

Mid-Ocean Dynamics
Experiment
AC 42 Box 2 Folder 72

Dennis Moore : M0DE-1 log Book,
March 9 - July 21, 1973



\$4.50

THIS BOOK BELONGS TO

MIT MOPE Office

CLASS OF _____

HARVARD COOPERATIVE SOCIETY
CAMBRIDGE, MASS.

MODE-I LOG

MIT mode Office (54-417)

M. O. J. ...

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March 9, 1973 12:30 P.M. Entry by Dennis Moore

Jean Filloux called from Ft. Lauderdale - Hunt departure delayed due to generator failure. New generator shipped by air from St. Louis. Installation to be complete by midnite March 9. Sail at midnite March 9 or A.M. March 10.

Due to delay of Hunt departure it is possible to get Logan-C maintenance instructions to Hunt before departure. Mr. Ambroseno of EpSCO bringing xerox copy of maintenance information to Logan Airport at 1 PM March 9. Williams to meet him and DASH (Delta Airlines Special Handling) material to Jean Filloux at Ft. Lauderdale airport on Delta Flite 1253, 9 March. Filloux to pick up at 6 P.M.

Additional information on Hunt ^{from Filloux.} Hunt speed now estimated at approx. 7 knots. Increases time between stations.

Vacquier has only 2 magnetometers, not 3. One of these will be used only 1/2 time. Harvey will not go out until Hunt ~~III~~.

MARCH 9, '73 2:30 P.M.

ENTRY BY SUSAN ASHTON

ATTEMPT TO TELECOPY TO WHOI + HARVARD —
SIMULTANEOUSLY. VOICE RECEPTION FINE ON
HOT LINE, TELECOPY IS EXTREMELY POOR.

Filloux Lt. March 10 12:30 AM

D Moor

Suggest MODE Exec Comm
call M.A.S. directly on Hunt crisis,
MODE scientists^{in Ft. Lauderdale} are beginning to wonder
what is going on. Suggest we
call to express our own doubt.

What should Filloux's attitude
be? Please advise immediately.

Generator still in St. Louis at 8 AM
March 10.

Filloux says preparation of ship started
much too late. Should have been
completely checked out by March 7,
and ready to go up until Friday
Scientists were not losing anything.

Now they losing. Up til now
Filloux has not pressed because of this.

DWM call Nova. William Campbell to pick
up Filloux in a small boat & bring him
to Nova Lab so he can use phone
there. #305-927-1621.

Robinson - Weekend Contact 3/10-11
603-763-5941.

% Livingstone
Winn Hill Rd
Sunapee.

except NPF
1:15 All E.C. members notified to go to Hot Line Phone
Hot Line call set for 1:45 PM. 3/10
Filloux called back. Talked to Hansen -
Hansen mentioned prior trouble with Tracer
- went to higher up in the company.
Got satisfactory response from them.

WSR will get name and number of
MAS president for us by 1:45

Fofinoff - 540-2839 - D.E.S.C.

Got NPF at home - Scheduled to complete at 2 PM. Will go to Hot Line

2 pm March 10

Filloux on conference phone

E.C. (-Wunsch) on Hot Line

Filloux reviews history.

Ronald Mosey - Project Supervisor
at MMS.

Sailing in Biscayne Bay
Boat has radio
but no name
Miami Marine Sp.
~~Boat~~

B [John C. Ploegert - Pres. MMS
6120 Almond Terrace
587-9409

Charles Gattas 989-0737
~~587-2083~~

Mr Edwin Canter 587-2043
VP Shipyard.

March 10

3:30 PM Filloux called back to report that generator is on the way and departure is now set for 7 AM Sunday March 11. He actually expects departure by noon Sunday. He will call D Moore at home before ship ~~sates~~ sails.

HS & FB have gone home. DWM to call them only if something changes. DWM to keep after Gallas et. al.

1600 Local Time March 10

DWM called Hot Line Center
FW reports.

HLC talked to two ships at sea. Weather Forecasts from Kindley coming a/c. No weather maps for facsimile yet. Can only transmit 10" x 10" fac.

CHAIN

Completed release ~~lowerings~~
At 1300 Zulu setting of mooring #25 was in progress.

Sched for later Recover 474
Set #1 CTD's proceed to position
of mooring #8. 0500 Z March 11

Researcher

1200 GMT No CTD's casts
 completed, Minor elec. difficulties.
 Heading for $29^{\circ}08' N$ $69^{\circ} W$
 On March 9 Float #13 set at
 $27^{\circ}42.3' N$ $70^{\circ}53.5' W$ Time: 1455 Z

10 March Launch #14 $28^{\circ}40.2' N$ $70^{\circ}40.0' W$
 0712 Z.

Tudor Hill ~~is~~ can here
 #12 and #4 but not #13 and #14

On Hot Line Telecopy Problem

Jim Mitchell 548-5972

DWM tried twice to call J Mitchell
 Line was busy.

March 11, 1973 Dennis Moore

8:45 AM Jean Filloux called to
 say Hunt would depart ~ 1200.

March 11, 1973

Demie Moore

10:30 AM DWM talked to F Webster at
Aot Line Center

Researcher has launched 5 floats (#13, 14,
to date. Only 1 of them (#17) is
being heard at Tudor Hill Bermuda.

Chain work proceeding satisfactorily.
Full status report March 12

The governor of Bermuda was
murdered at midnite last nite
March 10. This has caused some
sort of alert status at Kindley
field and we are unable to
transmit facsimile material.

March 11 11:45

Rossby

Jurks Head Inn, Grand Turk.

D Moore

Hear's

3

new floats

Doesn't know which one's yet.

Message for Richardson - J Erich can
land on Grand Turk.

Messages to Remy P.R. and Eleuthera
message at Tudor Hill - Approve by Youse - Transmit
by NAUFAC

Tracor MAS - Mr. Collier called

Noon March 11 New Generator in.

Bad Thrust on one bearing, has to be taken out and properly shimmed. Generator works but want to correct thrust before sailing. Estimate 4 P.M.

Mr Collier 305 - 523 - 2540

Routing for St George's

176 + 23 + 5D

Op 176 +

TC Hamilton

12:15
March 11

NPF will try line test ~~to~~^{to} Bermuda at 1800 Z March 11. This according to Dorson.

DWM talked to Dorson - Reported to him that T Rossby has 3 new floats - Doesn't know which one they are. Also report Hunt delay another 4 hours.

MARCH 11 2015

Dave Dorson - via Am Radio:

On grand turk they heard 7 flocks:
4/12/13/14/12/12/19

Ask J. to get hold of Don Jones.

22.20 ZULU JM → TRACOR: Huphill Flere.

23.25 Mr Collie: Hunt will sail with bow

MARCH 12

0100

Hunt Sailing.

Mr. C. H. ... 305 - 523 - 2540

Rating of ... St. George's

at 1000 ... This ...

swim ... to ...
that ...
have ...
Hunt ...

March 12 1510 Z F Webster
 Hot Line Communication Schedule - Radio
 1300 Z Test Signal for Tuning
 1310 Z Weather
 1315 Z Researcher
 1330 Z Chain
 1350 Z Hunt
 1410 Z Discovery or Eastward
 1430 Z Trident
 1500 Z Traffic List + Listening Watch
 1600 Z Mode Radio Off
 1800 Z Traffic List + Listening Watch
 1930 Z Test Signal for Tuning
 1945 Z Weather + Gen. Messages
 2000 Z Traffic List + Listening Watch /
 Facsimile
 2200 Z MODE Radio Off.

No schedule for domestic networks yet.
 FW request DWM. call Jim Mitchell

Dorson requests Diane Dow Yale - Get position
 of Float #4 and Float #12
 Return to Hot Line Center

Diane Dale Yale

1 HLPhone Floor 12 28° 18.7' W March 12
66° 58.7' N

Floor 4 28° 27.1' W March 12
67° 21.0' N

March 13 1500 Z

Exec Comm.

DWM check on Trident

Bathymetric Charts to Hot Line Center

Crease Request

Series 5 Norway, Trinidad, W. Dakota

Status of stations & Prop. Dist.

Trident Sailed March 12 2005 Z

Summary WK #1

Ships in area

Ch dep. WH on 6

1 CTD station on shelf

Arrive MODE 3/10

Set moor 25, 1, 8

Recover 2 site m, 474 473

2 CTD sta at moor.

Res Dep Miami 3/8

Arrive MODE 3/19

Launch Floats 13, 14, 18, 19, 17, 7

Test IES

set 2 AOML Tide Gauges

Hunt depart March 12 0100 Z

WK #2

March 13

Ch has set moor 15 and 16

CTD at each moor site

Res has set floats # 16, 20

floats in 125 Km red ring 1 at center.

Phone Co. Ref - Complain about Telecopy

Mr. Tiihonen N.E. Tel. 743-5801

Mr. Ed Harrington, ~~NE Tel~~

Adam Beatrice ^{Night Shift} RCA, NY.

1-212-363-4232

Ch. Eng. RCA Jim Snow }³⁰

~~John~~

FW - Summary of work done

March 12 2030Z ~~12~~ Hot Line phone Bermuda only
connected to WHOT.

Beatrice suggests

Mr. John Santorelli at TelCo Boston

617-743-5951

is man to deal with.

to change patch

to Demi from Hunt: 13 MARCH 1350 Z
 All sci. personnel ~~was~~ able to make good
 use of time allowing delay. No program
 adversely affected by late arrival in
 Mode area.

Ph Filloux

1
 to Demi.

STI system is working on the
 researcher.

MARCH 14 1645 Z

(Susan)

COPY OF MESSAGE FROM SCARLET ON
 TRIDENT

MOORING 21 TO BE SET AT 2300 Z 16 MARCH
 OR

1100 Z 17 MARCH

THIS MESSAGE SENT TO CARLMARK + SEXTON
 - FROM K. DALY - A445 CARLMARK HAS BEEN TOLD
 THAT SUBMARINE WAS REROUTED.

MARCH 14 1700 Z

(Susan)

Messages from HLC for H. Rossby

- Hunt 14 MARCH 1350 Z

- from Baker: Please keep us posted re: progress of inverted echo sounder

- Researcher 14 March
Gill Grumm

MARCH 15 2100 Z

Susan

From PAUL TRATTANI 202-426-9093

- FOR SCARLET - ^{RE:} ROSSETTE SAMPLER TO ACCOMPANY ~~TESTING~~ STD. STD SYSTEM

fine - rosette sampling system failed under pressure test.

Parts of rosette already at WHOI - NOIC will send PYLON with STD tomorrow (16 MARCH) - message relayed to Scarlet via

K. Daly WHO/

MARCH 16 SUMMARY OF WEEK 9-16.CHAIN:

MARCH 7: 1 CTD ON SHELF

MARCH 8: ECHOSOUNDING ON SITE D (CALIBR. TEST)

" 9: TESTING RELEASE ON WAY TO MODE

" 10: PREP. RELEASE

" 11: SET MOORING # 25 (WHOI 480)
RECOVERED SITE MAINT. MO. (WHOI 474)

" 12: CTD # 3
RECOVERED WHOI 473
SET MODE # 8

" 13: CTD # 4 ~~at~~ C 7
CTD # 5 at G 10
SET MO. # 15
SET MO # 16

" 14 SET # 11
CTD # 6 at K 3

" 15 SET # 12
SET # 13, Recovered turned as nylon shot
below release parted. no equ. lost

15: (cont.) : CTD AT E2

16: PLAN : TO SET #14, RESET 13
ETD FOR SITE D.

RESEARCHER:

MARCH 8 : DEPART MIAMI

9 : LAUNCHED SOPAR 13

↓ 14

↓ 18

11 17

↓ 19

↓ 7

~~RECOVERED 2M CONSTAT~~ ^{TERM} ~~MADE STAYS~~

TEST LAUNCH OF IES.

12: SET 2 HOML TIDE GAUGES

12: SET 2 SOPAR FLOATS

13: ECHO S. CANNOT BE RECALLED

14: COMMENCING STD OUTER SURVEY

WHILE WAITING FOR IES AND

FLOAT 4, 12 TO SURFACE.

15: STD STATION AT D5, C6, B6, B7

HUNT:

MARCH 12: AFTER DELAY LEFT 0100Z
 14 UNDERWAY TO MODE: SPEED 8 kn
 15: INSTALLED SIO ELECTRIC FIELD
 INSTR.
 INSTALLED WHOI MAGNETOMETER
PLAN 16: TO INSTALL SIO ICPP AND
 HARVARD PG AT CENTRAL MOONING

DISCOVERY: WORKING EAST OF BERMUDA ON
 NON-MODE PROGRAM: RADIO CONTACT

TRIDENT:

MARCH 17

1530 ~~16~~ MORNING CHECK TO BERMUDA: NO MESS.

1550 Bermuda to Dahlen MIT:
 "All Receivers set successfully, Bob had
 message given to Dahlen at home"

2030 from Bermuda: no contact with Johns ~~contact~~ Hopkins,
 Francis wants to transmit data and can't.
 Bermuda will contact W.HOI to resolve this

2100 Phone at W.HOI is being re-wired and ~~and~~ they
 will be incommunicado until 5 p.m. (2300)
 Johns Hopkins and Harvard cannot be reached

March 19 Dennis Moor I think this is garbled. James Crease
 could not reach Bretherton on Saturday to
 transmit data to him.

March 18

- 1310 from WHOI: H. Stommel called to explain that until the afternoon he can be reached at WHOI. In the afternoon he and A. Robinson will be at his home.
- 1400 from Bermuda: Researcher sought contact with Rossby at Yale. Arrangements made. He will stand by at 1900
- 1410 from Bermuda: Researcher confirmed 1900 as alright.
- 1440 to WHOI: asked for correction of data on con 8.
- 1450 to WHOI: What happened to con 7 and con 11?
(answer in kbcpsy book)
- 2100 from Bermuda: correction for CON 9; E 10 = 611

1610Z March 19

23

James Crease gave Dennis Moore following additions to CON 10

Float 12 1445 Z 28° 11.9 N

March 17 7 05.9 W ✓

Position on recovery - 67?

