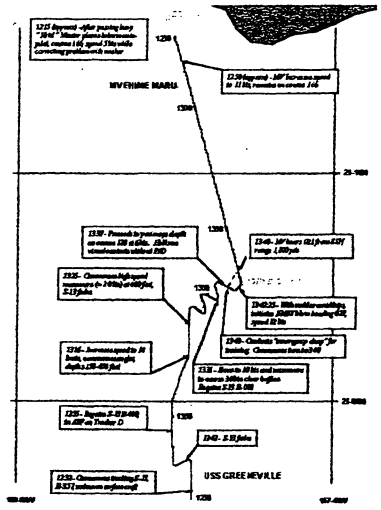
3/4
B.17

Overview of Incident

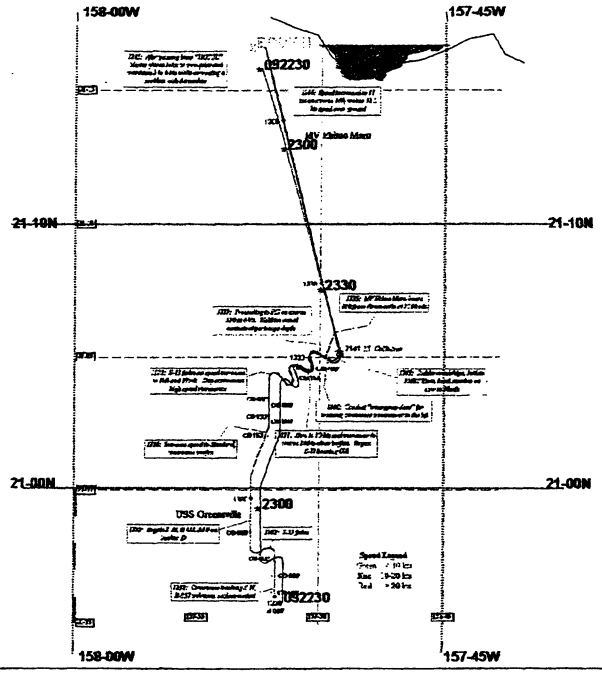


1) Reconstruction of Ehime Maru
   a) Based on Master's Statement
   b) Verified by ATC Radar data. - Exact Position not available
   c) Collision point not set to FAA Radar - to geographically off by ~1000 YDS

2) Greeneville's track generated solely by
   a) ST SLOGGER is input
   b) Only anchor point is collision point

EXHIBIT 42
PAGE 1 OF 17

CSP N72 and CSP CSTT Tracks



~~Be~~

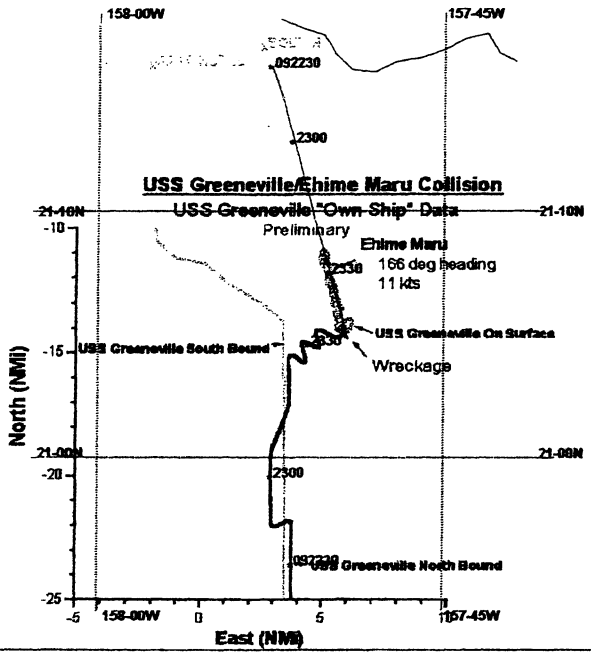
CSTT – independent analysis

– Anchored @ ESGN+ Collision point

Importance is to focus at the ~~three~~ minutes immediately prior to collision

EXHIBIT 42
PAGE 2 OF 17

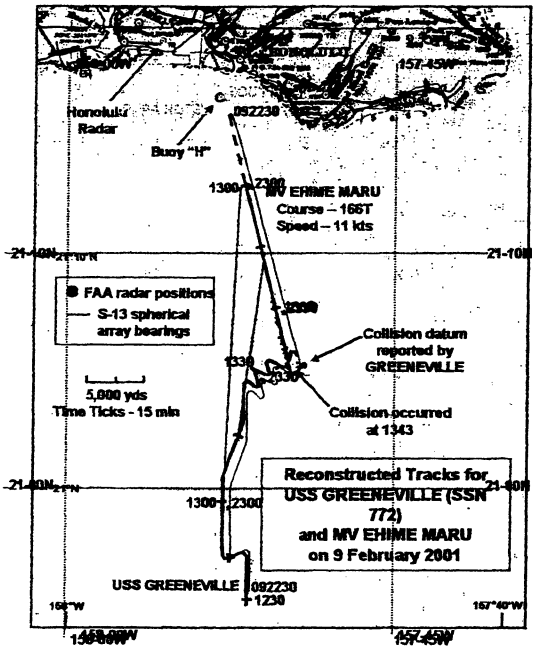
CSP N72 and NTSB Tracks



+ There are overlayed NTSB Product
  + Data Analysis Group
+ NTSB plotted radar data in Green
+ The tracks for Greenville are overlayed exactly

