

time Zhdg/spd

1945 Z

sb # 7 ch # 23

20° 35.951 N

- 066° 29.595 W

178°/5.6

2058

AIR GUN # 1 OFF TO CHECK OIL
IN COMPRESSOR

2115

AIR GUN # 1 ON

2300 Z

SONOBuoy # 8 IN WATER

20° 19.957

066° 29.624

178/5.6

2333

RETARD GUN FIRE TIME 2 SEC TO
SYNCHRONIZE ON EVEN 30 SEC INTERVAL
WITH MINUTE

2348:30

CHANGE DFS RECORD LENGTH TO
20 SEC WITH NO DELAY IN
ORDER TO GET DEEP HYDROPHONE SOURCE
WAVELET AND Buoy OUT TO 3 HOURS

0000 Z

10 OCT

81

TAYLOR, YANG, GUTIERREZ
ON WATCH

185/5.9

0100 Z

C/C 188°

188°/6.0

0109 Z

DECREASE SPED 25/25 RPM

188°/5.8

0136 Z

ALL TOWS ON BACK DECK ARE O.K.

187°/5.4

0326 Z

~~Switch~~
~~Change~~ generator

all 43 guns are off.

033901 Z

to switch generator

all 3 guns are on

DFS IV starts to record.

FM 10-3

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TIME Z

Hdg / Spd

1200 Z MCEWAN, SALAZAR ON Watch

189°/5.7

0510 Z Deck Tour; TOWS OK

0515 Z Pump ALARM Guns off

0527:00 Z GUNS ON Line & Recording

188/6.0

0531:30 Z Record length = 15 secs

0604 Z C/K 180°

180°/5.5

0644 Z all gear towing properly

180°/5.5

0800 Z ~~0800 Z~~ Pump ALARM Guns down

0807 Z DFS stops Recording

0820 Z TOWS ARE OK

180°/5.5

0850:00 Z Resume Recording

Two tapes will have # 3120 because
tape label was not advanced

0855 Z Tape drive down

0900 Z Resume Recording

1007 Z TOWS ARE OK

180°/5.7

1101 Z C/K 176°

176°/5.9

1200 Z Phillips, YANG, GUTIERREZ ON WATCH
Seismic, 3.5 E/S, MAGNETICS
& SAT/DOPPLER NAVIGATION SYS
SATISFACTORY

1421 Z TOWS are O.K.

178°/5.9

FM 10-3
10 Oct. '81

11

<u>Time Z</u>	<u>Hdg/Spd.</u>
1400Z	McEwen, Salazar + Phillips on watch
1700Z	Changed EPC single channel monitor to no delay. JPL
1740Z	all gear towing properly 172/6.4
2030:00	LAST SHOT ON LINE 44 BECN 171/5.8 270° LOOP TURN TO LEFT @ 3°/min TO POSITION SHIP FOR LINE 45 (Course \approx 270°)
2037:00	LAST SHOT ON TAPES GUNS OFF FOR MAINTENANCE TAPE DRIVER 11 FOR DESKREWING TAPES MAY SOLVE TAPE DRIVER #2 PROBLEM
2050	DISCOVERED THAT DATA LOGGER TAPE DRIVE HAD PROBABLY NOT RECORDED SINCE 103231 (10 OCT) LAST SCREEN DISPLAY NO BELL SOUNDED NOR DID PRINTER SHOW TD OFF LINE - IT WAS NOT OFF LINE IN FACT FORTUNATELY SILENT 700 PRINTER RECORDED ALL DATA!!
2120	S/C 000 000/5.0
2200	C/C @ 3°/min to 270
2220	GUN ON
2231.30	FIRST SHOT ON LINE 45
2315	SHIP CROSSES LINE 44
2345	STREAMER CROSSES 44 C/C TO 315 TO HEAD TOWARD POINT Q (19°30'N 67°30'N)

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11 OCT 81

TIME Z

Hdg / Spd

0000Z

Taylor Yang Gutierrez ON Watch 318/5.

0035Z

C/C 308°

308°/5.3

0159Z

C/C 314°

314°/5.4

0326Z

All Gear Towing Correctly

315°/5.6

0356Z

C/C 50/min to Port
Evasive MANEUVER

0400Z

Taylor Mceuen, Salazar
on watch.

289°/5.5

0405Z

C/C back to 315°

315°/5.4

0540Z

TOWS ARE O.K.

310°/5.3

0600Z

LYNCH, VAN SANTFORD, TAYLOR ON WATCH

0650Z

C/C 318°

318°/5.3

0738Z

TOWS ARE O.K.