Float 4 1804 Z 28° 23.0 N

March 17 67° 20.1 W

1730Z Dennis Moore just concluded
one hour reading data to Francis ~~Brotherton~~
Brotherton - All float ^{into} isotherm depths that
are presently available.

1945Z James Crease called - Von Heerzen
magnetometer in contact with NTO floats
It apparently puts out acoustic signal
identical to NTO interrogate signal.
D Moore alerted Von Heerzen who will call
John Swallow. Von Heerzen suggests Paul Murray on
The Hunt is the person to contact to
straighten out the problem. D Moore
called Swallow and told him to expect
to hear from Von Heerzen.

21900 FROM Yale

Flot # 16 :

3/16 / 1000	27 8.6	69 9.8	✓
3/18 / 1000	27 11.9	69.11.0	✓
3/19 / 1000	27 13.4	69 10.8	✓

Flot # 17

3/16 / 1000	28 45.4	68 37.8	✓
3/17 / 1000	28 44.4	68 38.0	✓

MARCH 20 : SUMMARY 3/16 - 3/19

CHAIN: Set mooring 13 (MARCH 15) and
14 (MARCH 16)

3/17 - 18 WORKING northward to site D in
heavy seas and force 9-10 winds
3/19 ON WAY TO WOODS HOLE

RESEARCHER

3/16 Recovered two ES. STD stations at
grid points E 10, F 10, F 11.

3/17 Unable to recover float 4. Did not
surface on time release.

20 MARCH 1973 1530Z

Phone # for AR² in Tucson, Ariz.

HOTEL: 602-327-7341

UMV of ARIZ: 602-884-2751

(ask for DR. ODISHAW)

20 March 1610 Z

E.C. meeting all members
except ARR

J.O. Williams gave summary
of activities March 16-19.

HM Stimmel says we really want
to know more general kinds of things.

Mooring - How many out?

P - How many inner & outer stations done?

Flots - How many flots out now?

F Bretherton suggest we compile
~~set~~ list of ?s for Hot Line Center.

? For Hot Line Center

1. What is p coverage compared
E plan. (As of Tues. 12 stations behind).
2. Hunt info seems incomplete
Trouble i Baker release?
Trouble i IGPP Capsule?
Revised Hunt schedule - Ask FW.
3. Hunt speed - Why is it
slow and what is the impact
on rest of the cruise plan?
4. Status of floats 7 and 17?

FB wants to know significance of
Yale float positions?

Time of fixes?

Different dates for diff. ^{local listening stations} ~~positions~~

- What does this mean.

F.B. says Baltimore phone company only
got instructions to switch to 4 lines
yesterday - Will take 2 days in purchasing
- No schedule for the work.

F Webster - No info on Yale & Hopkins phone
changes -

Notes decision today not to send facs to
ships until further notice. Represents big effort in Bermuda.

From now on at 1900 Z daily

HLC will send summaries to all the ships by voice.

CW suggests summaries of what has been done vs. what should have been done.

(A) ? FB asks about IE Sounders.

(A) CW asks why two Baker gauges ~~in the boat~~ in the center. Is this a change in plan?

(A) FB notes Th. Panel looked at minimode plan again. Suggested to Crease that some floats be set at 4000 m depth over both rough and smooth Topog. One from each level to be set at 4000 m. instead. (= Total of 3 at 4000 meters). DWM to ask Swallow if this has been accepted

General Problem - How do changes in plan get agreed on and publicized.

(A) DWM to ask all PI's for written statements of any changes in exp. plan. If at sea, send explicit message to MIT office.

Gold Book Production Schedule - DWM now has the ball.

(A) Ask Sturges about impact of slow Hunt speed.

(A) How was von Heerzen - NIO conflict resolved?

20 MARCH 1973 2130 Z

CREASE TRYING TO PATCH D. DORSON
 WHO TO RESEARCHER
 WHO 1 HOTLINE OUT OF ORDER

21 March 2000 Z

Crease Rosdy Moore
Bottom Experiment. where do echo sounders go?
($27^{\circ}40'N$ $71^{\circ}40'W$ - location of H₂₃)

3 sources of echo sounder positions
don't agree. What is correct?

Rosdy says "overview" is correct.
Crease will straighten it out.

MANEUVER 22:

18⁵⁰ ^{WHO - Susan} Chain is leaving tomorrow 08⁰⁰
due to 65 miles wind at site B

20⁰⁰ Bermuda: what is plan for
U Hawaii instrument?

20⁵⁰ Cowey U. N. Hampshire: ask
JM to call back

Summary - MARCH 20 - MARCH 22

By MARCH 22: 17 MOORED BUOY
 2 TIDE GAUGES
 21 INV E.S.
 3 STD ELECTRIC FLUX
 1 WH Magnetic
~~1 STD Magnetic~~
 3 Harvard P6
 3 I GPP

30

STD STATIONS as of MARCH 21
 TRIDENT 6
 RESEARCHER 26

CTD STATIONS
 CHAIN 9

 41 MARCH 21

1450 Z March 23 Day 82

Exec Comm

Wunsch, Robinson, Brotherton, Moore (Williams)

Rev Tues meeting.

New?

Does T Rossby have new
Yala positions?

? Slow Hunt speed. —

? Ask Charlie Gattas —

? Has WHOI magnetometer been recovered.
How stable is the freq.?

Routine Agenda

Written Agenda + Written Summary of last meeting.

DM 2. Presentation of Agenda (Written)

DM 1. Written Minutes + Disc of Actions Taken.

JWilliams 3. Overall Summary + ~~Review~~ since last week

Cumulative Graphs Req. Info a. th moorings ~~at~~ - CMs inch bottom

b. P gauges

c. All the rest of bottom exp

d. SOTAR floats out - ^{Plan} In water
3 lines on graph. Functioning

e. # of STD/CTD station

1. Inner x 3000 m
2. Outer Bottom

f. Airdropsondes

Flites

% data rec.

g. Profiles - Sanford + Pischapsky

h. Katz Tows

— Plan changes
of accomplishments

DM 4. Review since last week. - Reading of Reports ^{Cons}

5. Problem Identification + Agenda Additions

6. Act on Agenda

7. Contact # S + E. C. Plans.

FB 7. Scientific Review.

8. Other Exec. Business

For Today 5. Problems 7. p-int. 8. other E. B.

Bottom Exp

Trid-Hunt Equip.

Hunt Speed

Releases

Chair Delay

E. Office

E. Officer #2

Politics + Fatigue

Telephone

Gold Book

Movie

USSR

Mr Sinopoli

Tues Agenda

Item #8 First.

E. Office DWM explains his feelings
and unhappiness.

ARR - We aren't in trouble yet.

Around the fringes we've been sloppy.
Some serious communications problems.

Troika meetings need to be re-established.

No body on MODE Ex. Of. staff
who has real organizational reliability.

E. O. #2 Report from ARR on status.

In the meantime we try for some temporary
help.

DWM Telephone - Can we make an
acoustic coupler not involving telephone
electronics - Neergard.

ARR (A) ✓ Russians - NPF to call FOMIN

(A) DWM check \bar{e} Collins on Movie.

ARR (A) Mr. Sinopoli - ARR + HS center.

DWM (A) Tues Agenda - DWM + J Williams work out this weeks.

DWM (A) Set new navig. mooring if, one ^{present} is lost. - Action before CHAIN sails

DWM (A) DWM Ask James about Trid - Hunt problem - Foresee any problems on Hunt II.

Rec to R Heinmiller

And because
P program
is falling behind,
of ~~MA~~ STD, CHAIN should
take ETD's when laying moorings.
CHAIN will be late to Bermuda
Time to be taken out of CHAIN III,
between Katz' tours - Discovery
will help inner coverage, western
side (2nd coverage). Note diplomacy needed.

ARR (A)

Follow-up
Contact Nick F.

Message to Dick

2020

Mary on Hunt reports that he is reluctantly
wrote magnetometer with 5 kHz Beacon
disabled. Will be switched on on command

2029 Z

Scarlet switching to inner part
of inner survey - Has started work.
Researcher have to due to weather

Bottom Exp.

AR² and FB conferring with
Rossby on Hot Line Phone. He Intends to
launch 4 IESs this cruise

E₆ to the center has Exec. Comm. agreement.
Not sure Researcher has this change

(A) Crease wants CHAIN I bathymetry
at Bermuda - AR² to hand carry
next Tuesday. Susan to get from Heinmiller.
Pat Bush wants it too!

2254Z March 23 - Stommel & Moore
Rev. Exec Comm Meeting.

Stommel suggests someone at HLC
to work on the bathymetry, Pat Bush?
E.C. Agenda Item Tues.

(Agenda
Items)

March 24

Questions to HLC from Richardson:

- 1 - When is TOAW Hunt:
- 2 - What ϕ and holesize for blades for BS circular saw:
- 3 - " Length + width of blades for large bandsaws:
- 4 - Can they kerf on $8\frac{1}{2} \times 14$ (legal size)
- 5 - Do they have paper " " in stock
- 6 - Mr + Mrs Frost + Mr Gray Hardy will arrive March 27 on evening BOAC flight from Nassau: Please leave message where to stay
- 7 - Rich needs 8 cf of food quality freezer space. Please ask Caron Gebelein.

MARCH 25

1335

Research

Mooring 25 inspected 0850

Antenna appearing in good condition

Did not hear signal on 2398 kHz

Lights ok. Position: Loran C 6 2803.9 N

6938.2 W

Did ~~not~~ hear CB - 26.995 MHz.

~~1432~~

~~Bermuda~~

2120 - Experimental turbine Bermuda - Ditmore

2204 Bermuda announces closing up for today.

MARCH 26

13.26 Enule

727
272366814.10 Answers to Richardson directly
forwarded from Bermuda

14.29 from Foffaney:

Called Fomin; prep. for
visit process at full speed
Monis will ask Fomin.
plan to come. we expect telegram
on details

2/10 Z 26 March (URI)
Bob Sexton called.
Trident reported with Nav, Loren C and
STD's all inoperative. Presently doing
hydro-casts. Sexton calling Ambrosene.

Crease will talk to Scarlet and
report to E.C. during morning meeting.

145-8 Z March 27 Crease to Moore

Message to E Baker

Jim & Emily will fly back Saturday.

Urgent message to Walter Munk - Telecopied.

1505 Z

Res has left area -

Completed 3 more stations - I1 - G1 - F2

Trident - Hove to . 28kt winds

Now doing bottle stations

1 sta at G7 yesterday.

Nav. 1 loan C line good . others intermittent.

Scarlet confident that they can do
bottle program and get good results

F Breckerton raises ^{gen.} question about how
we got into this situation. Can we
forestall further trouble.

? directed to Crease by Stammel

Are you confident about the arrangements
for Hunt STD work?

Crease concerned about the inst. coming
down on CHAIN (3000 meters only)

Attempt patch to TRIDENT

Scarlet says another instr.
is coming from NOIC as well.
#5344 expected from NOIC.

Rich says TRI I - technicians
had plenty of prep. STD's. Not
sure about ~~the~~ TRI II.

Wunsch wants to know about advisability
of sea to sea transfer

Crease says outer star & inner
□ should be covered once by end of
month. Swallow & Crease advise
against attempts to change ship
schedules now.

Bretherton says space scales
look about as expected now. Don't know

about time scales.

Fofnoff reports CHAIN delayed
at least one day now, since commun.
WHI.

FB points out logistical implications
of ship sched. changes —

Rev. Fri Problems

Central Mooring . 2398 K_H is
with Tensiometer - not serious problem

(A) RWM
Aunt speed and Sturges
view of the problem.

seems (Aunt radio operator
impatient.)

Rev state of Gold Beck

HS - Other problems

HS - Schedule of people
in Bermuda should not be
treated lightly. HS apologized to FW
and the committee.

Other problem - No provision
for drawing float tracks, bottom topog.
etc.

(A) HS to call Hansen about PA Bush

1908 Z - March 27

Phone patch Crease & Tripiani

CSTD Deck Unit due for
shipment tomorrow.

STD #5344 due for shipment
by April 4. (Need for Hunt April 7)

Rosette for 5346 is not working.
It is at NOIC and must go to
Gen Oc for repairs. DWM to
try and speed this up, or replace
by a loaner.
Needed Bermuda Ap 2. Try w/R Aircraft?

Crease wants to know when aircraft
are coming, Crease wants Sturges out
sooner than sched. if possible.

DWM talk to Sturges —

Crease wants to talk to Mr. Tom Winterfeld
at WODC 2100 ~~Z~~ March 27.

2217 ~~Z~~ March 27

DWM calling General Oceanics

74

305-754-6658

Ms. Bobbie Seigler says - Air Freight
to Gen OC - They will pick up
at Airport +

NOIC call with weigh-bill #.

02197 March 28

Stommel got Scarlet via
C+W Bad connection - Will resume
discussion in the morning.

0231Z 28 March

DWM attempts Shore to Ship i Trident

According to Sexton - 18-20 bottles
aboard - Not all i Therm. frames

6 30 liter Niskins

~16 1.7 liter "

~18-20 5 liter Niskins.

Sexton estimates ~120 thermometers -

Here follows a brief history of the
events of the evening - by D.W. Moore

0015 Z 28 March R Scarlet reaches D Moore
(at home) on ship to shore radio - very clear
connection. Scarlet reports Trident was
doing shallow (1400 meter) hydro-cast when wire
parted 13 bottles and ~26 thermometers lost.
Scarlet says Trident must get STD from
CHAIN or RESEARCHER or come to BERMUDA
- THERE IS NOTHING THEY CAN DO WITHOUT
ANOTHER STD.

DWM CALLS HS - Then HLC
Stannel says he will call Kefenoff and
get back to DWM.

