

**NATIONAL TRANSPORTATION SAFETY BOARD
Office of Research and Engineering
Vehicle Recorder Division
Washington, DC 20594**



GROUP CHAIRMAN'S FACTUAL REPORT OF INVESTIGATION

DCA08MM004

**By
Christopher Babcock**

WARNING

The reader of this report is cautioned that the transcription of a voyage data recorder audio recording is not a precise science but is the best product possible from a Safety Board group investigative effort. The transcript or parts thereof, if taken out of context, could be misleading. The transcript should be viewed as an accident investigation tool to be used in conjunction with other evidence gathered during the investigation. Conclusions or interpretations should not be made using the transcript as the sole source of information.

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division
Washington, DC 20594

April 4, 2008

Voyage Data Recorder (VDR) Audio Transcript

**Group Chairman's Factual Report
By Christopher Babcock**

A. EVENT

Location: San Francisco, CA
Date: November 7, 2007, 0830 Pacific Standard Time (PST)¹
Vehicle: *M/V Cosco Busan*, International Maritime Organization (IMO)
#9231743
Operator: Fleet Management Limited
NTSB Number: DCA08MM004

B. GROUP A group was convened on November 27, 2007.

Chairman: Christopher Babcock
Vehicle Recorder Specialist
National Transportation Safety Board

Member: Captain Steven D. Brown
American Pilots Association

Member: Captain R. W. Holly
Field Operations Supervisor
California Department of Fish and Game

Member: LTJG Jacob Hopper
Investigating Officer
United States Coast Guard

Member: Captain Richard Hurt
San Francisco Bar Pilots

Member: Captain Rob Jones
Marine Safety Investigator
National Transportation Safety Board

¹ All times are referenced to local PST

Member: Captain S. T. Harlan Li
Marine Accident Investigation Section
Government of Hong Kong Marine Division

Member: Nagarajan M. S.
General Manager
Fleet Management Limited

Member: Lieutenant Kris Szczechowicz
Assistant Senior Investigating Officer
United States Coast Guard

Mandarin Chinese translation assistance was provided by:

Captain S. T. Harlan Li
Marine Accident Investigation Section
Government of Hong Kong Marine Division

He Ning
Staff Assistant
National Transportation Safety Board

Michael Yan
Staff Translator
United States Department of State

C. SUMMARY

On November 7, 2007, at approximately 0830 PST, the Hong Kong flag vessel *M/V Cosco Busan*, a 901-foot container ship operated by Fleet Management Limited and owned by Regal Stone Limited, with a complement of 24 crew, allided with the delta tower of the San Francisco-Oakland Bay Bridge while en route from the Port of Oakland berth 56 to Busan, South Korea. The 65000 gross ton vessel sustained signifigant damage to the hull and internal structure and released approximately 58000 gallons of bunker fuel into the San Francisco Bay. No injuries were reported to the crew

The following attachment is a transcription of the of bridge audio and radar imagery recovered from the VDR. The document contains the transcription from 0620 PST to 1134 PST from the 25-hour capacity of the VDR. For further information regarding the VDR see the "VDR Group Chairman's Factual Report."

Christopher Babcock
Vehicle Recorder Specialist
Vehicle Recorder Division

Audio Quality Rating Scale

The levels of recording quality are characterized by the following traits of the voyage recorder information:

Excellent Quality	Virtually all of the crew conversations could be accurately and easily understood. The transcript that was developed may indicate only one or two words that were not intelligible. Any loss in the transcript is usually attributed to simultaneous bridge/radio transmissions that obscure each other.
Good Quality	Most of the crew conversations could be accurately and easily understood. The transcript that was developed may indicate several words or phrases that were not intelligible. Any loss in the transcript can be attributed to minor technical deficiencies or momentary dropouts in the recording system or to a large number of simultaneous bridge/radio transmissions that obscure each other.
Fair Quality	The majority of the crew conversations were intelligible. The transcript that was developed may indicate passages where conversations were unintelligible or fragmented. This type of recording is usually caused by bridge noise that obscures portions of the voice signals or by a minor electrical or mechanical failure of the VDR system that distorts or obscures the audio information.
Poor Quality	Extraordinary means had to be used to make some of the crew conversations intelligible. The transcript that was developed may indicate fragmented phrases and conversations and may indicate extensive passages where conversations were missing or unintelligible. This type of recording is usually caused by a combination of a high bridge noise level with a low voice signal (poor signal-to-noise ratio) or by a mechanical or electrical failure of the VDR system that severely distorts or obscures the audio information.
Unusable	Crew conversations may be discerned, but neither ordinary nor extraordinary means made it possible to develop a meaningful transcript of the conversations. This type of recording is usually caused by an almost total mechanical or electrical failure of the VDR system.