319°/5.3

0740Z

INCREASE Speed C/S to 5.8

318°/5.8

0820Z

Speed Creeping up,
Decrease Speed C/S to 5.9

319/5.9

0955Z

TOWS ARE OK

315/5.9

1200Z

Phillips VAN-GUTIERREZ ON WATCH

SEISMIC/MAGNETICS/3.5 BATHYMETRY/NAVIG-OK

1400Z

DECK TOW GEAR CHECKED - OK

325/5.0

144530Z

C/C 000°/4.9

145102Z

Last shot of Line 45

325/4.9

FM 10-3
11/12 OCT 81

Time Z

HDG/SPD

14:52:31 First shot of Line 46
1600Z Salazar, McEuen + Phillips on watch
1730Z all gear towing properly
1823 GUN FIRE TIME RETARD 6 sec
TO SYNCHRONIZE WITH EVEN MIN
1900Z all gear towing properly
2030 Small Bit of TRAP snagged on
MAGGIE CABLE NO EFFECT OF
MEASUREMENTS - LITTLE DRAG EFFECT
WILL PROBABLY COME LOOSE. WILL
WATCH FOR PROBLEMS

2308 GUN # 4 OFF DIESEL
2336 " " ON INJECTOR PROBLEMS

OCT 12

0015 SB # 9 into WATER

CHANNEL 28
LAT N 20° 16.436
LONG W 67° 29.541

00:29Z SB # 9 OFF the AIR

0100Z Pressure drop 1900 → 1700 ON GUNS

00:42Z SB # 10 into WATER
CHANNEL 10

LAT N 20° 19.751
LONG W 67 29.617

0050Z SB # 10 off the AIR CAUGHT IN TAIL BUOY

0106:30Z SB # 11 CHANNEL 29

LAT 20° 20.051
LONG 67° 29.677

OFF AIR @ 0112 5.9/35.9
CAUGHT IN TAIL BUOY!!!

FM 10-3
12 Oct. 81

14

Time Z		HOG/SPD
0130 Z	SB #12 CHANNEL 21 IN WATER 20° 22.414N 67° 29.812W CAUGHT IN TAIL BUOY	359/6.0
0400 Z	SALAZAR MCKEAN TAYLOR WATCH	000°/5.7
0405 Z	ALL GEAR TOWING WELL	001/5.7
0425 Z	INCREASE Speed by ~ 0.5 KT	001/6.1
~0445 Z	POWER FAILURE - Pump Alarm GUNS DOWN	
0448 Z	INCREASE SPEED to ~ 6.2 Kts	002°/6.2
0452 ⁰⁰ Z	Resume Recording	002°/6.3
0630 Z	TOWS ARE OK	000/6.0
0715 ⁰⁰ Z	SB- #13 CHANNEL 28 LAT N 20° 50.767 Long W 67° 29.821	000/6.2
0756 Z	Decrease Spd 0.2 Kts.	359/5.9
0800 Z	VAN SANTFORD, LYNCH, TAYLOR ON WATCH	
0826 Z	Compressor Shut down Recording Stops	
0842 Z	Recording Again	358/5.6
0925 Z	TOWS ARE OK	000/5.9
1108 Z	TOWS ARE OK	000/5.9
1110 Z	C/C to 003°	003/5.8
1224 Z	S/C to 6.25 knots for Conding Traffic	