No answer at Bermuda 7-0055
DWM calls Sterrer, leaves message for
Grease to call him ASAP

DWM call NPF at home - Gets phone #
 for C&W Bermuda. NPF reports he and
 Stommel are going to WHOTJ. DWM calls
 C&W (Steve Cox) and asks him to raise TRIDENT
 by any avail means - preferably MODE RADIO
 frequencies → ^{DWM confers to Sexton (UKR) at home} DWM comes in to MIT
 Stommel & Scarlet are talking via Hot Line
 and C&W radio (not sure if it is MODE radio
 or VRT) Very poor connection. Stommel
 suggests Scarlet use STD to map height
 of T surfaces - Scarlet says this is possible
 Will confer further in morning. DWM
 tries to raise Trident via Jacksonville
 High Seas Op. Sexton calls (see p. 46).

0325Z DWM raises Crease on Hot Line at HLC

(0330Z Jacksonville High Seas reports Trident
 not answering -

Reviewed situation E Crease - Phone patch

Crease & Stommel, Stommel reviews his conver.

with Scarlet - DWM gives Crease Sexton's

estimates of what is aboard Trident - Crease

will carry on with Scarlet in morning. -

General need for a way of contacting

C&W HLC at any time pointed up by

this 205 minute delay between Scarlet's

call to Moore and Moore raising Crease. Also
 fact that Scarlet could not raise C&W and had to

use ship to shore (Jacksonville?) to raise
moore is also earning.

1334 Phoupatel HS-ARR

1430Z

March 28

Cease - Scarlet reports

Lost { 13 5 lit. Wiggins
22 Rev. Thermo.
2700 meters wire

4 unprotected thermo. left.

Not sure how much wire left.

Trident will use STD & Rosette
as suggested by Stammel -

Will fire 5

Rosette 7

at 9

these 11

depths → 13

15

17 1/2

20

22 1/2

25

27 1/2

30

x100 meters

A. Crease suggests repeating stations.

On deep casts will take out
3000 m Niskin and put it at
5000 m for depth check.

At moment 30 knot winds.

CHAIN still delayed - Will be
prepared to transfer an STD if
conditions are favorable.

1433Z ARR wants E.C. to discuss
HUNT at 1700Z March 28.

1447Z NPF reports CHAIN still
at site D, winds 35-40 knots -
Moderating. Cancelling STD stations at site D,
CHAIN will be underway by
midnight - ETA Bermuda 5 March.
Updated ship schedule March 29.

1500Z 28 March

Tripiani NOIC is hand carrying
Rosette to Gen airport to ship to Gen Oceanics
They will meet the plane, attempt repair,
pressure test, and ship to Bermuda.

1515 Z March 28

Water Bottles for Hunt

from CHAIN (10) & DISCOVERY (16)

4 inprot. thermo. avail at ~~BE~~ HLC
Rosette bottles will not be any
problem if Gen DC does delivery
the other rosette.

Scarlet wants to talk to Neergard
at 2000 Z today.

1700 Z Excc Comm. on Hunt

1706 Z Message to Rescarcher from Rossby
Grand Turk no longer hear Float #7.

Hunt info. - sep. sheet -

Re Trident situation - Stammel outlined
history.

Crease says Trident sched. to work
until the 3rd of April.

Crease says we should get some

deep temp sects in central area.

FB comments that isotherm depth info seems to be useful so far.

FB suggests maintaining coverage by skipping stations instead of slowing down.

CW suggests no transfer of STD be attempted.

Sexton — 13 new Niskins & Therm. Frames ordered — To Bermuda by Apr 5.

Lambert would like 1 STD left aboard.

AMF Jack Zerner called
Quite chance of cross-talk
Does Pazis know it?

Crease says TRIDENT STD #2 will be left aboard unless we request something else.
Crease will discuss with Scarlet.

(A) DWM ask Gen Ocean ^{on Tripoli} how many bottles on Rosette for STD 5344 have thermo frames.

Sexton says he doesn't think
figures on hydrowire are correct yet.
Don't add up.

2128 Z March 28

Crease + Sexton Patch
STD #2 will stay aboard
4 unprotected therm. on TRIDENT
JC wants to know if these
are avail. for Hunt. R. Sexton
says Bill Hahn (aboard Trident)
can decide.

Hydro-wire left, Sexton
asks reconfirm, from Trident.

JC says Scarlet to take a Rosette to Hunt
+ 12 bottles + 2 therm. frames.

Sat. Nav. Problem - J.C. will
call Magnovox direct.

2136 Z March 28

Crease & Smith (Magnox) - Phone Patch

Voltage between pin 28

1553 from Bermuda

Who is responsible for crystals on Hunt.

6210.4 KHz transmittin-

6862.5 KHz Receiv-

2046 Z March 29

A R Carr

Crystals ^{for} HUNT - need following info

1. Actual Crystal Freqs
2. Manu. & Model # for radio and IF freqs.

2110 Z AR Carr calls back.

MAS has given him info about radio.

He will bring proper 6210.4 KHz crystal & freq. counter for alignment to Bermuda.

Demi call Bermuda.

Pat Bush called, asking dept. of chair

2202 Z

Sturges asks - ? for Crease

What about WHOI thermometers

borrowed by for Hunt - Were they lost on Trident I.

Do we need new thermometers

Ask Crease about range of
protected thermometers available
from Discovery.

MARCH 30

1325 for Bermuda:

Katz
Agenda: He does not want to have ~~any~~ ^{his leg shortened} ~~any~~ ^{any} more.

- 1. he wants to have 1 good
 imm pattern
- 2. Minimod means info too
- 3. important - towing work to
 have a good pattern for
 comparison:

1334Z Robinson explains the above —
 Will rep. Katz

James Crease - Ask Plessey way-bill #
 (A) for CSTD unit shipped to Bermuda
 Same for Tripani w.r.t. deck unit and
 also 5344.

Agenda Request - Scientific Summary of Progress
 to ships from E.C. to ships
 one way radio link —

1432 Z March 30

E. C. meeting

F. F. F. , Moore , Stammel , Wunsch
Willms , W. Brown.

Rev Minutes

Discuss interim actions.

F. F. F. talked to Menin on phone.
Menin says prop. for participation
of Fomin & "two of his youngsters" is
proceeding - Fomin to cable

Ⓐ DWM to send detailed
cable to Menin about Fomin et al.

Ⓐ DWM to get movie shaped up
- Brad Gove

Robinson failed to discuss Bermuda

Ⓐ Press Conference with H.M.S.
H.S. to discuss with ARR.

Tuesday meeting agenda - Stammel suggests
 Friday minutes to E.C. by Tuesday.
 DWM agrees and will try. Not
 guaranteed until staff level is updated.
 CW says good sec. can do it.
 ? left open.

DWM reports on Gold Book.

NPF reports revision to CAAIN schedule
 CAAIN⁺ arrive Ap 4 depart Ap. 7. Looks like
 further revision in order. Bermuda 6-9 a
 possibility.

Overall Rev.

Williams revs graphs.

W Brown reports Baker does not
 expect to recover 2 ganges at center.

No Hawaii instr. yet.

only 1 vol Herzen instr. to date.

On Float Graph - FB says we
 want to know how many floats are
 being heard in the last few days.
 week.

① Floats clarify Floats recovery
and relaunch data.

Rev. cons.

Release problem discussed.

Trid soft prob. rev.,

FB asks about Trident Loran-C

WDF mentions CHAIN Loran-C problem.

① All Loran-C must be checked &
repaired as needed this week.
DWM to contact Ambrosene.

No problems added to Agenda.

Hunt Problem is rep. by AR²⁴
Speed

W Brown say Ch mate on Hunt
says 8 1/2 knots is max. on a good day.

① Clarification from Don Hansen
on Hunt Contract.

what penalties are TRACON liable for if specs not met. What are their options if we press them. Please enquire of contracts officer what we can do

Note - TRACON Adm and people on ships not giving same answers.

(A) Should EC request all Hunt CS to prepare speed impact statement. Esp. Sturges + Stemmel, Adopted

(A) Sturges to Discuss Radio Op Problem w/ Master of HUNT.

(A) DWM check w/ ARR wrt conv. w/ Hunt Master about Radio Op - Neergard.

Hunt gen. problems - Brown says minute to minute formal comm. on gen. prob. did not [] , but lightning grepping did. Gen problem did not interfere w/ the work.

(A) Hunt II - NPF provides continuity
(A) DWM to review status with him Monday.

Fire Drill Procedures

From now on major fire drills will be handled by E.C. members going Hot Line Phones to avoid repeat of confusion during Trident crisis last week.

Hot Line Phone

Rev. status.

FB concerned about interim until selective ringing straightened out, Above all system must be maintained.

16527 Grease reports Amt Master delighted at prospect of help with the radio,

CHAIN scheduling -

NPF says CHAIN won't come in until the 6th at earliest.

Bretherton says his prior understanding was that delays to a certain extent should

come out of density program.

C Wunsch and F Bretherton insist on the need for ship scheduling priorities.

Discussion over lunch - Need to assess scientific priorities

1953 \approx March 30 AR² on Hot Line Phone

FB queries him on feature charing. He is not prepared to respond to this? at this point.

AR² raises ? of entire ρ program.

Agreed that HS, ARR, and J Crease to look at ρ manual and ship tracks and re-assess the entire ρ program. We do not have a consistent plan.

When NPF arrives Bermuda tomorrow they will call rest of E.C. on Hot Line Phone to make a decision.

(A)

Inv. facs. transmission to aid sci. rev. for ships. Meantime we proceed to sci. rev. for the E.C.

Sci Rev by Bretherton

He will prepare written
summary for minutes and for
transmission to the ships. He will
try to write it so it doesn't ^{visual impact of the}
~~present~~ depend to much on the maps.

Wkend contact #'s

C Wunsch

Home March 31

To La Jolla % Munk April 1-6
Valencia

NPF HLC Bermuda

starting March 31

FB Beltinger - Home Office

DNM Home or Office on Wkend

HS + ARR Hot Line Center on Wkend.

APRIL 1

1301 Phone patch Stomine - Falmouth

1337 Creax: Plesney - Problem.

PA: CSTD Plesney (calif.) via
Para 132

↓ Deck unit (Eastern).

Way bill number. Creax goes to
sea, so check that with Nick

1442 ju creax to Ne

From Scarce: suggested modification:
suppresses oscillator all together
bring ideas + necessary components.

1447

Message transmitted.

1628

HOT LINE RANG BUT NO ONE ON LINE

1629

AS ABOVE

Wbran Hot Line: find out from Capt'n Hum
whether or not IGP portable lab has
~~be~~ been moved off the ship

WB 404 939 2992

yes: ok

2106 Z March 31

AR² reports of program has a contingency plan. Cresser preparing an addenda to manual. There are contingency ships that can pick up when some of days lost on regular p work.

We are now looking for one day (i.e. CHAIN III will lose one more day beyond initial rescheduling). Therefore CHAIN III will be shortened to 21 days with only 7 days between ~~his~~^{Katz} tows (his min. rest period). Discovery will do 1 day density work (CSTD) to complete inner pattern. Further losses in CHAIN schedule not to be absorbed by CHAIN III.

CHAIN now in Ap 5 out Ap 8

DWM to check with Wunsch

FB registers mild protest at procedure.

C Wunsch says he agrees, as long as J. Crease is completely satisfied.

Rosby on Floats

FH 12 recovered

FH 4 not recoverable but still working

FHs 7 and 17 went dead on a Sunday ^{3/18} 7 recovered ^{3/20} 15 put in its place ^{3/20} 15 is effective cont.

of 7. 7 put in "in place of" 17. ^{3/25} 17 still audible from ships. 17 not recovered. 7 now ~~was~~ inaudible again. (from shore).

8 floats presently being heard at shore stations, 2 others still in water.

2140 Z PWM reports back to ARR on C Wunsch's opinion - FB on line also

(A) Land speaker attachment needed for Bermuda phone.

Formal announcement will come from N.P.F

22 23 Z Phone amplifier for
 H.L.C. Send down with someone
 going on CHAIN III eg. Katz.
 Get one with amplifiers on
 both parts of phone if possible.

1 April

1437

Message from

27° 35.8' N, 70° ~~25.6'~~^{26.5'} W

Surface float #5 with two lavender plastic floats attached, sighted while streaming hydrowire - possible cut mooring
 Message relayed to Dennis Moore

1454 Telephone Test:

1: WHOI + B.

2: MIT

3: HARVARD

4: JH

5: — (Yale)

6: Everybody

1525 Z April 2 Fobnoff to Moore

Bermuda telephone say no more extensions
can be added to 7-0055, and no
manned answering service is available.
Try to arrange live evening coverage
at HLC.

3 Scripps techs arrived early
for CH III Not notified of sched
change. - Remind C. Scientists to inform sci. crews
of sched changes.

~~FF~~ Heinmiller reported that
MODE mooring # 9 (WH # 496) set in night
did not submerge. Appeared mooring
was towed by something after
launch and did not submerge. They
assume anchor is lost - Recovery underway
May cause further delay of CHAIN
NPF will issue new ship schedule
after situation is clearer.

Heinmiller suggests possibility of
conceding 1 or 2 CTD stations to make
up the time, so that April 5 arrival
can still be met.

NPF suggests Moller or Milliard May have more
info - DNM checked with WHOI radio rm. NO info -

1650 Z Kotoroff has Grease's addendum to j 69
manual - He will ask M Cornell to telecopy
it to MIT.

1652 Z DWM called Sturges at FSU
He was at lunch - His secretary said
he is leaving for Bermuda tomorrow.

1901 Z April 2 Sturges ETA
Bermuda 1937 Z Ap 3. Eastern from Newark.

1907 Z Set up 4 station conference cell
for 2000 Z Moore
Hansen 305-361-3360 x325
Sturges 904-599-3725
Willoux 714-453-2000 x1138

2120 Z April 2
Nergaard wants more
crystals for HUNT
Freq. of crystal 5960 Kc
8362.5 Kc

April 3

1312 Telephone Test

1	:	Bermuda	→	MIT call	✓
2	:	WHOI	→	" "	✓
3	:	—			
4	:	J.H.	→	" "	✓
5	:	—			
6	:	General ex. Bermuda.			
7	:	MIT			

1321 from Bermuda.