Transcript of bridge audio from the *M/V Cosco Busan* which allided with the delta tower of the San Francisco-Oakland Bay Ridge at 0830 PST on November 7, 2007.

LEGEND

CAPT	Voice identified as the captain
PILOT-1	Voice identified as the accident pilot
PILOT-2	Voice identified as the relief pilot
PILOT-3	Voice identified as accompanying relief pilot
SUPER	Voice identified as the company port superintendent
CREW	Voice of unidentified Chinese crewmembers
HELM	Voice identified as the helmsman
CHOFF	Voice identified as the chief officer
2ndOFF	Voice identified as the second officer
CHENG	Voice identified as the chief engineer
2ndENG	Voice identified as the second engineer
USCG-IMD	Voice identified as the Coast Guard Incident Management Officer Division
USCG-1	Voice identified as member of Coast Guard investigation team
USCG-2	Voice identified as second member of Coast Guard investigation team
USCG-3	Voice identified as third member of Coast Guard investigation team
USCG-4	Voice identified as fourth member of Coast Guard investigation team
UNIT 10	VHF transmission from pilot callsign Unit 10
UNIT 7	VHF transmission from pilot callgism Unit 7
UNIT 27	VHF transmission from pilot callsign Unit 27
VTS	VHF Transmission from US Coast Guard Vessel Traffic Service
MF	VHF Transmission from the <i>Millennium Falcon</i>
SOLNA	VHF Transmission from the tug <i>Solana</i>
WILLR	VHF Transmission from the <i>William R</i>
REV	VHF Transmission from the tug <i>Revolution</i>
TERN	VHF Transmission from the USCG Cutter <i>Tern</i>
GG	VHF Transmission from the Pilot Boat <i>Golden Gate</i>
NJORD	VHF Transmission from the dredge <i>Njord</i>
VHF	Transmission made over VHF radio
UHF	Transmission made or received over crew handheld radios
CELL	Transmission made via cell phone
SAT	Transmission made via satellite phone
PHONE	Transmission made via bridge phone
?	Unidentified voice

*	Unintelligible word
#	Expletive
@	Non-pertinent word
[]	Editorial insertion

Note 1: Times are expressed in Pacific Standard Time (PST).

Note 2: English translation of Chinese conversation between crew is italicized.

Note 3: Generally, only radio transmissions to and from the accident vessel were transcribed.

Note 4: Words shown with excess vowels, letters, or drawn out syllables are a phonetic representation of the words as spoken.

Note 5: A non-pertinent word, where noted, refers to a word not directly related to the operation, control or condition of the vessel.

22:11:00 6 November 2007

START OF RECORDING

6:20:35 7 November 2007

START OF TRANSCRIPT

06:20:36

PILOT good morning.

06:20:38

CREW pilot?

06:20:39

PILOT yes.

06:20:43

CREW do you want a soda coffee?

06:20:46

PILOT uh just a minute. *.

06:24:10

CREW **.

06:24:12

CAPT *what's up?*

06:24:13

CREW ***.

06:24:15

CAPT *** is down there but ours is not.*

06:24:19

CREW ***.

06:24:23

CAPT ** has been pulled back already.*

06:24:24

CREW *** of the crew have been put down.*

06:24:28

CREW *who asked to put it down? how can we put it down before they leave?*

06:24:33

CREW *ohh?*

06:24:46

CAPT uh mister pilot.

06:24:48

PILOT yes.

06:24:48

CAPT captain. good morning.