EXHIBIT 42
PAGE 3 OF 17

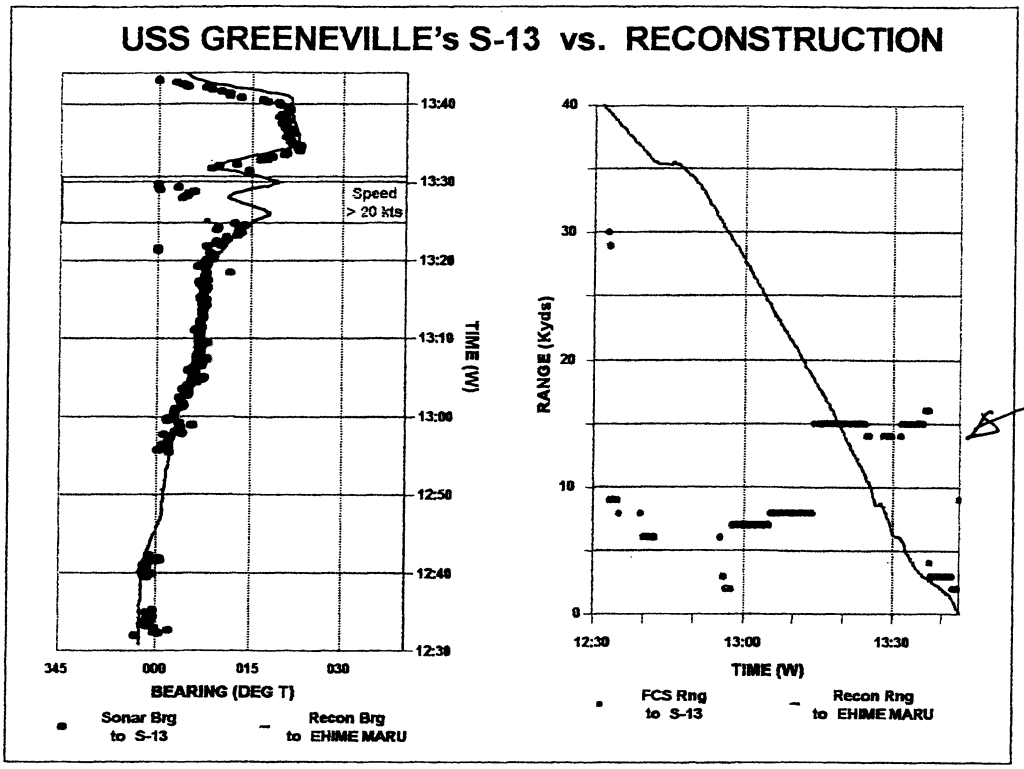
CSP N72 and CSDS 12 Tracks



Real World analysis group
at BEVRON 12

They anchored ~~a position~~ Greeneville's position at two points:
The collision point +
the subs last inertial position - known errors