(Magnawat): ordered for Trident a Satellite
 Nav. ^{power supply} orb. by URI: what flight + airbill
 number (58 per 20 feet): 300

1328 URI: 401-792 6222

BOB Sexton 792 6138

1333 B Sexton said he did not have the info
 yet, but will phone Magnawat after I
 ad call back.

1401 please call Trepani's office
202 426 9093

1417 Bermuda cannot ring WHOI: goes via
MIT.

1429 Z 1300 Z

PanAm 401 to Nassau

Rosette Sampler left Miami at ~~8 AM~~ this morning

Leave Nassau 2055 Z today

Arrive Bermuda 2255 Z today

Way Bill # 026-3335-2222 BOAC Flite 676

Rosette
Rosette Sampler Deck unit, ^{Rosette} sampler bottles, STD fish

Will leave Flite 132 PanAm April 6

Arrive Bermuda 1730 Z April 6

Way Bill # 026-3521-7683

1454 Z Sexton doesn't have shipping
info. Do ships know about Ambrosen's
coming to fix Leran-C.S.

1505 Z

April 3

E.C. meeting

All except Wunsch -

Folonoff notes air freight to Bermuda not coming thru - But no specifics yet.

AR Robinson requests we find out what exactly airline contracts to do when they accept air freight. Do they guarantee a specific flite?

2 items that should be in Bermuda now haven't arrived. Flonoff to supply list of missing items

Cable Monin, saying reservations are being made. Details to be sent when all arranged.

Written notice of telephone
test - procedure 1430-1435 Z

Test each station —

then let everyone know
the status —

~~Est~~

Memo on procedure to be
followed when phone breaks down.

Also Party with problem
notifies Phone Co and MIT
MIT first —

MIT notifies all stations.

Memo on phone ringing
- How it works, how it rings
If you don't get thru, ring again.

Stammel agenda item — WHOI #3

AR Robinson says - Make it a Friday item.

Hunt problem — Nergaard reported
slip rings and hydro platform still to be
fitted - otherwise which is ready
Problem left to Fofinoff, Sturges, Nergaard
Moore to stay informed.

cc chairman suggest May 1
for press conference

1603 Z D Moore call to FAA
concerning air freight -
George Howard says CAB
regulates Air Freight, set fare
and level of service. Watch out
for fine print - "We will guarantee
or we will refund"
Warns about magnetized
materials — shippers responsibility.

1616 Z — Call to Pan Am Clipper Cargo
w.r.t. air freight
Bob Keon — 569-5460

Contract to move it from
one place to another.

No guarantee on time.

Pan Am takes reservations
but this is no absolute guarantee.
Boston Pan Am can track down lost
items even if they did not originate
here.

April 6

AL665
Lv. Boston 1:55 PM
Ar Islip 3:11 PMAP 7
AL 620
Lv Islip 7:15 AM
Ar Boston 7:56 AM

Stony Brook - Monday April 9

8 PM -

D Moore seminar on MODE

Fly directly to Islip

Call Dr. Rene Chevray

516-246-4024

with travel arrangements. 6771

1/8/54 7

Fobano PC

Milliard to Bermuda tomorrow -

send radio phone amplifier.

Items expected in Bermuda by Air Freight
not yet there

1. Rosette
2. Deck Unit, Rosette, Batter STD Fish
3. Magnovox Power Supply

EA 807 4 April

Way Bill # 007-0509-2552

4. MIT CSTD Way Bill # 026-2289-5821

No reservation
on this~~shipped~~ from Plessey

29 March Pan Am 132

5. Deck unit from NOIC

EA 811 31 March

Way Bill # 049-47191

Clarity from Tripani
 What deck unit is being
 shipped Ap 6

(A)

What happened to deck unit
 shipped 31 March

Why is Ap 6 the date?
 Why not sooner.

1703 Z DWM Called Jack Yeager -
 He will start tracking
 down the ESTD.

NOIC delivery to airport tomorrow
 on items for Ap 6.

Deck unit from NOIC went to
 Airport on March 27

Tripani's sec. will give him
 info about deck unit.

stuff to be shipped ^{today and} on Ap 6
 has been guaranteed by
 Mrs. Cooper at Pan Am Washington

~~Plessey~~ - Darlene Clonts
 714-278-6500
 x 298 or 280

Can we take a
 shipment as accompanied cargo
 and thereby guarantee a specific
 flite?

~~WT (300-400#?)~~
 STD Fisd 36" x 26" x 26" WT 165#

Rosette Deck Unit

Rosette Bottles

1805 Z Port Bush NOAA
 wants \$400 advance
 for Bermuda

Send more MORE charts
 to Miami

Pan Am Cargo Sales Office J.F.K.
 212-632-5800

Tell Pan Am

URGENT - Must Ride

This is still no guarantee, but
it will help.

Mr. Hininger - CSTD will
definitely go out tomorrow

~~the~~ Staff coming from NOIC
~~if~~ Problem is trucking from
Washington to NY

Another possibility is to have
Washington office call NY
when truck leaves -

212-632-⁵⁸⁰⁰6071 - PanAm Wash use this
number.

Mr Hininger

Can get 160 Kilos. on
April 5 - No problem

from Bermuda:

Discovery 18.50.

3 April: Wive parted when we had nearly finished setting N2. Last 3 current meters, a release and a pingo and 4500 m of wire. can now set only 4 moorings. We propose omitting N5 and ~~replace~~ N2 approx 4 miles NE of original position.

1927 Z Paul Tripani

Recommends we don't try any change in arrangements now.

Will ask Pan Am at Friendship to phone ^{Pan Am NY} when truck leaves for

Robinson, Rhines, & Moore agree with Discovery suggestion —

2034 from Heinmille: chain:

H. Reports hearing - faint signal on 26.995 Mc DAR channel A at site of Mooring # 3. Approx 1910 - 1925 Z 3 April. Probably not surface mooring since distance is too great. Signal too weak

to get bearing. faded out and has
not been heard since.

ARR wants Carlmark's opinion

Munk, Filloux, Baker affected
concerning 26.995' MH signal.

Filloux asks Pulsed or
Modulated? Pulse Rate?

Hunt
heard
moring ^{#25}
at range of
35 miles

When will Richardson fly?
Will he monitor?

Falonoff asking CHAIN to
clarify and other ships to listen.

3 April
Cable to Monin

Your cable concerning
~~the~~ Fomin, Koshlyakov, ^{and} Grachev's MODE
 participation is [^] acknowledged.
 We are happy to have them
 aboard. I will make the
 necessary airline reservations and
 arrangements for them after
 their arrival in the U.S. I will
 cable the information about these
 arrangements as soon as they ~~are~~ have been
 completed.

Sent: 2341 Z April 3

Stommel - Moore MODE slogan -
 "Better than nothing at all." (in latin)

4 April 1440 Z

Sexton - To Trident

Satt Nav Power Supply

Way Bill # 007-050-92522

Arrive EA 807 1656 Z 4 April.

Call Smith at Magnovox before
installing # 219 - 482 - 4411

Shipping Info on Niskin's avail.
tomorrow.

Sexton will arrive Bermuda
1530 Z 5 April.

Message for Dr. Al Green (NSF)
c/o Steiner - Sexton URTI will
be in Bermuda to meet them
on Trident 1730 Z 6 April.

5 April 1451 Z

Bermuda wants to ~~to~~
charge wharfrage on Trident - Who
owns her? URI owns her, i.e. State of R.I.

1500 Z 5 April

Carlmett says Missile Test may put Rossby
out of commission for a day or two.
own advise Rossby.

(A)

More info on test -

Patrick AFB x 7961

Mr. Don Leonard

or Jean (?)

1515 Z 5 April

Rossby says no problem in the
past with missile testing.

He also says a group from
ONR is coming to Yale 5 April to
(apparently) discuss using some SOGAR
floats to track an eddy North of Bermuda.

1520 Z 4 April Mr. Sinopoli

Will try to set up May 1 Bermuda
press conference - He will call us

1526 Z 4 April AR Carr
Crystals for HUNT

We can only do that request
for 1 channel. Transmit + Rec must be
within 500 KH of each other.

Can only handle req. for 5960 - crystal
freq (4460 carrier) - He will order it.

Trans + Rec on this set shares
a common tuned circuit - Can't
be too far apart in freq.

to Mr. Raymond Day,

According to FCC, NSF has
own freq. comm + block of frequencies -

Crystal won't be ready for
Hunt II.

DWM to inform Nergaard.

1540 Nergaard say both crystals are for receiving.
Not to be used together.

Nergaard reports no word on yesterday's shipment via Nassau.

DWM to check on today's baggage — and inform Nergaard.

Sturges upset about loss of unprotected thermometers — He says Leetmaa was sending some out with Richardson's aircraft

1553 Z 4 April Hininger Pan Am Cargo N.Y.
 Will watch for cargo from NOIC
 For Flite 132 6 April.
 DWM gave him the way bill IR.

Concerning CSTD from Plessey
 on board today —

Tripiani - As of yesterday
Deck Unit had not left N.J.

~~Ms. Metchitr~~ Eastern Wash

DWM to try Eastern - Newark
Rep back to Basil Martin - in
Tripiani's office.

1609 Z Eastern Airlines Air Freight Newark
~~to 656 7020~~ 201-621-8858
~~to~~ CSTD deck unit still in ~~room~~
Newark

Way Bill #
049-47191

Newark Airport Eastern Air Freight
201-643-7386

Manager Cargo Cust Service Newark

Mr. Amory - Out of Town

Mr. MacHogan - On the Road

Deck unit set for today's flight:

Ask for Pat

Call at 1815 Z to see
if it got on.

1645 Z

Sturges - Unprotected thermometers
 HAVE they ^{been} ~~been~~ delivered to Nova.

Nergaard wants to know about SetNav Power
 supply

Eastern Airlines Air Cargo JFK

212-656-7020

Miss Paterson

Not on today's flight

Not yet in N.Y.

ELSWORTH

~~6~~ Smith

~~x 6520~~

at Magnovox

219-482-4411

x 5612

6 Rev Thermometers

4 Niskin Bottles

4 circuit cards - shipped via Eastern Airlines

3 Ap Waybill #007-0428-4070

1 wooden box.

via Baltimore Philadelphia

1747 Z

Researcher

still in Miami -

2017 Z April 4

Hansch

Shipment to Bermuda
via ~~Baltimore~~ Philadelphia
Material still in Miami
Presumably EA 809 ~~BA~~ ~~BA~~.
Bdm.

Res Sched Depart 1430Z 5 April.

APRIL 5

1810 Tel from Dennis.

1815 Informed Mitchell about phone problem

1320 Phone parcel Nick - Dennis re. Per freight matter
Dennis should have down Eastern shipment
from Florida (Thermometers etc)

1440: TOF: TRIDENT ARR Bermuda 1300Z
CHAIN EXP 2000Z

1551 Fof. wants to know about a
 Speas reel of wire.

1540 Dave Nergard wants to know if
 Rosette Sample (to be shipped
 via BOAC from NASSAU — (PAA
 # 026 333 522 22) can be
 expedited. General Creamer is skipper

Trident has arrived

Scarlett CSTD + Deck Unit is now
 installed on HUNT.

1707 Re Hammers case:

Eq. leaves Miami on Eastern 36
 1.20 pm to Philadelphia .arr 3.40 pm
 tomorrow: Philad. dep EA 809 10.25 am
 Bermuda Av. 2.20 pm

Info from Mrs Wetzel, Eastern
 Air Freight Miami.

1710 7 transmits to Nergard, Bermuda

1740 Radiophon of NE: 648 7100 Jim Dugan.

Proposed paging system: up to 20 units and $\frac{1}{2}$ -1 mile
(5 Watts) ev. 30 Watt. 3/4 mile

4" x 2" x 3/4" 1 Unit 100.- Sales price. 70NE only

Encoder 170

Base unit 225 (+170 if 30 Watt)

incl. antenna.

extra antenna ~ 50.-

c. FCC license required in US: CB unit (5w

30W: Business license.

Frequency: 27.255 MHz

→ FOR 4 states: ~1000.- sale.

1759. Telephone me: will check ringj problem
yesterday's ringj due to some repair
work. Contact # 743 6226 n 6229

Dick Bennett

Hamm

Air bill # 007-0428-4070

1 Package 50 pounds

1845 Z Niskin Bottles for Trident

Wat way Bill # 010-8351-2671

Pan Am 130 should arrive 1525 Z 6 Ap.

Mr. Bradshaw Pan Am Miami

305-637-6102

Shipped to Nassau 4 April

Pan Am 403

should be in Bermuda by now

BOAC 670 4 Ap should have had it

if not in Bermuda yet, call Bradshaw

~~back.~~ have BOAC Bermuda

wire BOAC Nassau.

WSR suggest. MODE E, C. cable Mary Jorde

congratulations for presidential
citation.

Mary Jorde

N SF Office for Oceanographic Facilities
and Support.

Congratulations on your
presidential citation. Many thanks
for your support of MODE-I

Sincerely yours
 Dennis Moore
 for the MAPE - Executive Committee

2220 Z April 5

Freight Report

NCAT shipment in Phila.

Magnovox Power Supply in NY

BOAC has nothing today

April 6 (A) items for DWM

Call PanAm Miami on
 Gen Ocean shipment

Call Hininger NY to be
 sure NOIC shipment aboard
 tomorrow.

Call PanAm Boston on
 Trident Niskin Bottles

0042Z April 6

Scarlet - Tripani failed to send
complete pen and ink unit and chart
paper for CS TD deck unit.