06:24:49

PILOT good morning. how are you?

06:24:50

CAPT * can go?

06:24:52

PILOT uh we'll take a look at things here. see how— talk and see how the visibility *. do you have a toilet up here captain?

06:25:10

CAPT uh toilet? right here.

06:25:11

PILOT yeah okay.

06:25:45

? *

06:25:47

SUPER good morning.

06:25:49

[sound similar to bridge phone ringing]

06:25:51

? * speed.

06:25:59

SUPER they would not know that the guy is speaking to them.

06:26:04

CREW *.

06:26:13

SUPER what time are you supposed to sail?

06:26:17

CREW seven *.

06:26:22

? *.

06:26:40

SUPER you should at least ask. what is the *?

06:26:46

? huh?

06:26:46

SUPER ** we are supposed to go. ** who will take us? ***.

06:27:01

[sound similar to papers rustling]

06:27:13

CAPT hello. **.

TIME and
Source

Communication

Radar Imagery

06:27:24

CREW ***.

06:28:21

[twenty two second unintelligible conversation]

06:28:32

[sound similar to general alarm bell]

06:28:45

SUPER captain why don't you ask *? **.

06:28:49

CAPT **.

06:28:50

SUPER ***.

06:28:59

CAPT just a minute I'll call the agent ***.

06:29:07

SUPER * when I come in the morning *. you should at least ask **.

06:30:00

CAPT hello @ this is * on the Cosco Busan.

06:30:03

**SUPER-
PHONE** hello good morning @ ***...yes sir pilot is on board and uh and uh sailing is seven o'clock. we have uh twenty five minutes **. we have received **...hello? **. hello? yeah hello? yeah hello hello? yeah. okay so we ** okay? okay okay okay. * we are waiting.

06:31:45

CAPT * *they want to leave. they do not arrange it. what do they want to do?*

06:31:49

CREW * *that is strange.*

06:31:53

CREW **.

06:33:31

PILOT which which VHF does this go to? which one is one? this one this one. and number two is? two okay. put that on thirteen.

06:35:06

VTS unit seven the Bay Breeze has departed Harbor Bay and reporting approximately one eighth nautical mile visibility over.

06:35:33

VTS Bay Breeze is departing Harbor Bay they've got about one eighth mile nautical mile visibility over

06:36:03

CREW ***.

06:36:41

**PILOT-
VHF** traffic romeo Cosco Busan.

06:36:50

VTs romeo on board the Cosco Busan good morning.

06:36:53

PILOT-VHF good morning preparing to depart Oakland fifty six for sea deep draft forty feet four inches uh probably use nineteen alpha for tugs. and uh what's the visibility around Alcatraz to the Golden Gate Bridge?

06:37:16

VTs it's uh— romeo it's a eighth to a quarter over.

06:37:21

PILOT-VHF all the way to the Golden Gate Bridge?

06:37:23

VTs that's correct.

06:37:25

PILOT-VHF and where's seven now?

06:37:28

VTs main ship channel.

06:37:30

PILOT-VHF okay.

06:37:32

VTs your welcome uh romeo Cosco Busan Oakland fifty six for sea delta echo deep water and correction what are your uh Oakland Bay Bridge and Central Bay lane intentions?

06:37:33

CREW *what about *? not here right now? **. if not here forget it.*

06:37:42

PILOT-VHF yeah you got it right delta echo and deep water.

06:37:46

VTs roger that and working nineteen alpha. there is a * in lane seven for the dredge Njord. they're reported hundred and fifty feet in the the channel in the *. four hundred and correction four hundred feet east of lane seven they're dredging westward * they're on channel eight two and they request *. the William R * barge greater than bound for Oakland ninety nine. over.

06:37:52

[sound similar to bridge phone ringing]

06:38:02

CREW hello?

06:38:19

PILOT-VHF okay and what was the dredge again? was that the Njord on eighty?

06:38:23

VTs yeah that's correct that's the Njord on eighty two.

06:38:26

PILOT-VHF eighty two okay I'll talk to him.

06:38:29

VTs thank you uh romeo.

06:39:11

PILOT-VHF dredge Njord romeo.