FM 10-3

12 Oct. 81

Time Z

Hdg/spd

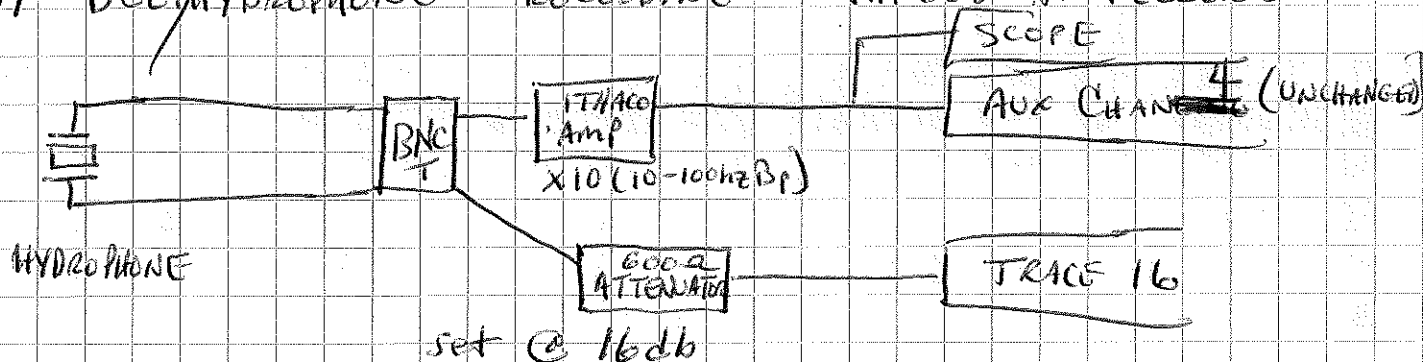
~~1300Z~~

SB# 14, Channel 13. into water 7.1/5.8

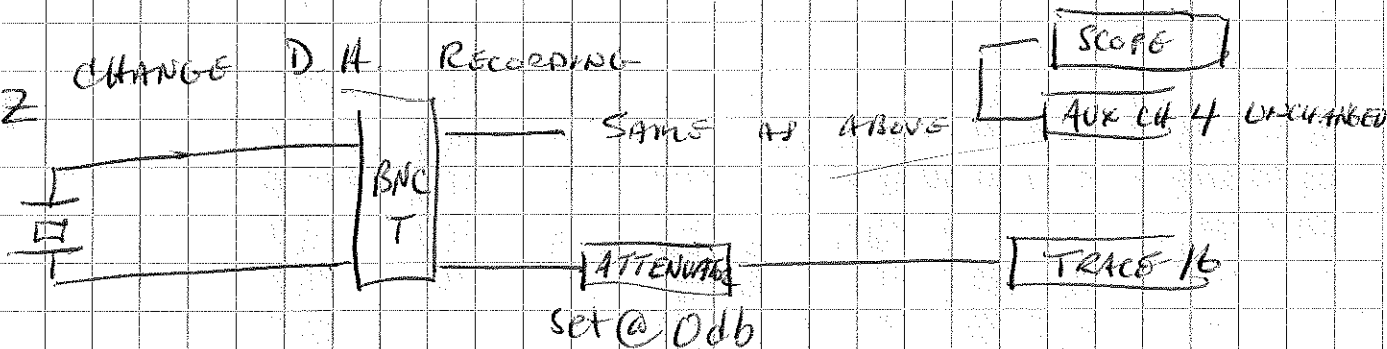
Lat. N. $21^{\circ} 19.926'$ Lon. W. $67^{\circ} 31.002'$