Send with Danteler if possible ~~Basil Martin Maryland Unlisted~~

Tripani
Ch. Asst. - Mr. Basil Martin¹ Woodbridge,
Va - 703-670-3913
will supply Danteler

Lee Danteler 301-532-6172

Eastern Air Freight - Philadelphia
1-215-365-6056

Hansen Shipment -

Air Way Bill # 007-0428-4070

Miss Pitman will check and
call back

15347 April 6

Executive Committee

Robinson Brotherton Meove

(Stommel at WHOI, Felonoff at HLC Bermuda

Wansch in La Jolla)

Review minutes

Q17 Change "Two" to "more than one"¹⁴

Add (A) annotated copy Tues Minutes
following Fri minutes

(A) Extra Ops Manual for Brotherton

(A) Adjustment of H.T Line Phone ringing
time - JO Williams to notify all stations

Hot Line Phone - Suggested Change - Status
of Hot Line phones to be telecopied
on all station call. This will test telecopiers!

Paul

Trapani

Delta Flite 210

\$15.75

Lv 12:03

to Paul Trapani

Ar 1:10

Air Bill # 006-DCA-0064-0216

Minutes read and O.R. with 1 change as noted.

Mr. Hininger

Pan Am

Didn't go today

Good shot for tomorrow

Mr. Strallo 212-632-5800

~~Call at 8 AM to insure.~~

Mr Hininger will call back this PM

Cable Menin

Try to get Russians here

May 24

2 reasons

1. To be sure of making ship

2. To look at data at Hot Line Center

Check with State Dept.

Overall Review

(A) Yale to send fixes
to all stations on a regular
basis (with Yale con#s),
send at regular transmission
time. ~~if pos~~

(A)

Anything with a # from any station
not sent at
regular ^{trans.} time should be
retransmitted at the next regular
transmission time.

(A)

All stations to be manned at 14:30 Z
for telephone tests.

We can't tell how p is
changing with time because
2nd outer pattern coverage hasn't
begun.

(A) Be sure all PT's know results of follow-up items - e.g. Con 63 Item 6

Why has city desk been discontinued? (FB)
ARR says addⁿ comments replaces city desk.

~~(A) Cons should show problems~~

Gold Book Dist,

Cost - 1000 vs 2000, etc.

Consult with Collins, ^{and Corlmark} on Distribution.

Hot Line List

Navy Rev Invite List

IDOE list?

AR² suggest EOS article -
Has discussed with Spilhaus -

Also Science Article ~~might~~ now.

Bradshaw Pan Am ~~Nassau~~

Miami

Rosette transferred from Pan Am to BOAC
Nassau today. Rosette to Bermuda
tonite BOAC 670.

EA Bermuda parcel went
on EA 809 yesterday or today.

E.C. #5 H.L.C. Report

CHAIN Delay

Density Report (ARR)

Researcher Delay

Status of Hunt

Air Freight

Cable to Mary Johnson

Stommel memo re. Webb

Ship Schedules

C.S. & P.I. Information Dissemination

AR² HLC Report

Problems handled well

No set plan for data analysis

No schedule - phone coverage, etc.

No data organization.

(A) Whiting to Bermuda Wed. instead of Tues.
DWM to inform H.L.C.

HLC phone line watch problem.
needs clarification

Relation between HLC Ch Sci, Excc Comm,
and ρ rep at HLC needs clarification.

Suggestion is that ρ rep is treated
as ρ rep and must be aware of all
the ρ peoples' opinions at all times.

(A) Large Ship Schedule in MIT MODE-I office.

$HLC \in C^n$ where $n=1$ means ChSci HLC
is very important

At present this means (DM, AR, CW, JMcW)

Adequate Help for E. Office
for the next months —

1944 Z April 6

Fotenoff called Sturges
revised from Hunt.

The winch won't do.
Level wind marginal
2 men req. to operate
Up speed < 40 mot/min.

Spare cable

1 is the Hunt cable
Other not yet delivered
Due 1st WK May
Can get sooner.

Hansen informed - He is calling
TRACOR - Mosley and then Gattas

Carlmark - Navy can't supply

Suggests Lamont. Call Ken Hankins.

914-359-2900

might have ideas on where

For help getting it there

to get winch.

Jim Yause on Bermuda —

Suggest Altanin - Try Mary Jehrde

Carlmark will ~~say~~ check with Oceanographic Office.

Also - Old Trident Winch.

Mary Jehrde - 202-632-4102

An Altanin —

Call Bob Elder 202-632-4168

MJ suggests

~~Discoverer~~ - Hansen say no good

Surveyer - Possible.

~~Sands~~

~~See~~

Office of Polar Programs - Elder "on the ice" until the 17th.

Mr. Bob Dale 202-632-4168

If they can help, they will help.

MODE to foot entire bill.

Discuss with Feenan Jennings —

Hansen reports TRACOR will
check \bar{c} Capt τ get back
to us. Concerned about shipping

Carlmark reports Navoceanos - winch.
Here in Sutherland. —

Edwards (WHOI) says try James Walczak
Navoceanos

Carlmark says he has covered Navoceanos.

Carlmark is picking up winch in
case we want it. Will call back
at 6 PM.

Bill Keen says he thinks Trident's
Niskins went to Bermuda unmanifested

check with 567-2213
for message \bar{c} Bermuda if Keen doesn't
call back tonight.

Mr. Dale Polar Programs

Can get winch relatively easily. Associated Plumbing Hydraulic Motors, Electric Motors etc. is a much bigger deal. Military sealift Command Atlantic

Mr. Knudson - 212-439-5302

Any other way would be less traumatic, but Altanin not insurmountable.

Mr. Jean Anderson

415 466 5582

Can get specs on Altanin winch.

Actual Authorization for removal can't come Mr. Dale

Mr. Dale - Home: 301-263-6126

MSC would expect some funds from NSF.

2215 Z

Sturges suggest we ask TRACOR
for a recommendation on the wire
Find someone at TRACOR who
knows this winch —

Wire req
at least 6000 meters
better = 7000 meters

Diameter : at least .25"
.3" is better

1 2 or 3 conductor

3 is better than 2 is better than 1.

Check with TRACOR 1st

Hansen: TRACOR says

Speed problem due to power
circuit problem - Needs to disconnect
crane -

Level wind - Respooling
from scratch should help.

Yellow 547-3000
Bratt 876-2000

105

Conference Call

will be at 1400 Z April 7

305-523 - 2540

Gattas & Masley

305-661 - 8897

Hansen

Bermuda 7-0055

Sturges & Halverson

253-7828

Moore & Kofanoff

Conference Op - 1150

Re: Mosey

→ 305-945-4860

2333 Z Sturges says - ~~we~~ ^{we} at the has
talked to Mosey and Mosey
and Mosey says small wire
could be the wire diameter.

0033 Z Kofanoff says we should have
(ITUNT) go to sea with present wire
and the present wire - Have them
do a station in deep water
(4000 m) and report back on how things
are going. WPF foresees delays of
at least 1 wk. if major equipment must
be transferred.

Heiniller could not raise Cndr. Yonse today.

NPF says which would probably have to come by surface freight.

WPK says seal HUNT out as is an bring it back if there is a problem.

Run Mosey Monday AM 642 7515

1432 Z Air-Freight

Still waiting for

Magnovox Power Supply
Box from Lectmaa Miami

Rosette from Gen Oceanics ^{Arrived April 6}

Washington Shipment from NOIC
Pen Ink Chart Paper

At Eastern in New York on Ap 6 ^(May 6 1975)

Call Pan Am N.Y. (W. Bill p. 71) ✓

071445 Z Ag Mr Strollo

NOIC shipment on Pan Am 132
this morning April 7.

Mrs. Frey will try for
tomorrow on Magnavox Sitt. Nav.
EA Air Cargo NY has 20,000 lbs
waiting for Bermuda and handles
1500 lbs a day!

Latnae Hansen Parcel - Eastern Air Fr - Philadelphia
Mrs. Gross.

This package is "on the line"

Check around 3 PM to see if
it went today. Not booked thru from
Miami - ~~Expta~~ If not out to Bermuda,
have agent explain to supervisor and see
if we can get it on for tomorrow.

1536 Z Volkman - ~~considering~~ go
concerning grooving for CHAIN winch.
Can't get it on today as freight. should he
hand carry?

1629 Z

More + Robinson rev Hunt status
 Arguments for going to sea
 with present winch -

May less days work in
 28 day cruise if winch
 only brings wire in at 40 met/min.
 It will take $O(1 \text{ wk})$ to get more
 wire to Bermuda. Ship can go in and out
 of Bermuda in $O(6 \text{ days})$.

\therefore Hunt will go to sea as is.

New cable will be purchased
 and sent to Bermuda as soon as possible.

If things don't go well on
 Hunt they will come in for new
 cable.

1919 Call from Nick Fotonoff at Bermuda
 requesting that we make phone contact
 with Gordon Volkman. There is no
 response at WHOI. Could not raise him
 at home

1940

Patch - Nick Fotonoff - Stanley Hayes
 (548-2349)

2030 David Nergard from Bermuda - explaining
 that 3 shipments have arrived at
 Customs, but Customs officers will not
 release them Way bills :

~~1070~~
 -7663
 -2222

2045 Patch Richard Scarlet - Dennis Moore

8 April
 1450 Tony Sturges ^{Bermuda} patched to Dennis Moore

1711 Z 8 Ap D Moore came to office
 to check with Bermuda on Hunt
 status. A long conversation
 between Sanford at Bermuda and
 someone at WHUI apparently not
 related to MOPE was going on.
 Note: Hot Lines phone is for MOPE
 business.

1715 Z Hunt ready to go
 except for pens for CSTD deck
 unit.

1421 Z 7 April
 Carlmerk
 2 filter to Bermuda
 a week from Charleston AFB
 Charleston S.C.
 Size Limitation Palat
 Size limit 108" x 88" 102" h.
 Can put 2 pallets together
 but requires special handling at Bermuda

Contact - Mrs. Mitchem Naval Air Traffic Coordinator
803-747-4111 ext 2148

Approp. Documentation needed.
Get from Mrs. Ledger
202-767-2296

Call Mrs. Ledger first.

Transfer of funds will be required.
Will have to use contingency
fund - slightly higher than
commercial air freight. Must be
work done under an ONR contract.

1428 Z NPF - Hunt reports no test
conducted yet. Preparing to do it now.

1517 Z - K. Daly reports WHOI
HOTLINE TO BE NON-FUNCTIONING
FOR 3-4 HOURS.

April 9

1812 : Don Hausen called and asked about cable situation. Also will bioslation be putting someone onboard researcher?

2119 DENNIS MOORE - please call
T Rossby

1443 Z April 11

Webb has picked up #7 and #17
#3 and #13 are quiet.

#8 is weak. #19 dropped out yesterday.

Possible significant expense
to repair these.

Rossby Wants contingency, money
committed for repairs.
~ \$600/instrument

DWM says \$2K expenditure O.K.
will check with

APRIL 12

Con with - MOSEY - checking out cable
 capability of winch (speed + capacity)
D. Hansen

NO COMMUNICATION SINCE MONDAY

- $\frac{1}{4}$ - $\frac{3}{4}$ flyer on winch
 - winch could be conv. to 3800 line pull
 - bare drum 175 ft/min (could be ^{re-}configured at sea) single drive to double drive - cam ring could be changed easily, but not

could flyout 4200 lb ^{line pull} - bare drum speed 150 ft/min

Don't jump to conclusions about wire size. Stinch is capable of pulling $\frac{3}{4}$

Set up conf. at 2:00 local

1900 Z with Troika + Scarlet + Hansen to discuss Wire + situation on HUNT.

Robinson OK, Hansen OK, Moore OK, SCARLET OK, STAMMEL OK.

1901 Z

Scarlet reports Hunt STD is working. Winch is no better. Hunt says new drum + wire ^(Larger Diameter) ~~would~~ are needed. Wire itself probably not enough.

H Stammel correct reviews drum problem. Drum flaired at ends - Drum very rough.

1907 Z Message from Sturges Winch blown 2 hydraulic seals suggest. Dennis continue search for winch.

HS suggests - proper line
of communication is Hunt master
to TRACOR —

What has been communication between
HUNT CAPTAIN + TRACOR

Hunt

1. Hydraulic motor powers level wind
blew seal. Replaced entire motor.
Same seal second motor blew. No
further replacements or ability
to repair. Leakage rate of fluid
supply \Rightarrow Can live with it
if it doesn't get worse.

2. Sturges was asked if replacement
drum + wire would be sufficient.

He was hesitant to answer, but thought
that it would probably work.

But crew feels that winch is like
a bastard brother

3. Master has been in touch w/ TRACOR
mostly about non-function steering gear.

~~##~~
 Old Trident winch is
 hydraulically powered - Winch itself
 may be O.K.
 Contact would be Sexton.

0956 (local) Decision of Ex. Comm.

Hunt remains headed for Fort Lauderdale.
 Some "mystical" authority to fly to Wash.
 and Miami to inspect winch at trycos
 - apparently present winch was sitting idle
 outside for some time. The same may apply
 to their second winch. A reliable winch is
 more important than money.

1045 (local)

URI

not elect contin.

Sprocket
gears for
level winds

{ 1)
2)
3)

.182" single cond. - 6" fm top. 3,000
 Scarlet used it on URI winch

.294 two conductor [20,000']
 4.5" fm top.
 18,000

3) .445

2700M

Cliff Burins willing to trouble shoot

With this lead time no perfect level wind.

Scarlet: } breaking pt } of 0.182" wire
concerned about } level wind }

Smaller wire - harder to level wind.

Ship today, - before ship arrives,

FJ. Lauderdale - better equipped
Buda - Navy priority - slow (Civilian)

John Brown: 1200,
Flying Tiger 569-5400
only to west & orient.