EXHIBIT 42
PAGE 4 OF 17



Northerly solution
Y ~~Dhmr~~ Dmhr = 0

This is a very tight reconstruction giving me confidence in solution

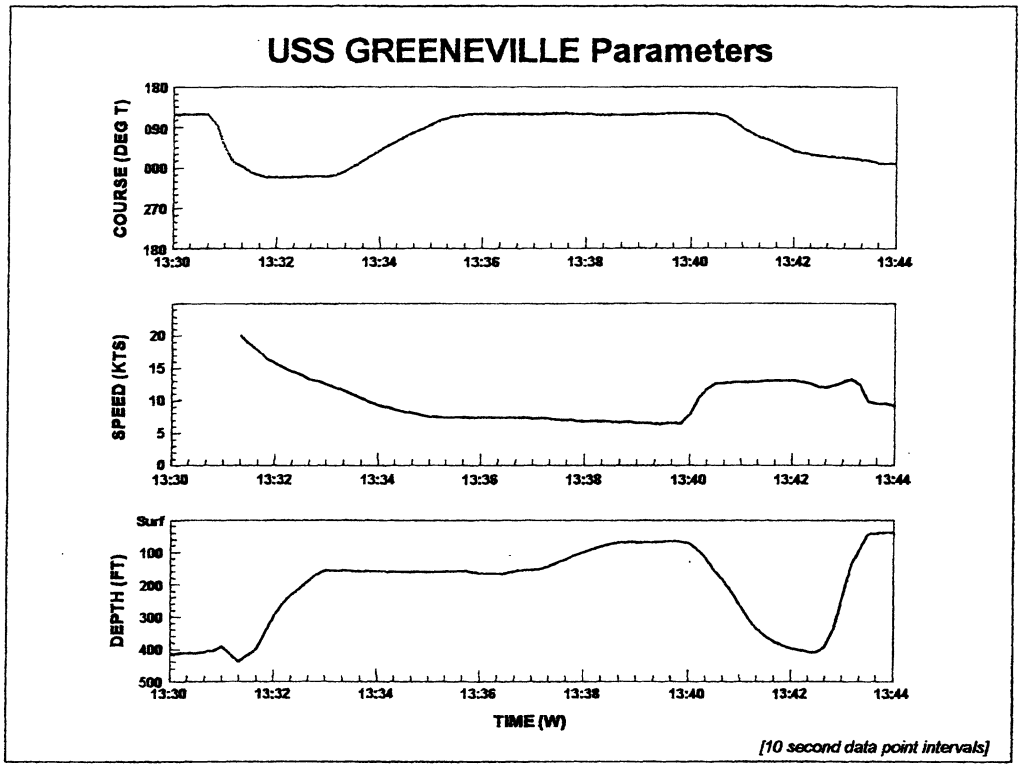
Discussion 15 KYD Solution
C 024 / Speed 11 → headed toward Diamond Head
Not sensible from a geographic perspective
+ Inspot Explanation.

Trial / Mate / System Solutions
What was visible

Update occurred enroute to P.D.
+ after collision

The accurate SOLN occurred after high DBY
leg. ≈ 6°/min

EXHIBIT 42
PAGE 5 OF 17



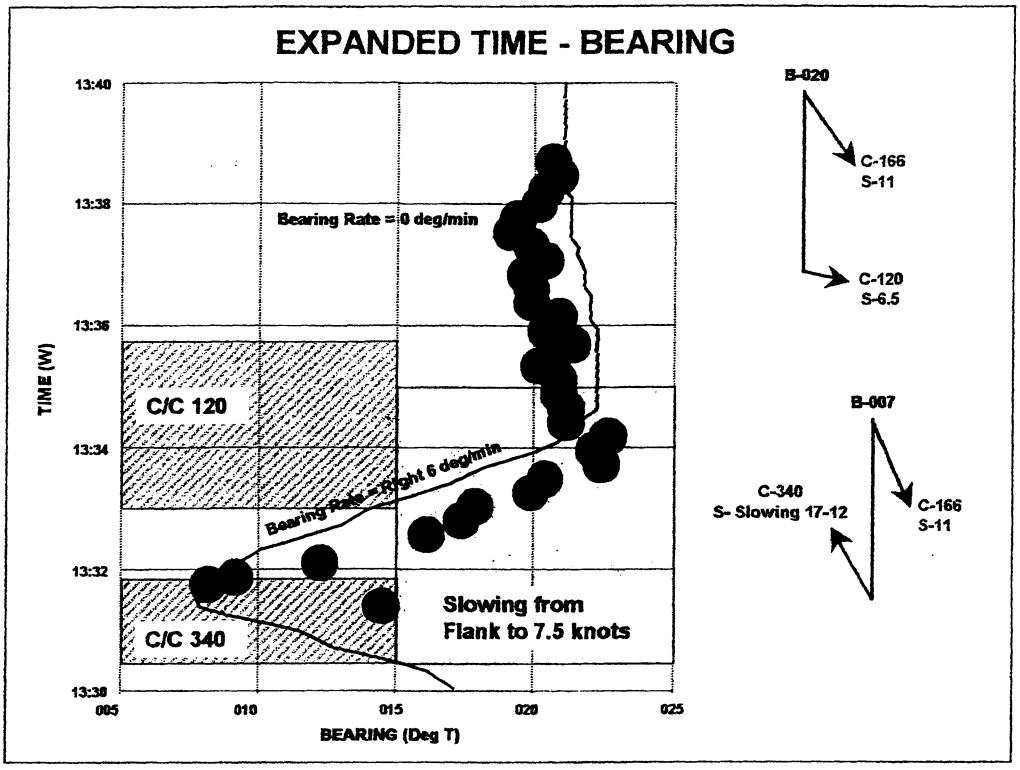
Caveats -

Grass plot up dated every one minute.

340 leg 1 1/2 minutes

Never steady in speed/depth

EXHIBIT 42
PAGE 6 OF 17



This is not a replication of data in FCS.