1336Z Change DFSTV Record length to 20sec. 7.1/5.7

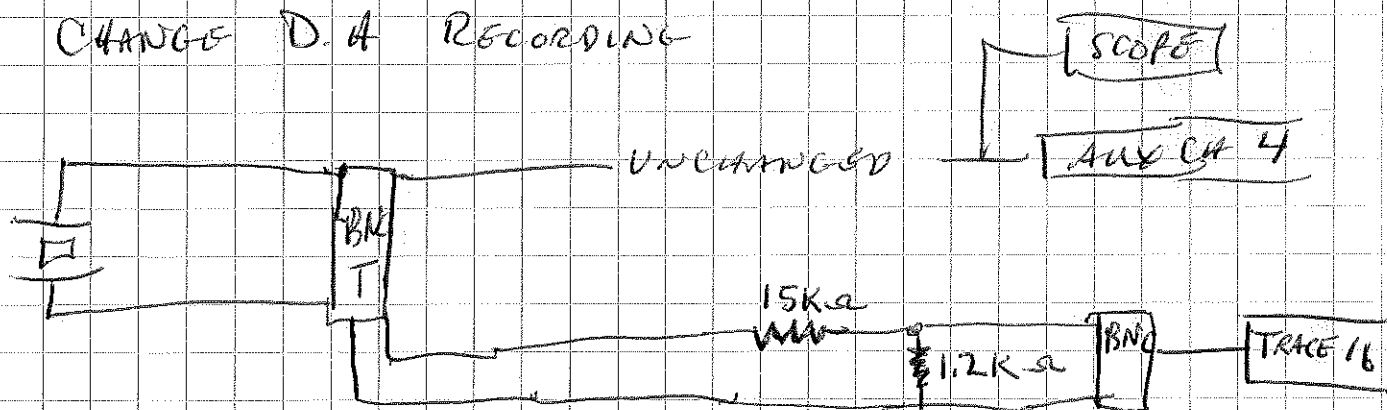
1339 DEEPHYDROPHONE RECORDING CHANGED AS FOLLOWS



1350Z CHANGE D.A. RECORDING



1400 CHANGE D.A. RECORDING



FM10-3

time Z

12/13 Oct 81

hdg/spd

1600Z

Salazar, McEwen & Phillips on watch

1645Z

all gear towing ok

1700Z

all gear towing ok

1945:00Z

SB #15

IN WATER CH 29

21° 53.164N 067 29.751W

CAUGHT IN TAIL BUOY
OFF AIR-NOISY @ 1952

2020Z SB #16

IN WATER CH 23

21° 56.150 67 29.707

2041

~~NOISY~~ NOISY BUOY CAUGHT
IN STREAMER AGAIN

2205Z

all gear towing properly

2252Z

CHANGE DFS RECORDING TO 15 SEC RECORD
15 SEC RECORD

2059Z

SB #17 IN WATER N.G. NEAR REEL

2320

GUN #1 OFF STB COMPRESSOR
SURGING PROBLEMS -

Oct. 13,

0000Z

Taylor, Yang & Gutierrez on watch

0140:30

LAST SHOT ON LINE #46

LAT 22° 22.250 N

Long - 67° 29.685 W

0153

C/C 5°/min to left

0208

ALL GEAR TOWING PROPERLY

0214

S/C 267°

267°/6.3

0221

Decrease Speed by 0.5 Kt

0347

C/C 253

253°/5.8

FM 10-3

17

TIME Z	13 OCT 1981	Hdg/Spd
0400Z	TAYLOR, McEuan, SA/AZAR ON Watch	254/5.8
0405Z	Increase Spd to ~ 6.3 Kts.	254/6.3
0506Z	TOWS ARE OK	253/5.9
0615Z	C/C to 245°	245/6.1
0726Z	C/C 5°/min to heading 090°	
0800Z	Guns FIRING PLYNCH, VAN SANTford joint Taylor	
0807Z	Steady on 090°	090/6.0
0812Z	START LINE 47 - Recording 5 sec delay, then 10 sec Record	090/6.0
0816Z	All Gear Towing Well	
0822 0821Z	Recording off	
0823Z	Resume Recording	
0833Z	C/C to 098° C/S to ~ 5.0 Kts.	098/5.0
~ 0841Z	TAPE DRIVE PROBLEMS Recording stopped	
0843:30	New Tape - Recording Resumed	098/4.9
08:48	Aft END OF STREAMER RISING INCR Spd by 0.5 Kt.	098/5.5
0904Z	C/C to 100°	100/5.5
1024Z	Increase Spd to 5.8	095/5.8

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13 OCT 1981

TIME Z

Hdg/Spd

1056 Z

TOWS ARE OK

093/5.6

1200 Z

Phillips, Yang & Gutierrez on watch

~~1219:50 Z~~

S.B. # 18 in water

12:30 Z

Channel 30

~~Lat N 22° 15.624'~~~~Long W 67° 37.227'~~

Lat N 22° 15.697'

Long W 67° 36.144'

~~093/6.8~~

091/5.9

12:37 Z

Reset the DFSTV system GUN FIRE TIMES
to start at zero & half minute interval

14:57 Z

Record length of DFSTV changes to 15^{sec}
For SOWBOUY # 18

1540

DFS Record Length to 20 sec
SALL GOOD RETURNS ON SB#18!

1600 Z

Phillips, Salazar + McEwen on watch

1612

DFS Rec Length back to 10 sec

1740 Z

all gear towing properly

1830 Z

SOWBOUY # 19

162.250 MHz

Channel 1

22° 14.740 N

67° 02.596 W

1850:30 Z

DISCOVERED TRACE 24 POLARITY INVERTED
SINCE BEGINNING OF CRUISE! (LEG BANYWAY)
CHANGED POLARITY TO CORRECT POSITION

1955 Z

all gear towing properly

2021

INCREASE DFS REC. LENGTH TO 20 sec.

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13 Oct 1981

time Zhdg/spd

2315 ALL DECK/TOWING GEAR CHECKED - OK 090/5.0

2338 CHANGE DFS REC. LENGTH TO 10 sec.

0000 14 OCT 1981 083/5.6
TAYLOR, YANG, GUTIERREZ ON WATCH

0030 INCREASE SPD 25 RPM ON 2 080/6.0

0143 Z DECR SPD 25/2 080/5.8
DJs 5 & 6 Show ~ 20-25

0202 Z DECR SPD SLIGHTLY 079/5.7

0220 Z INCR SPD SLIGHTLY 079/5.8

0310 Z ALL TOWS ARE OK 080/5.7

0347 Z C/C 0830 083/5.8

0400 Z McELAN-SALAZAR join Taylor ON WATCH 083/5.8

0421:30 SB # 20
CA 13LAT. W, 22° 15.008
Long N 66° 09.900451:00 First shot of Tape # 3239
Recmd DATA Length increased to 20 secs.

0459 TOWS ARE OK 084/5.9

0512 Problems with compressor
maintaining constant
RPM's. May shut Down in 082/4.9
half an hour.

FM 10-3

14 OCT 1981

TIME Z		Hdg / Spd
0526	C/C to 086°	086° / 5.9
0536	DECR. Spd by 0.2-0.4 Kts.	
0557	C/C to 089°	089° / 5.9
0715	TOWS ARE OK	089 / 5.8
0739	Change to 10 sec records	
0800	Lynch, VAN SANTford join Taylor ON WATCH	089 / 5.8
0819	#1 Gun off AT this time Compressor Problems	
0850	C/C 092°	092 / 5.8
0932	C/C 098°	098° / 5.8
1000:30	Compressor & Gun #1 firing	099° / 4.7
1003	INCR Speed by 0.5 KT	099 / 5.5
1023	TOWS ARE OK	099 / 5.5
1029	Doppler must be malfunctioning Spd VARIES 3.0-6.2 Kts thru WATER	
1043 ³⁰	New Tape 20 sec Rec. Lgth.	
1053 ⁰⁰	SB #21 CA 6	
	LAT N 22 16.388 Long W 65 35.340	} Doppler wrong, so this P.R. position may be wrong
	Backtrack from next SAT Fix	

FM 10-3

Time Z

14/Oct 81
15

Hdg / Spd

1117Z C/C to 102°

102°/5.6

1200Z Phillips, Yang & Gutierrez on watch

1507Z DFS System record length changes
to 10 second.