06:39:49

PILOT-VHF yeah yeah I got you on the radar.

06:39:58

CAPT *on the left is the red flag.*

06:39:59

CREW *is it the national flag or a red flag?*

06:40:00

CAPT *yesterday morning when we were operating we didn't use it.*

06:40:05

?-VHF where are you guys?

06:40:08

CREW *** flag.*

06:40:16

CREW-UHF ***.*

06:40:21

CREW-UHF *** talk-back system.*

06:40:24

CAPT-UHF *later on ** are going to get off.*

06:40:30

CREW-UHF ** to get ready.*

06:41:20

PILOT can you uh make this picture bigger?

06:41:24

CREW yeah ***.*

06:41:32

PILOT no no more more area.

06:41:35

CREW oh oh yeah.

06:41:43

PILOT one more.

06:41:45

CREW ***.*

06:41:51

PILOT back one more.

06:41:58

PILOT there's a dredge right here working and everything else is open. the current is coming this way. so we'll wait a few more minutes and I'll get the tugboat made fast and we'll have a look at it here.

06:41:59
[sound similar to general alarm bell]

06:42:09
CREW **.

06:42:16
[sound similar to bridge phone ringing]

06:42:22
CREW- PHONE *hello? what do you mean by what's going on? what? you are *?*

06:42:34
[sound similar to general alarm bell]

06:44:15
CREW- PHONE ***.

06:44:19
CREW- PHONE *okay is it too late to start now?*

06:44:25
[sound similar to general alarm bell]

06:44:28
CREW- UHF **.

06:44:33
CREW- UHF **.

06:44:36
PILOT bow thrusters okay everything—.

06:44:38
CREW yeah yeah yeah I already checked it.

06:44:40
PILOT **.

06:44:43
CAPT *well we're still at* **.

06:44:55
[sixteen seconds of unintelligible Chinese conversation]

06:45:30
CREW- UHF **.

06:45:32
CREW **.

06:45:35
CREW- UHF *now * is over here now. bring him up.*

06:45:42
CAPT *is ** ready?*

TIME and
Source

Communication

Radar Imagery

06:45:55

CREW *.

06:46:02

CREW- *officer on duty. officer on duty.*

UHF

06:46:04

CAPT- *.

UHF

06:46:06

CAPT- *get connected and see if the bow and aft lines are connected.*

UHF

06:46:24

CREW- ***.

UHF

06:46:29

CAPT- ***.

UHF

06:46:32

CREW- ***.

UHF

06:46:33

CAPT- ***.

UHF

06:46:35

CAPT- *let me tell you.*

UHF

06:46:40

PILOT mate can you uh—. mate can you get the variable range marker uh I don't know how to get it on...okay that's too big actually. okay. yeah yeah it's too far out.

06:46:41

[sound similar to fog signal]

06:46:44

CREW- *.

UHF

06:47:09

[sound similar to bridge phone ringing]

06:47:11

PILOT I don't want the rings I just want this. yeah yeah. let's see one mile one point four. oh here can you make this *. does it make a circle? a ring? from from this yeah.

06:47:13

CAPT- *hello? try again.*

PHONE

06:47:28

[sound similar to general alarm bell]

06:47:48

CREW- ***.

UHF

06:47:50

CREW- **.

UHF

06:47:52

CREW- ***.

UHF

06:47:56

CREW- *we have finished it.*

UHF

06:47:58

CREW- ***.

UHF

06:47:59

PILOT ah there it is okay. you got it there okay yeah. okay six * okay that's good.

06:48:04

CREW- ***.

UHF

06:48:06

CAPT- *okay that's good.*

UHF

06:48:10

CAPT *is it ready?*

06:48:11

CREW *that's good.*

06:48:20

CREW *has everyone (tried or eaten)? [same verb]*

06:48:23

CREW yes. **.

06:48:29

CAPT- *when ** passes through please report.*

UHF

06:48:34

CREW- *okay.*

UHF

06:48:39

[sound similar to bridge phone ringing]

06:48:43

CAPT- *hello? hello? ohh. *.*

PHONE

06:48:44

PILOT- traffic romeo.