Super magnified

Period 32 – 34 caused

EXHIBIT 42
PAGE 7 OF 17

If ship had done a 3 minute leg?

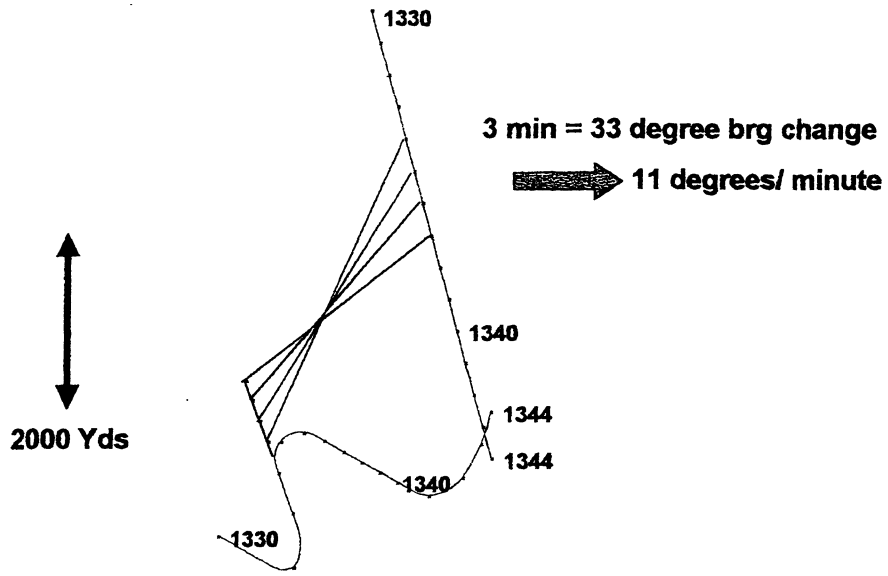
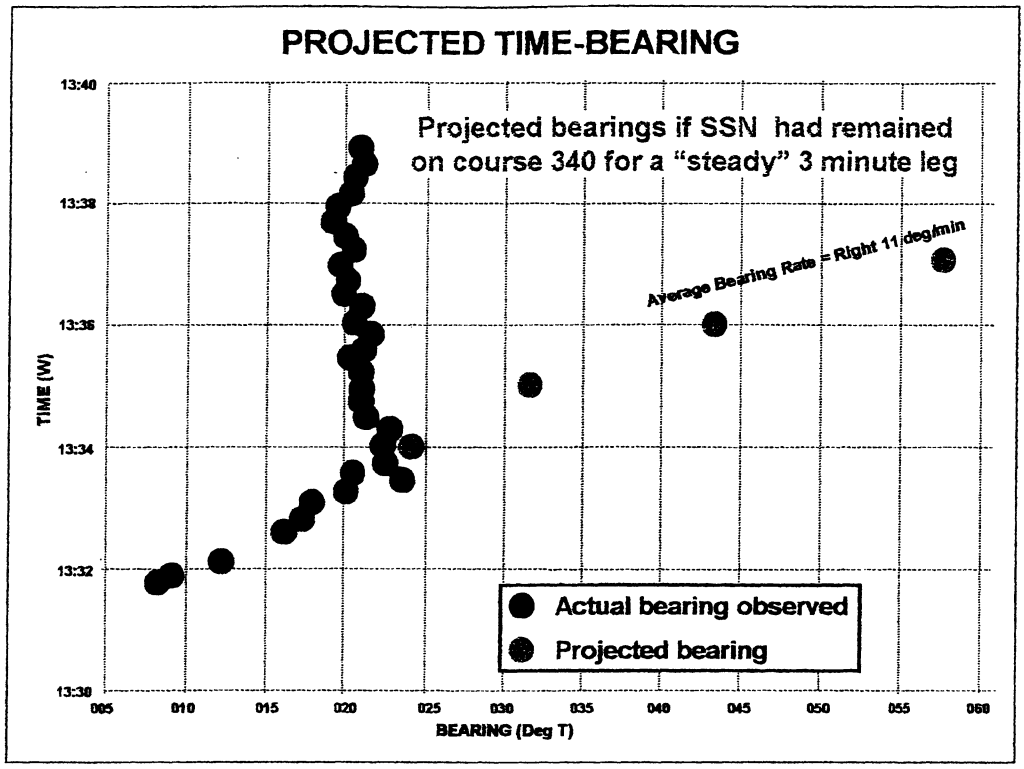