1600Z Phillips, McEuen + Salazar on watch

1748Z all gear towing properly

1755 END LINE 47 C/C 180 @ 1755

181131 1ST SHOT LINE 48 185/5.0
2 GUNS ONLY #1 - 1000 in.
#2 - 466

1845 #4 GUN BACK ON

2000 VAN SANTFORD, LYNCH PHILLIPS ON WATCH

2020Z GUN #1 OFF

2220 DECK/TOWING GEAR CHECKED - OK
STREAMER 30° TO STBOct 15 0000 TAYLOR, YANG, GUTTIEREZ ON WATCH
0002Z GUN NO. 1 ON

0020 Gun no 1 off

0024 Begin Rt. Turn 5°/min to 270°

0027 Increase Record Delay to 6 secs.

0058 BEGIN Line # 49 S/C 275° 275/5.6

0110 C/C to 265 265/4.9
0115 TOWS ARE OK
0148 #4 GUN BACK ON

FM10-3

15 OCT 81

TIME Z

Hdg/spd

0321 Z C/S - incr. spd. of 0.5 Kt 260/5.9
C/C to ~ 260°

0400 Z Jaylon, Salangan → M^CEwer on watch

0434 Z Decrease Spd to ~ 4 kts to Avoid
Another ship.

0505 Z Incr Spd to 5.0 Kts 260/5.0

0514 Z Incr Spd to 6.0 Kts

0516 C/C to 264° ~~264°/6.0~~
264°/6.5

0544:30 Incr Rec. Lgth to 20 secs

0640⁰⁰ SB # 22
Ch. 28

07 N 21 44.945
W 65 23.020

0715 TOWS ARE OK

0725 Incr Spd to ~ 0.3 kts

0856 C/C to 255 255/6.5

0937 #1 Gun Off -

0939 Tape change Set Rec Lgth to 10 secs.

1018 TOWS ARE OK

1028 C/C 250° 250/6.5

1130 C/C 254° 254/6.5

NORTH ATLANTIC TRANSECT

23

FM 10-3

15 OCT 81

Time

SPO/HDG

1200Z

Phillips, CUTIEREE & YANG ON WATCH

1201

ALL GUNS OFF

S.O/270

1205

#2 & 4 GUNS BACK ON

1210

GUN ON

1315Z

S.B. # 23 in water
Channel 6

Lat N $21^{\circ} 44.751'$
Long. W $65^{\circ} 57.430'$

6.5/252

1330

SB #24 @ CHANNEL #1 ~~IN~~ IN WATER

Lat N $21^{\circ} 44.637'$
Long W $65^{\circ} 58.731'$

6.5/258

1538

STB COMPRESSOR DOWN
GUN # OFF

1543

ALL GUNS OFF

1550:00

#2 & #4 GUN BACK UP

1600Z

Phillips, McQuar + Salazar on watch

1630Z

discovered that we haven't been
able to record the deep by dropsonde
since $\approx 1500Z$

WIRE BREAK IN CABLE OR
AT MAXIMUM FLUX

263 / 5.3

1745Z

Sb # 25 ch # 1

2144.666W
4620.801N

FM10-3

15 Oct 81

time Zhdg/spd1755Z
1804Zall tows check out OK 289°/3.5
gun #1 on

1840

ATTEMPTED TO BRING IN DEEP HYDROPHONE
FISH DISCOVERED STEEL TOW CABLE
BROKEN. THIS PROBABLY ACCOUNTS
FOR FAILURE OF DEEP HYDROPHONE
THIS AM (\approx 1500Z)

2040

SB #25 FINISHED > 26 sec T.I.
6+20

2055

GUN #4 OFF TO RECOVER
DEEP HYDROPHONE FISH

2110

SLOW TO DEAD SLOW ON 1 ENGINE
TO PULL IN DEEP HYDROPHONE
FISH BY HAND!!
(#300)

2200

DEEP HYDROPHONE FISH IN
TAG LINE WINCHED IN
ON T-BEAM WINCH
(Too heavy to pull by HAND!!)

2205

GUN #4 BACK IN WATER

2208

GUN #4, 2, 1 ALL FIRING

2210

INCREASE SPEED TO 5KTS

Oct. 16

0000Z

Taylor, Yang & Gutierrez on watch

0100⁰⁰ZSB #26 Channel 18
LAT N 21° 43.270
Long W 66° 55.192285°/6.1
} Good SAT. Fix
AT 0055Z CAME
IN after this DR.

FM 10-3

Time Z

16 Oct 81

Hdg/Spd.

0030 c/Rec Lgth to 20 secs
0126 All Guns OFF

0131 Guns #1, 2 ~~OFF~~ ON

287/6.0

0136³⁰ Airgun #4 on

0153 Deck Spd by ≈ 0.5 Kts.

285/5.7

0223Z All Tows are O.K.