VHF

06:48:48

VTS romeo traffic.

06:48:49

PILOT- you got somebody in the bar channel?

VHF

06:48:52

VTS roger that that's the William R going to Oakland nintey nine.

06:48:58

PILOT- he's going where?

VHF

06:49:00

VTS Oakland ninety nine.

06:49:03

PILOT-VHF okay I'm assuming that's way up the estuary somewhere I've never heard of Oakland ninety nine.

06:49:09

VTS that's correct.

06:49:11

PILOT-VHF okay. and what's the name of him? Waymar?

06:49:15

CREW-UHF *hello?*

06:49:15

VTS the William R.

06:49:17

PILOT-VHF oh the William R okay thanks.

06:49:19

VTS you're welcome.

06:49:20

CREW *ohh the line should not be done this way.*

06:49:22

CREW ***.*

06:49:58

CREW ****.*

06:50:05

PILOT so captain there's a— this is a tug and a barge coming in. we let them come in first and then— 'cause you can see the other side now and there's no more traffic this looks good. the current's not very strong. it's coming this way so I think we'll be able to go as soon as— after he goes past us. I don't see him in the channel.

06:50:08

CAPT yeah yeah yeah ***.*

06:50:35

PILOT yeah I did that once but it didn't make a square....yeah. yeah okay that's good thanks.

06:51:10

[sound similar to bridge phone ringing]

06:51:15

CAPT-PHONE *hello? uh-huh. good.*

06:51:23

PILOT stand by as soon as tug gets by you can single up you can single up.

06:51:33

CAPT ***.*

06:51:33

PILOT oh oh he's still working oh oh okay even better. oh yeah okay. whenever he's ready whenever he's ready will be okay too.

06:51:38

CAPT **. okay thank you.

06:51:42

PILOT and here's the— this is for the pilot ladder. it'll be on the port side three meters above the water. one man rope one on the after end. and no small lines no nothing tied to the ladder. we'll have this and this and this. okay?

06:51:45

CAPT oh yeah...um-hum. right right. okay thank you.

06:52:06

CREW-UHF *good. in a few minutes. ** front left ** front left **.*

06:52:12

CREW-UHF *yes okay. port side eight meters.*

06:52:21

PILOT-VHF traffic romeo we're gonna wait until the William R gets past us and we're still finishing up a little paperwork.

06:52:29

CAPT is this the barge?

06:52:31

PILOT yeah yeah he's not very fast. it's a barge. it's okay. the longer it goes the clearer the clearer it gets.

06:54:02

CAPT-UHF *please tell ** to bring down the superintendent's luggage.*

06:54:16

[sound similar to bridge phone ringing]

06:56:27

PILOT oh yeah yeah. I have some tea. thank you.

06:56:31

CAPT ohh.

06:56:37

PILOT yeah I just want to read it.

06:56:50

CAPT *.

06:56:54

PILOT it works a hundred percent? the bow thruster? some ships it's not a hundred percent.

06:56:59

CAPT yeah yeah yeah.

06:57:12

PILOT everything works. uhh okay.

06:58:08

PILOT boy this doesn't uh plot very well. we uh this is the target we wanted but is this cancel? cancel is this cancel this one? okay and this is the one we want. yeah acquire yeah information. **.

06:58:21

CREW ***.

TIME and Source

Communication

Radar Imagery

06:58:58

PILOT huh? no no no no no it's fine but there's no target there. I want to delete— there's nothing there but a buoy. I want the want the target off.

06:59:02

CAPT ahh.

06:59:10

PILOT won't go and it still doesn't have this one...no the one that was no I wanted the tug it's not tracking it's not plotting it. this this is the one we're waiting for and I can't I want to see when he's gonna go by and we've plotted it three times and nothing it loses it.

06:59:22

CAPT **.

06:59:51

PILOT yeah see if you can plot this right here this right there. not that one. this one. yeah. see if we can get some information. getting nothing out of this thing. is the ARPA broken?

07:00:14

CREW no no it's okay.