11:00 (Local) Eastern Airlines 569-3323

3 tons app. 3'x3'x3' all freight
(Prov.) Boston - ^{miami} Ft. Laud. Palatize 6'x6'
1:00 AM except Sund & Mon. hgt < 44"

(Prov.) Boston - Buda 15.70/100 lb

~~Wash~~ ^{phil.} - ^{miami} Ft. Laud 2:20 AM exc Sun
Mon. 13.10/100 lb.

Wash - Buda - nothing from
Washington to anywhere

Pan Am 747 ~~freight~~ Passenger
 Boston — Kennedy — to Buda.

~~lv 10:30 AM, ar 1:30 PM daily~~

\$13.100 lb = \$780.00

8:30 AM everyday ar. 11:25

Wed. - heavy load (out)

Bill
 Keon

min of 2 days notice

36" x 36" x 117"

48" wide, 40" high x 68" long

UR1

Dimensions, wgt: 4' high, 5' x 5'

3 tons,

1804 Z 12 April

1. Nav Bermuda has shop facilities at Navy Dock. Would require clearance from American General - they would notify Bermuda authorities. Whiting adviser strongly against.
2. Military aircraft into Bermuda is problem if double pallet is needed because it is impossible to unload correctly -
3. The Rio Arenal (ship) makes a run to Bermuda every few days - Takes 2 days.

1808 Z Bob Walton

not the same winch as the one we want

Winch Requirements

- a) diameter of wire
- b) how many conductors
- c) length
- d) Ft per min capability

for H. Stommel

Mr. Legendre from La Valle Un
Quebec City

1851Z

Don
from MOLLER - WHOI

winch from Westinghouse
7' x 10'

needs level, leads grooving

Westinghouse Ocean Research Annapolis:

Jim Eckels 202-833-5125

(in hand) Al Wyborny (Annapolis) 301-765-5258
Pengo Marine - model 100

at Pengo Marine: P

Fort Worth Texas

Jim Allen 817-295-5220

men from Westinghouse



210 ft/min (max)

284-3334

Dick Bater (?) Miami

Badger

1935 Z

Dick Edwards W H O I

2 conductors OK

1 started - may be at end (can be fixed)

No capacitance data

.30", 30,000 ft of cable

1950 Z Bob Sextant

leveling not perfect but serviceable

2008 Z Dick Edwards

149^{lb}/1000 ft. dry = 4500 lb

wgt; size of Drum

length 40"; diam 40"

wgt 8500 lb. + 500 lb drum.

Bob Sextant call Dick

Ron Mosey at Traycor Home 305-945-4866

Shipyard 305 - ~~523~~ - 2546

523

2056 Tex Hoadley contacted
will reply by night.

2058 Contacted Don Hansen AOML
- new cable
- URI winch

2110 Bob Stewart
5,000 + 6000

Driver - special license more than
8,000 lb.

URI winch leaves Thurs. night without
WHOI cable.

2126Z N. Foff

Tony Sturgis - if Hunt has bottom
cleaned 10% increase in speed,
time required.

by 1410Z answer to Hunt

2140 Dick Edwards
2 drivers possible - 18 yr. old.

12 april

1) Talk to Mosey Fri morning.
about cable & drum.

2) Dick Edwards - Fri. Morning.
Truck plus driver

3) Call Tracor - Mosey about
dry docking and cleaning the bottom.
how much additional time over the
install. of winches. also echo sounder

not working

No. of days at sea $\times 1.10 >$ no. of
additional day in drydock.

Last time Scarlet used
Trident winch dog in the
diamond shaft kept popping
out. Spring that should have
been there was replaced by
surgical rubber tubing.
Mention to Tex Hoadley.

Can we get level wind gears
made for #225 wire.

Scarlett says speed \times flow rate.
 Confirm with Hoadley.

We want 60 or 70 gals/min
 at 1000 psi.
 Will 1500 or 2000 psi
 source work?

Trident winch has no meter
 wheel - Need one to hang on.

Lloyd ~~Edwards~~ Hoadley
 Available for 3 days

2210 Ron Masley;

24 hrs. for cleaning

He thinks it was cleaned in January,
 usually done once a year. Scrape barnacles,
 sand sweep it. a 10% increase is reasonable
 if its fouled. will call Fri. morning.

672-9109

~~From M~~

April 13 EC 1454 Z

E.C. meeting All but Fofanoff
Rev. Last wk.

- (A) DM Air Freight Memo
- (A) DM Mary Jurde Calc
- (A) DM Russians Earlier

Suggested modification to Fri meeting procedure

ARR & HS suggest - Instead of trying to resolve all problems - Generate action list and responsible individual.

List typed xeroxed and dist. by end of the meeting.

Overall Rev. Acoustic FCC Problems (Jan's p Graphs, SOFAR. float graph ~~straighten~~)

Need someone to rev. entire Acoustic FCC situation - HS to Ask Don Dorson

ρ graphs.

All ρ ~~the~~ stations not on grid sep graph.

All ρ stations on grid from any ship to be incl in present graph.

SO FAR float graphs must be updated.

Con Review

IES - Swallow flt problem resolved by Webb & Swallow at sea.

Note: Rossby not fully aware of what was happening.

Con did not show dec.

Did Res launch IES as per con # 68.

Impact of Katz tow delay, Contingency plan from Katz.

Impact of CHAIN no deep stations

Hot Line + Planner

WHO's personnel not briefed.
HS & FW.

Relations with TRACOR -

Need to log all activities in TRACOR

EC - HLC - CS

consult AR² for text of minutes

Guidelines for quick decisions

1. Identify facts to be gathered
2. Set time for reporting
and report whether all the
facts are in hand or not.
3. Then take decision.

Post MONE-I funding & planning
 Carl Wunsch 1. Certain Exp. Groups have
 been built up. Do we
 let them disband?

2. Can some observations in
 MONE be time extended, ~ 1 year.

Suggests possible proposals to
 IDOE to provide both of
 above. Collins told Wunsch they
 would be happy to have some
 proposals.

AR² & H5 have discussed both
 scientific and procedural
 ways to proceed.

This is all called MONE 1 1/2.

FB notes speeds significantly
 smaller than ARIES speeds and
 also smaller than what we thought
 were coming out in MONE-0.

WHOI is already proposing site moving
continuity.

Note: Slip time lead time
must be kept in mind.

Discussed possible scientific pursuits
to provide continuity.

Procedural question.

Extremes 1. Disband MODE-I organization
and start over.

2. Make MODE-I organization
a very time continuous
organization.

∞ variety in between.

Discuss role of present MODE people.

ARR suggests continuity of present
procedures for FY 74 & FY 75. to be
drafted by HS & ARR.

Film status—

Still need a real script.
 Shapiro was to produce some
 script on theory - Didn't do it
 on time. Shapiro met with
 Rosenthal - Want to spend Tues PM
 with AR² to see how to make
 it existing.

EL still doesn't see
 how this all hangs together
 in a story line. Are we
 getting a useful movie or
 not —

Rosenthal suggests it is now
 time to come up with
 an exciting treatment and script
 now. Third draft was
 a sort of table of contents
 but we need more now.

They may respond that
 they prefer to write the script
 after the fact. Possible, but
 not ideal.

No on record telling
 the contractor that we
 want an exciting script
 now. Go on filming simultaneously.
 Script
 Treatment
 Exciting Presentation

What are they going to do.

Rosenthal told Shapiro how he felt.

2131 Z April 13

Moore & Seaver called Ron Mosey -

714-453-2000 X 2882
 1740

2158 Z Called Wendall Brown in
 accordance with Exec. Council decision

- 1) Winch down
- 2) going into part for ² new one
- 3) schedule remains fixed

timed releases of bottom instr.
 Several bottom instruments schedule
 to release at predetermined time based upon schedule

Before final choice is made
for location of which have Sturgis
contact Wendall Brown

2242 Z April 13 Mosey not home
left word for him to call.

APRIL 14, 1973

HUNT POSITION

1436

1300 GMT 15 APRIL '73

26 25.5 N 76 22.4 W

ETA 1700Z 16 APRIL '73

MESSAGES WERE PASSED TO HUNT

1756

FOR TELECOPY TRANSMISSION TO WHOI, CONNECT
TO WHOI FIRST (BEFORE CALLING OTHER STATIONS)
AND ASK FOR X443.

18.23

ALAN ROBINSON MAY BE REACHED TODAY AT
8625986 IN LEXINGTON, ~~ON~~ ~~MALKUS~~
PHONE. IS IN NAME OF MALKUS

1538 Z 16 April 1973

Bob Sexton ~~#~~ called.

How do we pay for this:

- 1) Truck rental fee \$431.21
they have issued purchase order
- 2) Expenses of drivers ~~\$750.00~~ \$gas, food, air fair
- 3) Salaries of drivers \$150.00
- 4) ~~Oil~~ maintenance crew \$131.20
- 5) Return of winch cost

total \$1239.16

1 mo. or six weeks

1726 Z

16 April 1973

URI - 2 PM

On Sunday, Hoedly called DWM

(will hold 12-15,000 ft) 7000 ft cable on URI winch - substitute

Electric motor for Lister Diesel. U. Miami

winch - New Eng. Trawl winches of no use.

Trayco W-12^{W-10} probably primary winch - URI
back-up. May not be operation when Hunt
gets underway.W-10, W-12 winches level wind has problems
with slack. Two man operation. Auto & manual

16 April

control of level wind must be done separately. Otherwise may blow hydraulic seals.

1800 Z Call to ONR - Sinopoli
about 1 May press conference.
Not in.

1830 to Hank Stommel
Film

1900 Visas for Russians - ^{Mr.} Collins - ^{State} Dept.
arr. 20 May 1973 instead of 27
302-632-3189

1925 H. Stommel - visas

2000

~~1945~~ Dr. Sinopoli 202-692-4254
no funds to travel

2000 ~~Movie Draft~~

ONI washed out
wanted adm., plane, magazines people
restrictions on travel.

16 April

2000 ARR

2005 Ron mosey

Tex.:

30 HP electric \rightarrow ~~30~~³³ HP Diesel
\$500 to try in shop

strip wire for trident

Primary (W-10) Hunt wire to trident

Standby WHO1 wire to W-10

W-12, big drum, slow, less pull

~~Tex.~~ Tony wants to work off port side. Block mts on deck.On stbd side crane doesn't reach out far enough. Several broken thermom.
; Nansen bottles.Due to comments of C.O. ; Tony
Tex changed plans for W-10 ; W-112 to
the Trident \rightarrow ^{W-10} 1 day shop time on
trident winch lost.

17 April 1445Z
 fm Tex Hoadley in Miami

URI winch running (without cable and level wind) with new power pack 30 HP electric motor

currently bldg the base mount on Hunt. Hope fully finish this afternoon. Then 30 hours to wind W-10 cable (.215") onto trident winch and to wind W101 cable onto W-10 winch. Removing ship from the water to clean the hull.

Estimated sailing time 1600 Wed., 18 May (the earliest)

Tony ~~is~~ Sturges is happy with the new arrangements.

In the event of ~~an~~ a casualty to the winch presently on trident, Tony want the ex-Trident winch on Hunt xfered to Trident between legs II; III (5-8 May) of Hunt Requires 2 days in Bmda, 2 men, hoses from MAS to Bmda and \$500

The xfer back to Hunt for leg IV (H. Stommel) - take 1 day - The Hunt is in port 6 days then.

17 April

Back ~~of~~ up winch, W-10, will be run in manual due to the sensitivity of its level wind to slack in the cable.

The new wire = .30 > .25.

1500 Z Exec. Council tel. Conference

Nick: Sofar floats #8 & 9 not signaling

Tom wants them picked up. Only if they become near to the course of the density measurements.

C. Wunch: Density priorities

Crease, Sturges, Breatherton, Nick

A. R. R.

Density measurement and Sofar vel. measurements involve a mismatch.

Nick:

Monin to visit WHOI. Stommel to talk about changing arrival time of the Russian scientist and to present a review of MODE 1.

Action G. Seaver

call Miami

1) have Tony talk to Francis about the changes in the density pattern (fm C.W.)

2) Tex talk to Hansen

17 April

- 3) Report daily to Bmda prior to noon about Hunt repairs so that this info can be included in the 1 PM cons. (until Hunt underway)
- 4) Miami - Tex. : status of echo sounder, Hull cleaning, & winches.
Why do we have to cut the WHOI cable. Is it because of the flared drum.
Does the W-10 still have the same drum?
- 6) Provide spare telecopier for Bmda.
talk to You & Dennis.
- 7) ARR action memo.

1900 Z Wendall Brown

called in regard to the state of Hunt. Had not talked to Tony Sturges. I (G.S.) had several times ~~ask~~ ask thru Hoadly to have Tony call W.B. and was under the impression that this had occurred
Also W.B. mentioned that R. Scarlet is requesting a schedule change of Hunt.

1910 z Called Xerox about Bmda spare
(861-1670) Bill Carleton - scheduled for
Wed. Will try to expedite for today

1940 z ARR

OK'd giving MIT telecopier to
DWM if all other possibilities fail.
Call Hank.

1950 z Xerox

We will pick up copier at
State wide transportation

Clinton St. Malden - 321-5900

near Malden Sq.

You will deliver 6 PM to DWM Home

2010 z Miami - Trayco - fm Ron Mosey

wire is being taken off Trident winch.

Hydrophone repaired underway. Photo cell
must be cleaned daily

Ship out of drydock 10 AM Wed. Then
they can put WHOI wire on W-10. There
is no reason to cut WHOI cable on W-10
(there would have been if it had been
put on trident winch.) W-10 has the

17 April

same drum. Because of ~~the~~ ^{the} way it is fabricated, the core is warped (or flared) The .30" cable should minimize this problem. Ron is pleased with the progress. More optimistic than yesterday.

Still cannot raise Tony Sturges. He has been told to call Wendall Brown.