283/5.9

0230 Gun #1 OFF

0232

0400 TAYLOR McEuen i SALAZAR on watch. 288/4.8

0422³⁰ Reduce Rec. Lgth to 10 SECS

287/5.9

0613 TOWS ARE OK

285/6.1

0618

SB #27

Ch. 20

Lat N $21^{\circ} 47.950$

Long W $67^{\circ} 25.443$

Realign with
SAT FIX AT

0620

Rec Lgth INCR to 20 SECS.

0630

Deck Spd by ~ 0.75 Kts.

0635

SB #27 off the air

0641³⁰

~~SB #28~~

SB #28 Channel 16

N $21^{\circ} 48'$

W $67^{\circ} 27'$

0645

SB #28 NEVER CAME ON AIR

SB #27 BACK ON the AIR

260/5.8

ON Channel 21!

FM 10-3

TIME Z

16 Oct 1981

Hdg/Spd.

0748

TOWS ARE OK

260/5.6

0833

C/C to 2750

275/5.8

0910 Z

SB #27 off the Air

0919³⁰

New TAPE - Change Rec. Length to 10secs

0927

All TOWS ARE OK

276/5.5

1107 Z

Gun #1 off, #4 ON

1147

C/C to 270

270/5.5

1200 Z

Phillips, Young & Gutierrez on watch

1210

ALL GUNS FIRING GUNS #1, 2 & 4

1328³⁰

LAST SHOT LINE 49

1329:30 Z

FIRST SHOT LINE 50

1400 Z

Phillips, McEuen & Salazar on watch

2002

FIRE/BOAT DRILL

ENGINEER SHOT OFF COMPRESSOR

WATER PUMP !!

ALARMS GALORE !!

2002

ALL GUNS DOWN

ADVISED CAPT/ENG.

2007

ALL GUNS UP

NOT TO SHUT POWER

OFF 100 KW WITH

TELLING LAB

FIRST !!

2210

C/C 090

END LINE 50

0000

Oct 17, 1981

Taylor, Yang Gutierrez on watch

0028

INCR Spd to Avoid another vessel 100/6.5

0130

TOWS ARE OK

FM 10-3

TIME Z

17 OCT 1981

Hdg/Spd

0231

C/C to 093

093/6.1

0300

SB #29 Channel 29

089/6.0

DR 0300

LAT N 21° 10.449

Long W 67° 39.547

0331

0350

C/C to 084°

084/6.0

0401

INCR Rec Lgth to 20 secs

0445

TOWS ARE OK

0548

INCR SPD \approx 0.4 Kts

082/6.3

0556

SB #29 off the AIR

0606

C/C to 075°

075/6.5

0612

Change Rec Lgth to 10 secs

0626

Channel or Trace 1 is NOISY/peculiar RONGALVO

0642

Front of Streamer TOO Shallow

Deck Spd \approx 0.5 Kt

075/5.7

0700

INCR Spd by \approx 0.3 Kts

075/5.7

0800

Van Santford, Lynch, Taylor on Watch

075/5.7

0815

TOWS ARE OK

0845

~~C/C TO 084°~~~~084/5.7~~

CANCEL C/C - SAT Fix places in 0.5 N mi S of 21° 10'

0927

C/C to 0810

081°/5.7

0943

TOWS ARE O.K.

FM 10-3
OCT 17, 1981

TIME Z

Hdg / Spd

1030Z

CK to 085°

085/5.7

1450:00

SB# 30

Ch# 1

21° 10.001 N
066° 39.325 W

1535

CHANGE DFS TO 20 sec Rec Length

1600Z

Phillips, Salazar + McEver on watch

1730Z

DECREASE SPD TO DEAD SLOW ON 085/3.5

2 ENGINES TO AVOID SHIP TRAFFIC

1735Z

RESUME SPD TO 5 KTS

085/5.2

1750Z

all tugs checked out OK

1815

SB# 30 DECLARED DEAD

1903 - 1910

DATA LOGGER OFF TAPE
Drive DOWN

2310

GUN# 4 OFF FOR COMPRESSOR SHUT DOWN
OIL CHECKS

2340

GUN# 4 ON ALL 3 GUNS FIRING

0000

OCT 18, 1981
Taylor, Yang, Gutierrez on watch

092/5.8

002030

Logger off Temporarily

0135

Tows OK

014200

SB# 31 Ch 29

LAT N 21 10.09

Long. W 65° 37.6

0253

Change tapes - Incr. Rec. Lgth to 20 Secs

FM 10-3

TIME Z

Oct. 18, 1981

Hdg/Spd

03:28

GA/VO Rec. shows excessive delay and loss of upper part of record. 2 more ga/vo Records were O.K.