EXHIBIT 42
PAGE 8 OF 17

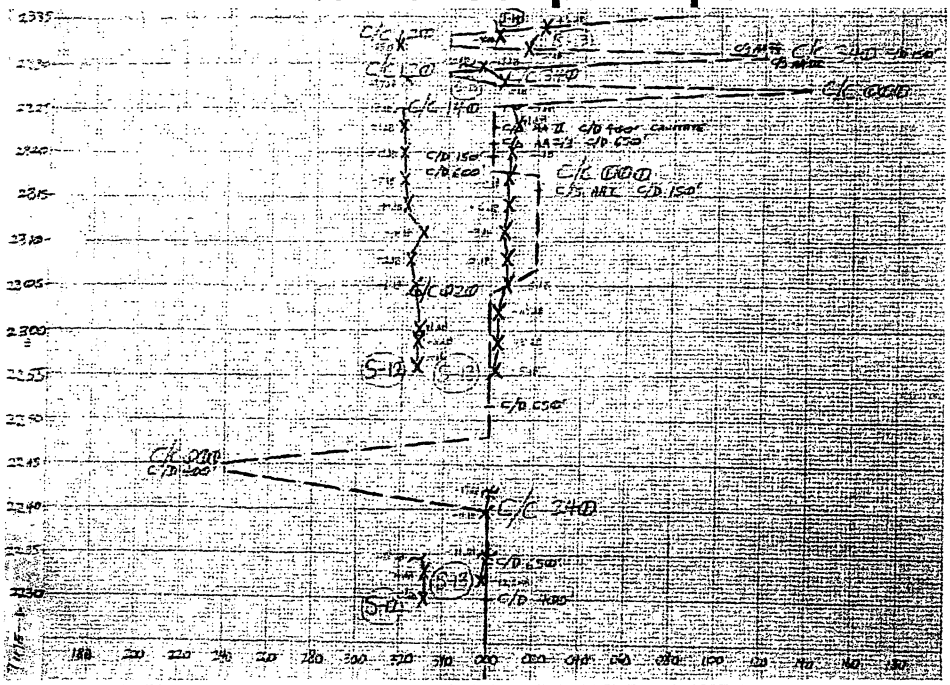


This would've been obvious to all operators!

No doubt
The FCS estimate of ≤ 3-4K would be confirmed beyond a shadow of a doubt

Adequacy of TMA - Choice of course.
- Suboptimal.
Collision course - S-13
S-14 who was quarantined on edge of baffles!