2100 z R. Scarlet

Wants Hunt to return to Banda 6 May instead of 5 May. Will calculate time required for Hunt to Trident Transfer. We will contact H. Stommel and ARR. He has notified Nick, if he doesn't hear from us he will include it in tomorrow's cona. ^{SCARLET} He has cleared it with W. Brown.

2106 z From Scarlet

want to delay Hunt arrival Banda until 6 May because Trident doesn't get in until then. But Hunt must leave 8 May because Filloox has back up trigger set for 10 May.

18 April 1973
 2118 Z fm Tony Sturges

A piece of trailer bed for
 SIO equip has been removed.
 Will be bolted back in place in
 Bmda. Involves unbolting the
 Hathaway winch and stowing it
 out of the way.

Sturges will call W. Brown
 now.

2138 DWM to APRR ; CW to R. Scarlet

2207 Burt Shapiro

Theoret. seq. in film
 not enough detail

On Trial basis? or with us

This Fri. will have more on script
 no footage work printed yet.

Need money

6 avenues should be pursued.

27 April 1973 arrives Bmda.

Shoot seq. on Discovery
 and

2220Z ARR about movie

- 1) Hasn't seen footage
- finances
- 2) Documentation to make it
exciting is hard
- 3) He wants vote of confidence
- a contract,
will change to suit us,
Upset without anything substantial to show
- 4) 1/5th of his time on it.

Allan got pt across that we took
Rosenthal's advice.

18 April 1973

1600Z Henry Barins X 361

19/145

order GP 189256

acc. No 73369

P.O. \$1199.00

out of money, want money

\$2257.00 spend

increase \$1000.00 to cover

also additional

Henry Pritchard

1606Z Dick Edwards.

tie line 188 dial tone - ext.

Money: \$400^{\$13}

\$550 Truck

250 exp

300 wages

95. air

\$1300.00

1640Z Ron Mosey on Tex at Traycor

still in drydock - rained last night

in water 3PM. Can sail 10:00-12:00.

Test pull on Trident winch >5000 lb

Installing Alpine metering wheel

Lee Densler (John Hopkin - Breather-ton)

stated to Mosey that it doesn't make

any difference whether Hunt sails

18 April

at midnight or 8 AM Thurs.
CW & R. Scarlet don't agree.

1720 NOIC - Doris KEENER
Where is the STD sensor # 5670
Shipped fm Bmda to the - ETA 1 April

1850 Called Wendall Brown
Tony has been in touch and WB seems
satisfied. Informed him of the status of Hunt

2045 Tex called
due to delay in properly winding the
cable on trident winch ETD 0600 AM Thurs.
19 April. Also 40 HP, 40 GPM power pack
not operating. They are repairing.
Unable to reach Tony Sturges

2110 Informed Nick of the above.

2200 DWM called
why does info of Tex at 2045 18 April
conflict with what he said on 16 and
17 April?

What is the max cable speed now?

2205 Called Tex; will call back.

19 April (1973)

1330Z (0830) TEX called

when winding cable to trident winch late last night (with no load) cable parted at 1000m. Night crew tried - 16 hrs. of work - went home. This morning removed 1000m. Started winding remaining 4500m on to trident from W-10. (spare wire on Trident - use for leg IV). Mosey says ETD early this evening. Tony & Tex say early Fri. morning.

Tex will call at noon

1940Z Hot line back in operation

DWM - notes regarding movie

20 Feb.: talked to Rosenthal in Washington about 3rd Draft. - OK as an outline

Science & Technology OK

Script won't hold audience's attention
It dealt with a lot of hardware
heavy words, no excitement or drama.

Script should be rewritten
 also need a more extensive
 distribution plan such as Public Broadcasting
 Thought budget too high

22 Feb. DWM & Rosenthal reviewed the
 " budget and found no fat.

2 March Action list

On the film: where to go from here.
 no action was taken because of
 the 5 March Navy Review crisis.

Note: this is the period when DWM spent
 35 straight days in the office.

Late Feb Discussions:

wanted rewrite and for them to start
 shooting. Accepted 3rd draft as an outline.

Meeting: Shapiro, Rhines, & ARR:

to get theory into script

not done

Theory part was not brought to Smida
 DWM suggests that Brad Gove write
 contract so that it can be canceled at any
 time and simply reimburse costs.

2100 \approx TEX

$\frac{1}{4}$ wire onto Trident winch
1000-1200 to finish. Then WHOI

0700 AM Fri. Sailing

TEX: must leave by 10 PM Thurs. nite

80-100 M/min max.: 30 layers

$1\frac{3}{4}$ - 2 meters in circumference

40/812 rpm = 49.26

\sim 90 M/sec. (86.2) M/min)

bar drum 1 meter in circumference

110 raps per layer

Wire changes angle as crane
moves - correction fell thru.

W-10 winch

from winch to shine 01 level
to crane base - along crane and over.

4500 M left

original 25,000 ft

1200 ft lost at sea in yard

2400 ft " " "

6600 ft " in Trayco yard.

$\frac{6600}{10,200} = \cancel{704.5} 3138$ M

14,800 \sim 4500 M (4553.8 M)

The 6,600 ft on reel - can be used.

NOAA gave Tony shines for WHOI wire

Yard told TEX they have a clamp on

Metering device for W-10.

Tony Sturges: "They don't have
shit here"

Very poor ship yard.

Hunt - 50% priority

10 ships in.

Very disappointed with facilities

9-10 Fri. morning. ETD

Bmda - CW i R. scarlet

2110 Z Xfer STD NOIC fm Hunt
to Trident for Lambert on a non
mode leg. In exchange will due depth
stations for us. 2nd backup on Hunt
= Has not been tested.

2120 Z Tony when at sea informs Bmda
of speed of Hunt (~7.6 knts). Bmda tells
Wendall Brown who calculates time on
8 May to leave Bmda. This then gives
turn around time for Hunt from 6-8 May.
Tony i ships company determine necessary
time for Xfer of gear from Hunt to
Trident.

2400 Z Skapino (fm ARR)

20 April

1400 Z Roy Mosey

1100 ETD

Tony Sturges:

Wire WHOI on W-10

"Lump of spaghetti"

not before noon

- looking for crew men -

Ready to go except for crewman

no metering device for W-10

shives for WHOI wire fm AOML.

Level wind on W-10, ^{not} significant
improved. Drum is bad.

2130 Z Call Traycor

Ron Mosey has gone home
Ship still waiting for sufficient
crew to comply with coast guard
regulations. ETD 0530 PM

567-9280

1500 21 April
 Phone patch: Henry Stommel WHOI
 Rossby Yale (home)
 :

23 April

DWM car meet Jan
 at 4:30 PM Delta # 1256

Ft. Wayne - changes.

Bob Serdant; Bill Hahn

United Fligh 2721 (567-4500)

01:15 AM Tues.

2 packages ^{May} #210.00 lb 1'42" x 3' 150 lb

S.A. memo on air freight distribution

Air freight - service road - to right of
 main road - behind Hilton. North Cargo
 terminal. 2nd right after motel.

Pich Scarlet:

message to Wendall Brown

Hunt - 1/10 Kts increase 7.1 KTS.

let Bio Station know dates

for apt #2 -

Call WHOI.

give weigh Bill no. to Bill Hahn
01674501534

24 April Call to Sinopoli
1650 Z - out until Monday
Mr. Greenbush
202-692-4254
will call back.

Message for Fred Neun

Shipments arrives at airport.

2000 Z

URI weigh bill no.

Magnavox-spec. comp. division
Clewath Smith 219-482-4411
in Fort Wayne: ~~with~~ Bill Hahn

2005 Curt Collins - out

Contract and funding office to call
back

2030 Mr. Greebaum:
 Washington not good
 (Watergate)
 Cambridge, WHOI
 Interest of press. - contact
 WHOI - ships - pictorial
 Mike Schofield
 ONR
 They: NSF are ^{very} interested
 what to talk about
 Pictures, dramatize it
 (middle may)

Massive nature of program
 International Participation

April 25.

Message from R. Scott to Susa:
 RS Flight Boston - Bermuda has been
 changed from May 7 to May 6
 PANAM 130. Only further change
 needed are Bermuda - Boston tickets
 from April 27 to ~~28~~ 29.

1500 Z DDDE

Secretary -

approved by their office. Then to
 Contract and Funding. This signature
 late this week. We should receive
 Mon. or TUES.

1515 Z

Curtis will call

Coast Guard - longer lead time

have done in past

Navy Oceanographic office

1545 Z

Curtis called - will personally
 follow this up tomorrow.

1605Z Bill Hahn

Fort Wayne hasn't received
satellite. Expect one day to repair
B. Hahn will keep me informed

1635Z from Wendall Brown

IES 134 replaced by Researcher III
(Technician ~~from~~ replaces)

In same location, as Swallow
floats will not be in the area.

1650Z Mr. Powell ~~DAS~~ DSR X2498

Invoice with P.O. - don't need P.O.
action - S.A.

1700Z S.A. ^{call} Heritage Travel X7964

2030 Russ Greenbaum

Mike Schofield handle N.E.
coverage. Knows right people and
N.E. press follows WHIO closely

Timing: Ships in
special equip. or instruments

Navy notify Wash. Undersea
technology, science writers. NY Times
sends a stinger

Problem of Mode not WHO press conference.

Spokesmen for MODE - such as NSF, ONR, DWM - stress the broad scope, multi-institutional, international aspect of MODE.

1430 Z 26 April 1973 - Bill Hahn

① Satellite went to Oak Grove Illinois instead of Fort Wayne!

Now at O'Hare, Chicago

satellite (for Trident) receives priority. If received Fri. 27 April, repair over wknd. Send to us. Excess baggage to Bmda - need a passenger on 6-9 May 1973.

② suitcase with circuit boards. send to URI on UPS

Nanag. Marine Lab URI

1430 Z Hot line phone check. Bmda's ringing system ~~is~~ down. must call every hour.

1620 Z Nick Foffonoff

disentagled fish.

Fish - 750 M, road up cable
to 500M Temp, current meter.

Did not release mooring

To chain: abandon further effort to release.

insure it did not release.

look for debris.

upper wire; intr. may be damaged.

Recommend: leave in until July. pick-up

3 1/2 days ship time to pick-up.

don't have replacement gear
aboard chain now. Heinmiller

back to chain.

500M instr. lost.

Release: Proper level of signal
and repeated efforts.

1635 Z Buda to WEML

Heinmiller to Chain (Bob Millard)

4 sec rep rate - is this the mooring

If on, run batteries down

may have to pick up now

sugg. - send command 2 ping command
not sure what they are hitting to. (sofar FCC)

If the pinger is stuck on. - runs
~~battery down~~.

down (2-3 wks) main battery.

Safest way to release:

continues release signal from
0 to 10 power level. sweep the power
level.

~~2030~~ ~~Bmda~~ meeting

1800 Z, to make final decision to release.

0100 local time

1714 Z Cons delayed from Bmda
due to phone patch to
chain.

1757 Z → N.F. & ARR
still here pinger - 4/sec. at location
of mooring #2, Sofar #18 close

pinger should have turned off after 2 min.
Sofar does not have a free running pinger
at this freq.

Transponder, ^{on release} at right depth for
mooring not to be released.

pinger changes rate when released.

pinger should not stay on
when pinger on, receiver off: for release
mechanism.

1807Z

Chain (WEML) - Bmda - WH10 - Harvard
- MIT

~~WH10~~ Don Muller - Bmda to Chain
Bob Millard status of mooring: sensitivity test tried,
WH10: is there a change in ^{4 sec} rep rate or change
when you sent the pinged command.

^{WH10} Chain - no change - still 4 sec rep. rate
Muller to Millard: 11 kc - how have you determined this.

WEML cannot copy.

so far xmits 9.8 kc, receives 10 kc.

transponders to at 10 kc

E.S. work on 12 kc

WH10 - Muller

must filter out everything but 10 kc.

to determine if it's the pinger on mooring 2.

WH10 - Chain 12 mc

Hemmiller thinks its the sofar float

⇒ Another horse in the FCC barn

Chain will leave the mooring #2 in place and continue with STDs.

1918Z Curtis Collins

Films - a matter of time

use contingency fund.

✱ Supplementary Budget in one week

(They have a flood of requests down there because it's the end of the FY)

2033 E. Scarlet WHIO to Bob Millard Chain

Request 1000 M test of STD ; cable

reveal problem that don't show up on deck.

Greatest loss in coverage to NW

although any stations OK.

Meyer & Co.

~~Matter~~ - C.O. chain run evaporators

at full capacity due to shortage in

Bmdc

2100Z

to Wendall Brown:

Hunt group has used your
 shock chords from S10 drums.
 Prepare to provide replacements
 if you need them.
 Yes

~~Rich: Scarlet:~~

27 April

1435Z

ETD & STD down on Hunt
 press on one & temp on the other

Test of STD on claim:

Electrical problems with cable

HF signal attenuated

modification can eliminate

but hasn't been done.

27 April

2054 to Stommel from Hotline cent

IS there a set of Plessey sensors
(Van Leer's) available at MIT that E Kalz
could have to repair his tow fish?

ref Bruce Magnel

Dave Merigard on Hunt.

29
~~30~~ April

ETA Bmda 1700 Z

1457 Z F.B. —

In Swallow to F.B. ARR,
about mini mode II

1826 Z Enr

C.W. Gordy ^V~~G~~ Volkmann

Boston - Bmda

Detar - Pan am.

1830 Mrs G. Volkman will relay C.W. message

30 April

1412 Z Bill Hahn

Magnavox - release it Wed.
to Boston. We ~~have~~ ^{Ship} to Bmda.

Sat to Bmda - 6 May

1509 Z Brad Gove called
wanted completion date to complete
the contract for Houston

Houston has suggested Feb 74
we talked about Jun 74
contract by 15 May

15222
Brad Gove April 20 Houston - DWM ltr
not suff. for a bill
will send back.

~~338~~ 33865

1735 Z DWM

~~file charts~~ - folded charts of Bottom
topography in Susan's office

Have WHIO send them to discovery
may be use - F.W. secretary

Conduct phone check

1900 Z

Fred. N.

retransmit equip. manifest - done

2059 Z

Countdown lines of bottom
topograph - send on Pan Am flight
to Bmda on Tues. 1 May.