0300Z

C/C to 085°

085°/5.8

0410Z

Logger Tape Not Running, MAY have been off since 0203Z

0418

C/C to 088°

088°/5.7

0504

SB # 31 off the AIR

085°/5.7

0544Z

C/C to 093°

093°/5.7

0745

TOWS ARE OK

090°/5.7

0800

VanBantford, Lynch, Taylor on Watch

094°/5.7

0800

C/C to 097°

097°/5.8

0900

Switch off Port Engine Stbd Only

0908

TOWS ARE OK

090°/6.0

0915

DEcrease Spd slightly 6.2 → 5.7

091°/5.8

0945

Incr Spd ~ 0.3 Kts

090°/6.3

0956

C/C to 095° (Drifted down to 088)

095°/6.4

1015

C/C to ≈ 180° (Rt. Turn) @ 5°/min

1025

TOWS ARE OK END LINES @ 1015Z

1034

S/C Begin Line # 52

155°/6.1

N 21 08.570

W 64 56.390

1040

Decr Spd by ≈ 0.5 Kt

153°/5.7

1044

C/C to 157

157°/5.5

FM 10-3
OCT 18/19 1981

TIME Z		Hdg/Spd
1059	c/c to 165°	165°/5.8
1115	c/c to 160°	160°/5.8
1140	c/c to 164°	164°/5.8
1200Z	Phillips, Yang & Gutierrez on watch.	
	Logger down from 1556Z - 1619Z	
1600Z	Phillips, McEuen + Salazar on watch	
1620Z	all tows check out ok	
1830Z	END Line 53.52	190°/5.9
		c/c 270° @ 3°/min
1842Z	Stopping turn so ship can pass.	
	START 1900Z	Line 53 S/C 270°/5.0
		Hdg 262
1907Z - 2006Z	Logger down	
2000	VAN SANTOED, LYNCH, Phillips ON WATCH	
0000	Taylor, Yang, Gutierrez ON WATCH	259°/5.2
0001	SB#32 CH. 23 LAT. N 20° 29.977	
	Long W 65° 22.9	
0015:30	Tape change - Change Rec. Lgth to 20 sec	
0200	TOWS ARE OK	
0207	c/c to 270°	270°/5.3

OCT.
19.

Fm 10-3
19 OCT, 1981

31

TIME Z

Htg/Spd

0230

c/c to 272°

272/5.2

0307

INCR SPD 25 RPM / 2

271/5.7

0320

SB # 32 still there!

0325

SB # 32 off the AIR

0332⁰⁰

Change tape & Rec Lgth to 10 secs

274/5.7

0345

c/s to \approx 5.2 Kts

274/5.2

0400Z

Taylor, McEuen + Salazar on watch

0429-0434Z

logger down - during tape change # 103386

0600

SB # 33 Ch. 24

LAT N 20. 29. 202

Long. W 65. 53. 048

0617

SB # 33 caught by streamer & killed

0640

BACK ON LINE SB # 33 but very strong static as if being dragged.

0730

TOWS ARE OK

c/c

264/5.3

0745

SB # 34 Ch. 28

264/5.3

D.R. Lat. N. 20 30.581
Long W 66 01.993

0800

Van Sanford, Lynch, Taylor on watch

264/5.3

0839

Change Rec Lgth to 20 secs on new tape

0845

TOWS ARE OK c/c slightly ON SAT Fix
CHANGING weather conditions

260/5.2

Fm 10-3

OCT 19, 1981

Hdg/Spd

TIME Z

1120 Z

TOWS Behaving Properly

260/5.4

1129 Z

SB# 34 still trans/receiving well. May be related to our Rel. slow Spd/H2O and the wind in our direction.

1150 Z

SB# 34 off the Air

1200 Z

Phillips, Young, Gutierrez on watch

1200 Z

SB# 35 Ch. 17

260/5.3

LAT N 20° 29.666
LONG W 66° 22.975

1505 Z

SB# 35 DECLARED DEAD (R.I.P.)

1600 Z

Phillips, McEuen + Salazar on watch

1630 Z

SB# 36 - ch# 26

20 29.067 W - 066 44.876 N

274°/5.5K

1735

Tows CHECKED - OK

275°/5.6K

Eddie's Logger down from 1832:33Z - 1844:33Z

1930 Z

tows checkout - OK

271°/5.7K

2000

Phillips, Lynett Van SANTARD ON WATCH

2040

SB# 36 DECLARED DEAD

2100:00Z

SB# 37 Ch 30 IN WATER

20° 30.331 N 67° 06.662 W

2104

GUN# 4 OFF SYB COMPRESSOR
DOWN BROKEN BOLT!! YUK!!

FM 10-3

time Z

NAT 81-53

19 Oct 81

hdg/spd

2133:30 Z

gun 4 back on line
shot pt # 3381

0000

Taylor, Yang, Gutierrez on watch

0012

c/rec lgt to 10 secs

0114

GUN #4 off - oil check

0140 Z

GUN #4 Back on.