Prior to Periscope Depth



Multiple Contacts

See Slide 16 for P.11

Protocol for checks + balances
OOD +team first +
Then CO review

S-14 on edge of baffles
S-13 R-6 / Then O-
Collision course — 6.5 minutes

See slide 57 for back up

EXHIBIT 42
PAGE 10 OF 17

After Periscope Depth

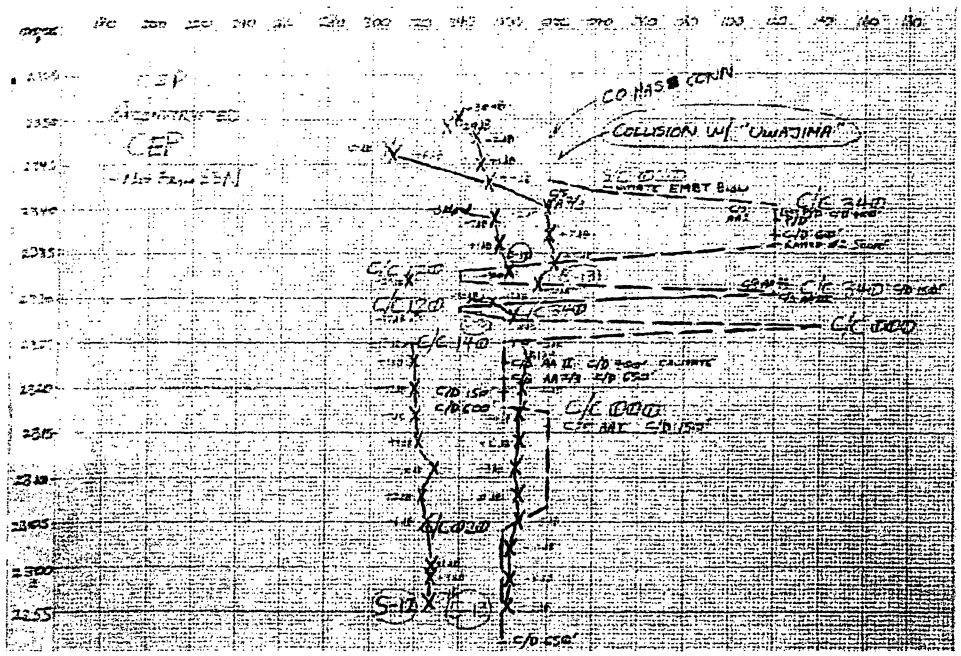
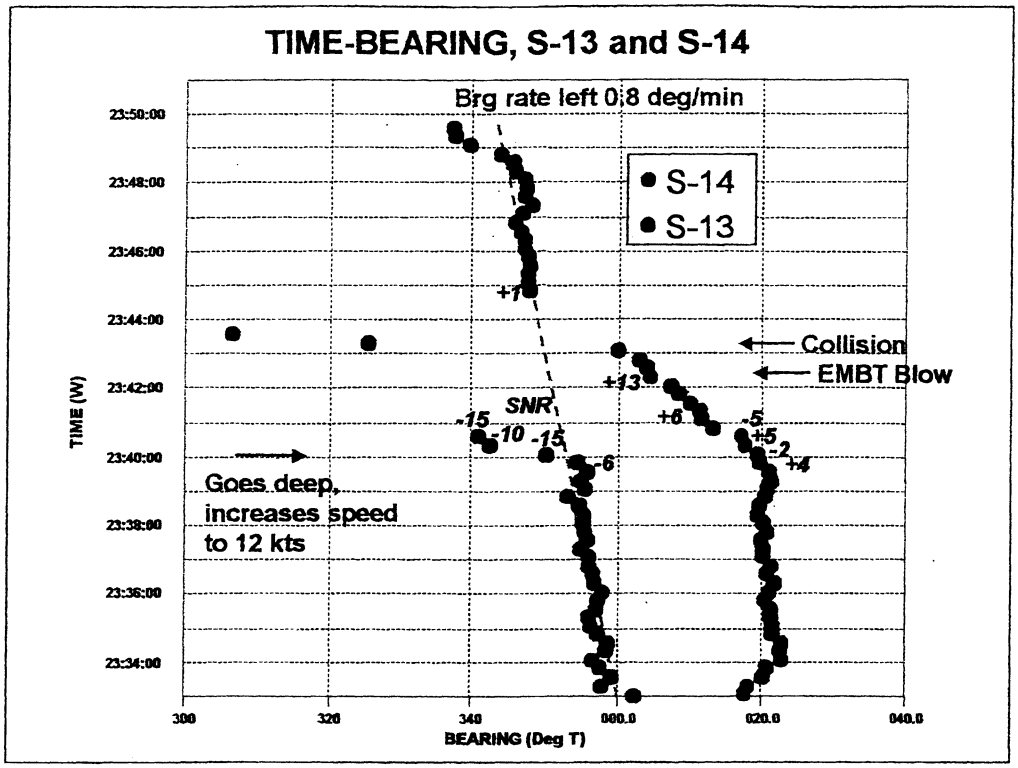