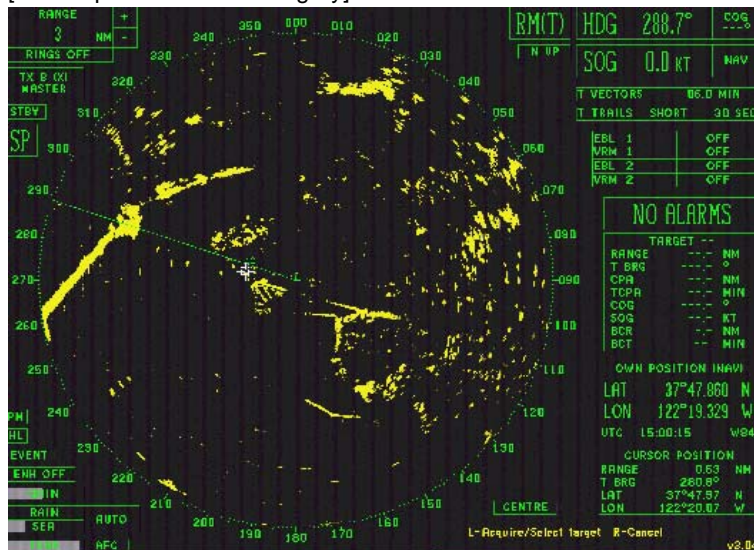
07:00:24

CREW it is okay *.

07:00:27

PILOT yeah but the picture is not as good okay.

[start of pertinent radar imagery]