0143

Increase Spd 25/2 C/S

273/6.1

~~034~~

0330

C/C to 275°

275/6.0

0452

C/S - incr by ≈ 0.3 Rts

0505

All GEAR Towing Properly

0535

Gun # 1 off

Eddies Jigger down 0537 Z - 0615 Z

0626

Gun # 3 (466) on line
* 1 on deck

0639

Gun # 3 ~~***~~ 1 off

0720

C/C - Turn Rt 3°/min to $\approx 000^\circ$ DECK GAUGE
READINGS

0723

Gun # 3 on GUNS # 2 (466), 3 (466) & 4 (1000)
Now firing @ 1950psi 1980psi 1960psi

0745

S/C ~~0050~~ 357° Begin Line 54
DECR Spd (C/S) 25 RPN/2 357/5.2

0806

!! TAPE NOT CHANGED - LINE Button Not Advanced
C/C to 349° 349/5

FM 10-3

TIME Z

NAT 20 OCT 1981

Hdg/Spd

0955

C/C to 000

000/5.4

1000

TOWS ARE OK

1020

C/S INCR. 25/2

000/5.6

1037

C/C to 003

003/5.6

1053

C/S INCR. ~ 15/2

002/5.7

1105

C/S INCR. ~ 15/2

003/5.9

1135

C/C TURN RT @ 3°/min to ~ 090°

1200Z

START LINE 55

083/5.9

1600Z

McEwen, Salazar, Phillips ON WATCH

1608 -

1636Z Logger down

1650 -

TOWS CHECKED - OK

2000Z

Lynch, Van Santford, Phillips ON WATCH

2100:00Z

SB#38 CH 18 IN WATER

20°50.039N

67°14.633W

0000

21 OCT 1981

TAYLOR, YANG, GUTIERREZ WATCH 088/5.8

0105

C/S INCR SPD 25/2

089/6.2

FM 10-3
21 OCT 1981

TIME Z		Hdg/Spd
0515	TOWS ARE DOING WELL	087/6.2
0545	c/c to 093	093/6.4
0603	Checked Tows	093°-5.8kts
0730	c/c back to 093 (drifted down to 085 as DR indicated our approach to 20°50')	093/6.3
0855	DECR SPD -25RPM/2	
0900	c/c to 097	097/6.0
1015	GEAR TOWING CORRECTLY	095/6.5
1200Z	Phillips, Yang & Boutierrey on watch	
1215Z	Ends of line # 55	151/6.5
1230Z	Starts of line # 56	192/6.5
1400Z	Phillips, McEuen + Salay an on watch	
1620Z	tows check out A-OK	
1920Z	c/c 270	
1930Z	END LINE 56 20 14.912 N -066 00.012 W	220°/5.0K
2000Z	Phillips, Lynch, Van SANFORD ON WATCH	

FM 10-3
22 OCT 1981

TIME Z		Hdg/Spd
0000	Gutierrez, Yang, Taylor ON WATCH	257/6.4
0116	C/C to 270	270/6.4
0223	C/C to 275°	275°/6.5
0229	C/C to 280°	280°/6.5
0245	C/C to 285	285/6.5
0300	SB # 39 Ch. 6 LAT. N 20° 13.544' Long W 66° 40.701	285/6.5
0327	DECR SPD -25/2 C/S	285/6.2
03	INCR REC Lgth to 20 SEC	
0400	McEWAN, SALAZAR, Taylor ON WATCH	
0401	C/C to ~270°	272°/6.2
	C/Rec Lgth to 20 SECS	
0630	All Gear Towing Properly	272/6.1
0640	CAN still hear SB#39 Pat 23 on 25 secs	
0721:32	C/Rec. Lgth to 10 SECS. SB#39 dead	
0730	C/C to 190 @ 3°/MIN	
0800	Van Santford, Lynch, Taylor	
0748	→ NAT 81-58 begins	175/5.8
0810		
0812		5/C 175/5.8
0830	C/C to	178/5.8
0842	C/C to 190	
0847	C/S -25/2	189/5.8

FM 10-3
22 OCT 1981

TIME Z		Hdg / Spd
0845	TOWS ARE OK.	190/5.7
1000	C/C 40 180	180/5.6
1123	C/C 40 176°	176°/5.7
1202	C/S +25 RPM/2	5.9/175
1215	C/S +25 RPM/2	6.1/175
1600Z	M'Ever, Phillips + Salazar on watch	
1618Z	gun # 4 not firing	
1640 Z	gun # 4 on Line.	
1645 Z	EPC single channel monitor delay from 4sec to 2 sec.	
1719 Z	Gun # 2 off Line	
1725 Z	Gun # 4 off Line	
1731 Z		
1733 Z	gun # 1 off - End Line 58.	
1738	ALL GUNS ABOARD	
2015	STREAMER ABOARD & SECURED	
2025	HEADING FOR SAN JUAN	137/11.0

END

WATCHES SECURED
ONLY E/S OPERATING
3/ NAVIGATION

FM 10-3