1 May 1973 -

1404 Z

cannot reach Yale

Hot line OK

1430

S.A.

02345 fm JFK to Bmda

1546

call
AMr. Ambrosino at Etesco Lorau receives
Hunt wants a spare.

1500

Exec. comm. meeting
went thru action item list
of 27 April

Chain: left Bmda 0530 TUES

ETA Norfolk - late Fri. 4 May

Hauled Sat.

~~tail~~ shaft enroute by truck from California

If the strut brg is OK Lv Norfolk on Wed. May 9

If not, an additional 7-10 days will be required.

1700
~~1500~~ z Called Mr. Price
 201-539-8300

~~1606~~ z

1832 z ? Portable conference telephone
 from Bill Hahn

1948 z UA Ft 2748
 Lv O'hare 1 AM 2 May
 Ar. Boston 3:55 AM 2 May
 weigh bill # 016 FWA 71579712

~~2052~~ z UA Freight 567-4500
 Debbie

att. R. Scarlet MIT
 Hold at Logan

Larry Rhodes: 219-482-5387

Magnavox Fort Wayne

~~at O'hare~~
 rec. 0815 PM 1 May at O'Hare

Flt 142 arr 5:34 (3:30 chk back)

weigh bill # 016 ORD 71579712

3 May 1973

1800 Z Ken Carver x 412 WH10

WH10 \$123.27 shipping ^{charges} 1 steel cable reel
and cable reel extender.

1810 Z to Ron Mosey
Tony Sturges left orders for
Traycor to return items piece meal

1845 Z Don Hansen
V. Miami; Scott Barryman
305-350-7244

1850 Z Scott Barryman
R/V Gilliss
sails 25 May - end of June
Dec 14th
Jim Gibbons - C. Iselin

4 May 1973

1330 Z Norfolk Shipbuilding's
Drydock Corp. - Foot of Claybourne Ave.
in Norfolk Va.

703-545-3551 ^{edwards}
due in Fri. night; Dick going down 4PM
haul Sat. Dick Demie down on Monday.

MAY 5

~~April~~

1553 GS Amies Monday 230 (leave 1235)

6 May 1973

1590

From the Chief Scientist on Hunt III:
concerning the departure time of the Hunt.

The pump associated with the main crane of the Hunt is malfunctioning or inoperative. The crew and captain have reportedly told Tracor that the pump needs to be replaced. Tracor knows exactly what must be sent. The chief scientist wants someone on the mainland (probably Dennis Moore) to insure that the Tracor people (probably Ron Mosey) get the pump to Bermuda tomorrow, 7 May.

Call the Hot Line center in Bermuda in three or four hours to let them know the status of this operation.

1940

From George Seaver in Bermuda:

Make arrangements with Erikson of Hewlett-Packard for a telephone patch with RRS Discovery to take place at 14/10 GMT (10:10 EDT)

2040 After 10 PM EDT, Bermuda
Hot Line will be down.

7 May 1401 Z DWM called AR Carr - He will
call back

Ron Mosery shipped some stuff to Bermuda
for HUNT — where is it.

Carr has crystals for Trident —
Mosery has pump for HUNT

Loran-C punch for Trident —

1508 DWM called AR Carr - DASH crystals
to Wash. National to Ms. Susan Ashton

Ambroseno

Maus Message to Robert Brennen
Can you be in Norfolk Va to
meet CHAW tomorrow, Kellogg
not available for CH IV. IF
any questions, call Maus

1540 Z W Brown says 3rd Eng. left
and no replacement on board
yet. —

For Neergard from Carr.

1806 Z Crystal for Trident to Baltim.
DASH# 006-0229-2091 DASH

4 crystals

Item 1. Rec. crys. for Perm. CW
10911.0 Kh.

Item 2. 3576.5 Kh 2 identical
crystals

Item 3 9761.2 Kh

Option 1 : Quickie

Remove rec. crystal in set from
channel 7. Install item 1 in its
place. Tune accordingly.

Option 2: Remove transmit & Rec crystals from
Ch. 1 and install items 2 in place of
both & tune accordingly

Option 3: Remove all crystals from ch 3 or ch 9
(Rad. Ops! description). In transmit sect. install item 3
In receive sect. install crystal removed in opt. 1.

change mode from A3A to A3J.
Tune accordingly.

Results of opt. 1

~~Trans. to B.C.W and~~

Trans. ~~to~~ Rec B.C.W on 8 megs

Opt. 2 puts Trident on 2 meg
inter ship. (Also helps aircraft)

Opt 3 recovers for ~~the~~ existing
8 meg inter ship.

If manual not available, see
Chuck Wilkins of NOVA group at
BBS.



DR. OSCAR HUH will send a message concerning possible observations for ONR.

for Bermuda

Phoop for Hunt will be
back on flight PANAM 130 830 am.
tomorrow → Bermuda 10.23

WB# Δ 006 FL 41951221 DASH

Wendell Brown

From Wendell

Have been unable to get a
waybill for the Overball-kit from N. Carol.
People who met it:

Womachs Machine Supply

775 Harvey. Louisiana 70058

504 - 362 - 5800

Mr. Bill Pelavert (?)

Overhaul kit for hydraulic pumps
 is made by HYDRECO FLUID SUPPLY
 EQU. HYDRECO DIVISION, NEW YORK
 AIR BRAKE COMPANY, KALAMAZOO, MICH.
 CUSTOMER PART NO 97554 (BHEF)
 SERIAL NR AD 22249.
 HYDRECO PART NO 3020K 2092

TRACON HAS SHIPPED IT BY Δ 220
 ARR. BOSTON 8.26 pm.

2239. Capt Pike says no help from WHOI
 on 3rd Eng. problem.

2319 Z Cliff Buehrens suggest
 a native Bermudian named Hugh Paterson
 (Ch. Eng. Sir. H. Lamb) - Contact Trumbell
 Lives on St. Davids under the
 name of Coombs -
 Possibly hired by Trident but
 Paterson may be able to find one.

8 May Don Hansen Miami:
 1300)
 fm Researcher, ^{to} ARR
 Can't ~~add~~ shorten Buda stay

2) Byron Morse - any word if he's coming on
 Researcher leg

3) 3 Russians on Researcher

4) STD fm Researcher to mainland air freight
 - how many days

5) DWM call Don

1332 Mr. Ambrosino

R.S. mailed Tape punch to Buda for trident
 9:20 Δ Flt 251 weigh bill # ^{Bos} 006-0283-4484

1340 DWM - call Carol

Da

Havana 4952813

Dave:

2096.5 (Airplane)
 Broke channel **1**^k: RF Communica. Recd.
 both transmit + receive **N.Y.**
 now \$8281.2 Split channel at
 8431
 8 MHz CW + 8 MHz Interlocking works.

1750 Z 9 May

Dr. Scott Daubin
 305 - 350 - 7560

1336 Z 10 May

C Wunsch

IF CHAIN rails late tonight
 10 1/2 working days in area.
 5 1/2 days for Sanford - leaves
 5 days p work = 5/7 center square.

Since everything on ship has been
 torn apart, (TID), STD, Computer, Winch,
 CDR anticipate at least 1 day
 of problem. This leaves 4 days = 16 stations

2 more days will allow them to do most of outer square.

Outer sq at 11 knots = 7 days.

4 days gives $\frac{4}{7}$.

6 days would allow nearly complete coverage.

Suggest 2 days from unscheduled time of leg 5 go to leg 4. Last chance with the CTD.

Tentative E.C. conference Hot Line Phase 1
1600 Z -

1356 Z Inform NPF of meeting at 1600

Shapiro - Wants to do underwater camera work - something (float, STD, etc) being dropped or lowered. Is 1 day cruise from Bermuda on Hunt between legs 3 and 4 possible? DWM to disc w Hansen, TRACER, MODE EC, etc.

~~Jim Witting~~ called -

1986Z Charnell:

looks like won't have to
give up 5 days of leg V of Researcher.
Will know by Monday
DWM asks for documentation
on its history. Why MODE by-passed,
Stewart pick it up with upper NOAA
people on Monday,

2000Z MIT-wit10-AOML-Discovery
phone patch.

2000Z S.A call Wayne Warwick
Tel brg Bos 254.2800
relation to P.O.# on brgs to Burda

12 May 1973

Send CON. 158 (+ remake of 157 if necessary) to J.H.U. + Yale on Monday. Harvard may want another copy of CON. 157. and com for tomorrow

13 May

1510 Tim Churgin in Bermuda called to get the number of Jaeger (who works for the people who make the STD's) in San Diego, so he can relay to Jaeger a message from Rich Scarlet. Get the number from Dennis Moore and return call to Tim Churgin
714-465-7518

1307 Z Bermuda Reports weekend telecopies sent to J.H.U.

Nergaard
Dave Nergaard

321-5667

15 May

1507

1) fm R. Scarlet

your output driver in one of the
General Radio counters has failed.

Bring replacement parts in June

2) R.S. to D. Nergaard

Bottom finder died when rosette
triggered with finder on ^{should we} try again?

to Stammel
2112 Photographer OK! for Hunt V

UW Photography:

at the divers risk-ok

no buddy (qualified dive on board)

17 May

Jim Chargin reports call
from Denny Pauli at ONR about
putting out a mooring with
inclinometer string - belong to
Scott Dwin at U Miami -

How close to mooring?

Acoustic Release Channel 10

Same as von Herzeln.

Dwin - Has an inclinometer array
for ocean current profiles -
Niskin Inclinerometers. Spaced
every ~ 75 meter on mooring. Inclinerometer
coaxial \bar{E} line Use line shape to
infer current profile. Each instrument
can record 7200 data pts. Interval
is programmable. 1/sec \leftrightarrow 1/2 hrs. He has
a complete system to be used in
Pacific later in summer. In June
they will op. near 25°N 75°W
for a system test.

Working from North Sea.

Would like to deploy in MARE area from
June 11-16.

Contact for Tracor:

Lowell Collier, FLUNDER: 791-3933

2000 Z 20 May Called HLC for J. McWilliams
~~the~~ Chargin will find him and have him
 call back.

2010 Z 20 May Call L. Collier at home - Told
 him we want HUNT to go out from
 May 23 - June 2 XBT survey of
 inner MORT area, and bottom topog.
 as well. He will inform ship.

2015 Z Chargin called back - Can't find
 McWilliams - Will leave a note for him
 to call D Moore at home or office.

2035 Z Talked to McWilliams
 Told him to call Trumball

2135 Z Charles Parker →
 Recommends getting 2 launchers
 and 2 recorders →

Ed Chute at WHOI takes care
 of XBT systems →

Suggest you - & off as appropriate
 watches.

George Knapp would be good person
 to take →

Parker not too excited about going.

2153 Z 20 May

Wendell Brown re HUNT

Winch - 1st Mate -

DWM asked Brown to tell 1st Mate to talk
 to Milliard before winding any wire.

Hunt itself - no problems

9.4 knots in good weather

8-8.5 in ordinary weather

Depth Recorder - Some problems with
 grounded lead - Now fixed
 plenty of Paper

Loran-C and sett nav. working
well. -

W Brown - La Jolla 25 May - 8 June

Bermuda 11-June until HUNT V.

Note: Have Baker call W. Brown.

George Knapp says he can't go.

Walter MunnK - Lv Bermuda 22 May.

Fchenok -

Other XRT people

John Bruce?

Bob Stanley? (Ask Bruce Warren 1st)

Scripps Tech?

John Bruce - Maybe will go. Check with
him in morning.

Also T Hoadley suggest - Someone from
Sippicon to go?

Ed Chute

Launcher + Recorder constitutes entire system. 2 systems can be borrowed.

Need $\left\{ \begin{array}{l} \text{XBTs} \\ \text{Paper for the recorders.} \end{array} \right.$
to get.

2 launchers and 2 recorders ^{+ manual} will be provided by E. Chute at WHOI [^]

Charlie Parker suggests — Clean launch tube every day. Keep previously expended cartridge in tube.

Be sure you have a good ground to sea water thru ship's hull. Down to bare metal, bolt down — cover with grease.

Parker will show common failures —

Nander must: Wallace Feldner.

⊗ 484 3625.

969 0100 X 2265 30

May 20, 1973

Dean Holt IDOE

Contingency Fund — To buy XBT's

AR² verbal OK

HS " "

DWM - OK

Fofanoff

1. Contingency

2. ST section for Pachopsky (Sound Vel.?)

3. HLC manpower - Bretherton?

May 23

1640
to

Hank Stommel for Scarlet Pingree

Suggestions for Density Work:

Continuous 800 km line of stations
through the MODE center. — Station
every 50 km, to observe
large scale pattern and
watermass variations.

1640

to DAVE NERGAARD

Bring vacuum - pump for use in
changing oil in rosette sampler

Scarlett.

For time 13 - 21 July:

Jawaid Ghani DL 0339
 (0327).

16,26

From Scarlet to Dave Mergand:

replaced 7440 in counter with
 7400 after appropriate
 rewiring. If only lasted 2 days.
 bring some 7440 chips. ✓

1350

From Himmille to DWT
 Moory #2 in good condition.
 Only visible damage was
 5 m of stripped wire jacket
 at about 790 m. No damage
 to instrument or glass balls

Himmille

Friday 13 - 21 July 1954

Left London 9:00 AM

10:00 AM

1426

From London to Dover via Margate

reloaded 7440 in counter with

7500 after appropriate

adjustments. Total loaded 2 days.

7440 + 7500 = 14940 ✓

1450

From Newcastle to DWT

Moody is a good candidate

only field damage seen

5 m of shipyard but parked

at about 7:00 AM. No damage

to instruments or film holder

Newcastle

430