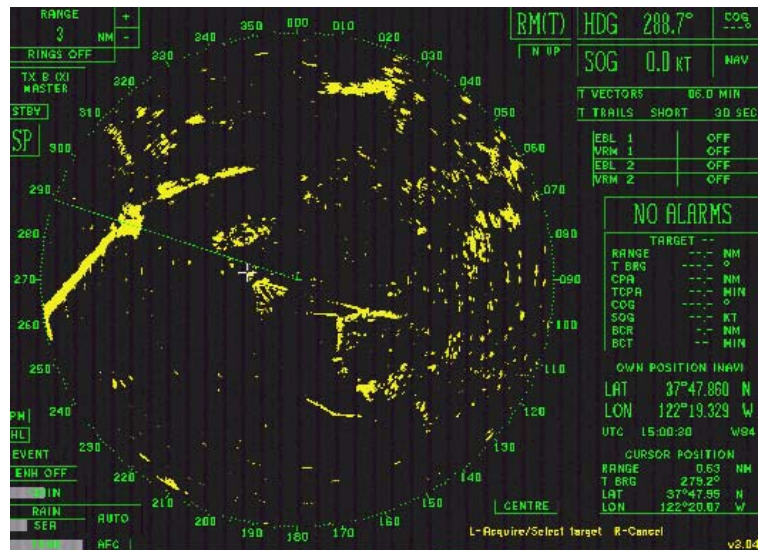


TIME and
Source

Communication

Radar Imagery

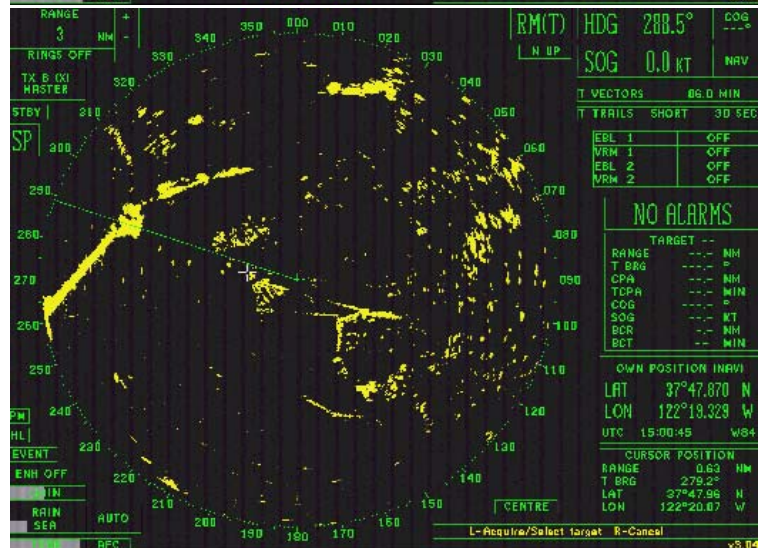
07:00:30



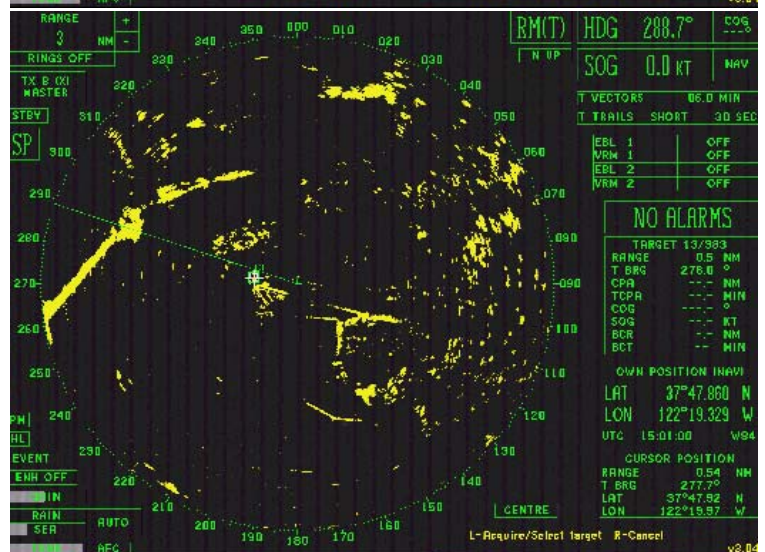
07:00:52
CREW *

07:00:52
PILOT

is it cause it's still not on here? yeah try it again. yeah. okay now it's on this— cause this is a better picture. did you get it? ** we need this to work to leave. no no just let it run. I want to see how fast he's going I want to see when he's gonna get by. information yes. okay see if it—. what's this big arrow? oh that's the— oh oh.



07:01:00



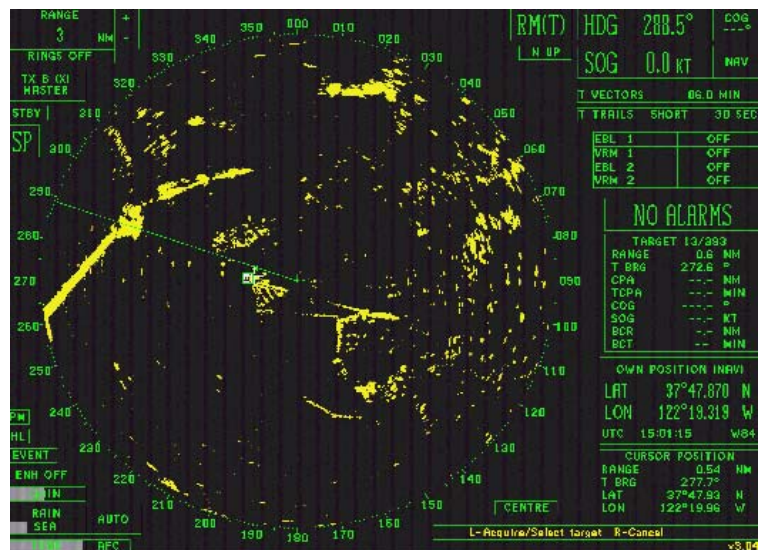
TIME and
Source

Communication

Radar Imagery

07:01:27

CREW **. change it north up or head up?



07:01:35

PILOT no no no no north up. oh I thought that was an arrow. **. oh yeah okay no north up's fine north up yeah okay. yeah trails you can get rid of trails trails off. true vectors.



TIME and
Source

Communication

Radar Imagery

07:02:01

PILOT okay yeah just leave true yeah. yeah. I just want to see if we can get the side of this um shore.

07:02:14

CREW **.