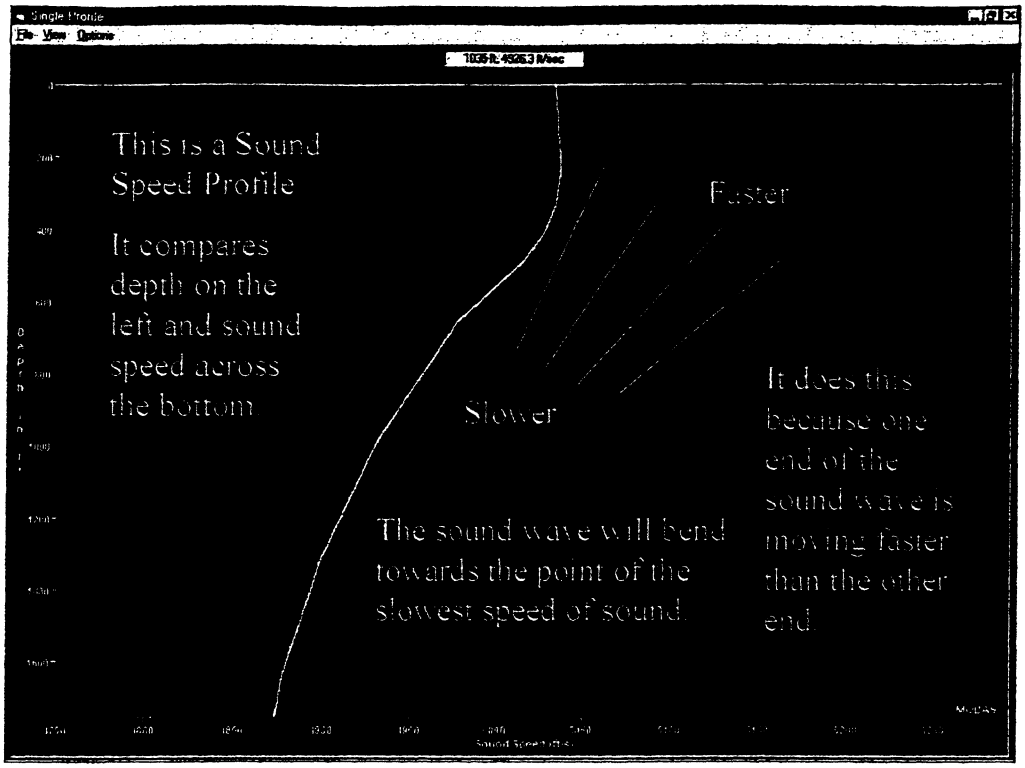
EXHIBIT 42
PAGE 11 OF 17



This shows that
S-13 was the contact

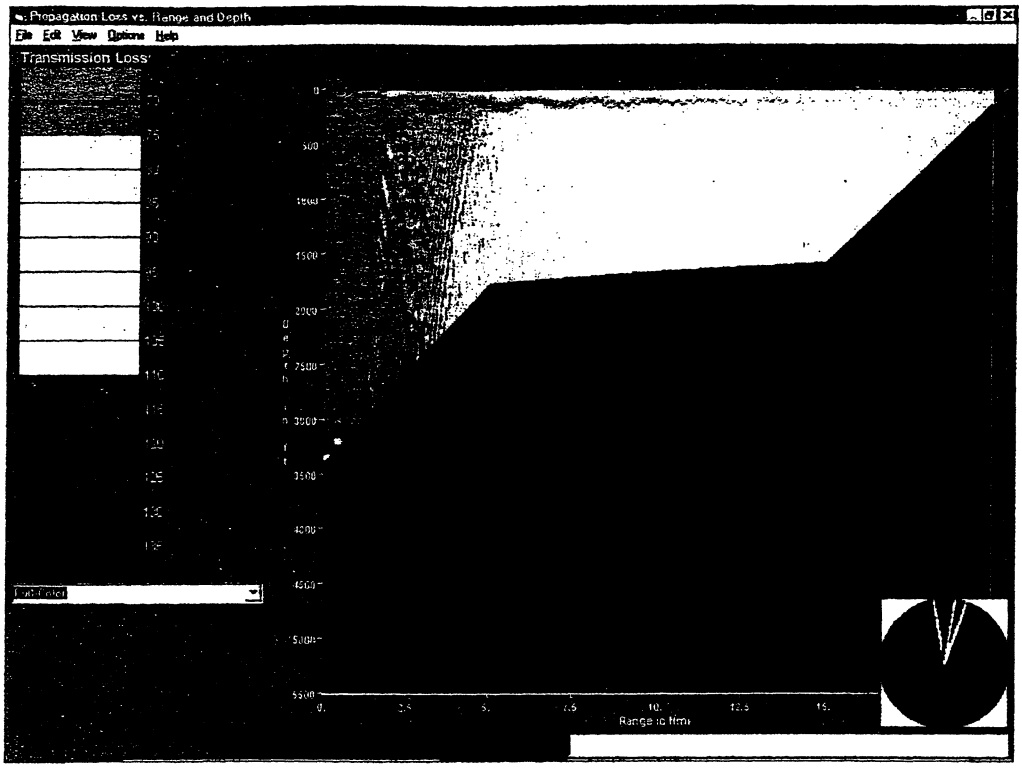
SNR ↑
Driving bearing rate
S-14 in baffles

EXHIBIT 42
PAGE 12 OF 17



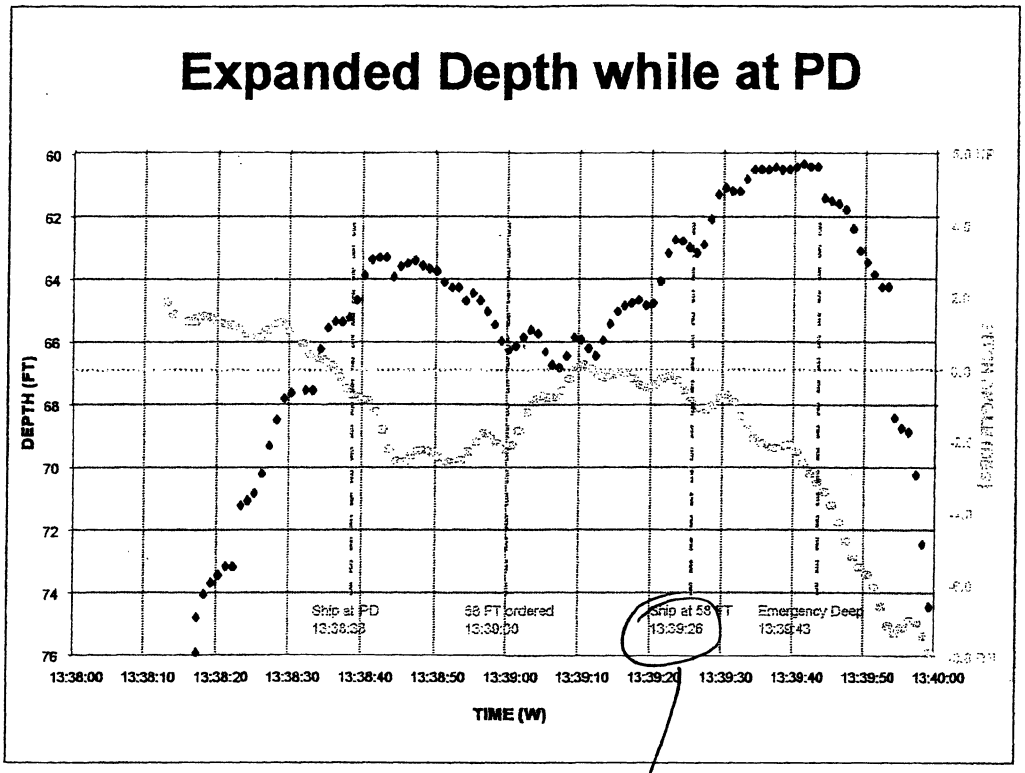
This is the sound velocity profile on the day in question
Taken from ship's stored data

EXHIBIT 42
PAGE 13 OF 17



Good sound condition

EXHIBIT 42
PAGE 14 OF 17



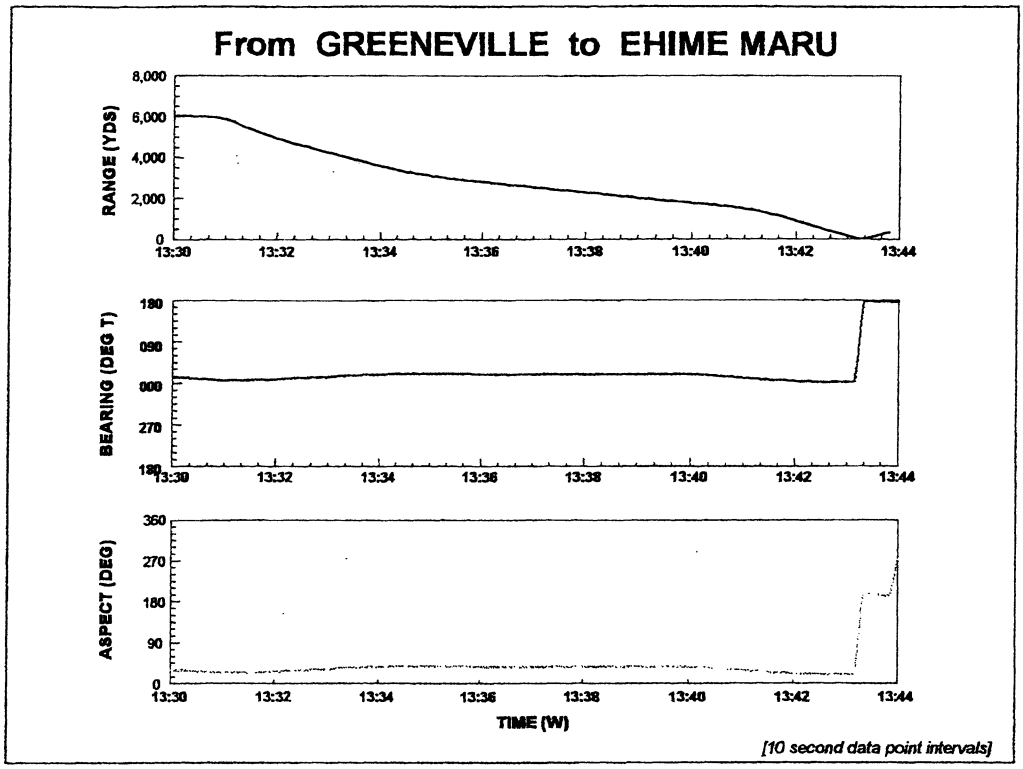
Should be time 30

Periscope Depth SD. – NEVER Routine
- Preparations – brief
- Set up sensors
- Bring on water
- Clear baffles – >120 Co Δ
  - Two legs on each contact
  - Try not to place contacts in baffles
  - 3 minute leg – for accurate determination of DBH → used in formulae + mental analysis

~~Adj~~

- CO/OOD concur
- 61 feet normal – Adjustable based on sea state
- No one speaks until WCC/E.D.
- Thumb rules for evasion – 1 in low / 4 in high Adjusted

EXHIBIT 42
PAGE 15 OF 16



Angle of bow 5-30

EXHIBIT 42
PAGE 16 OF 17

BACKUP SLIDES

ARTICLE

- ~~2104~~ 2102 - Describes watchbills
- ~~2105~~ 2104 - LOGW by XO
  - Only qualified personnel on watch
    - ↳ Confirmed by OPGUIDELINE in "SHALL" terminology

CO - Officer
XO - Embarked COB

EXHIBIT 42
PAGE 17 OF 17