07:02:23

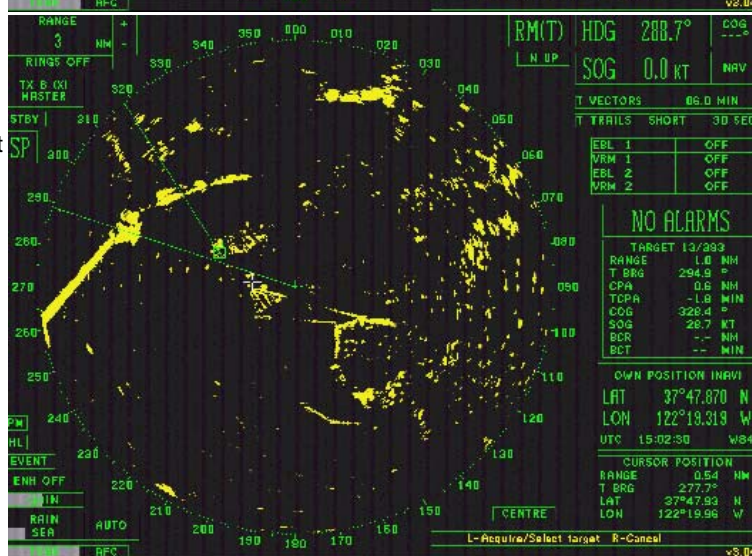
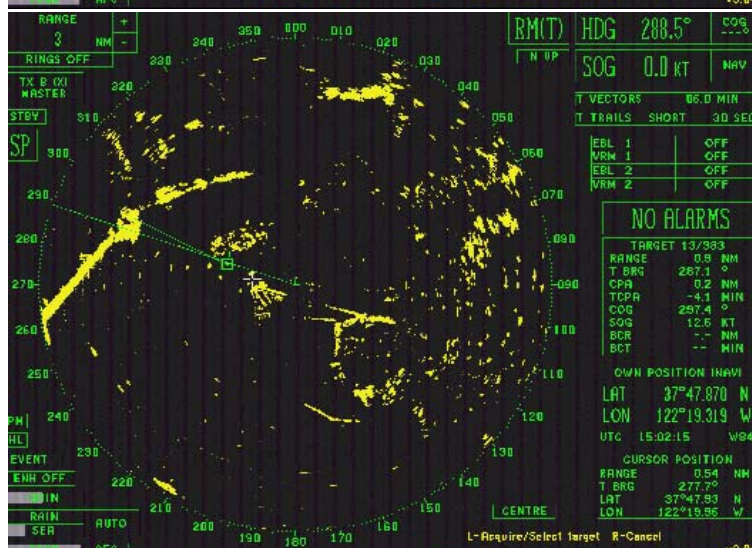
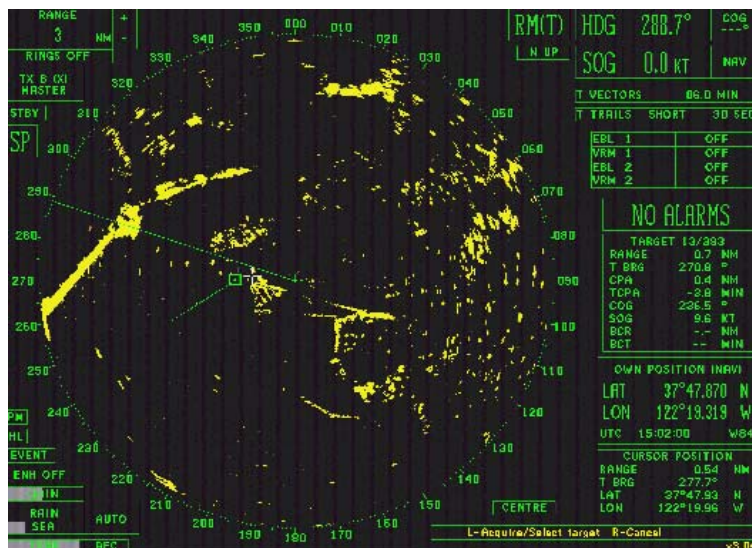
PILOT and is it on this AIS? yeah but I don't see em on here. that's what I thought some of them you— they show up here should almost be— see there's a dredge.

07:02:30

CREW * yeah.

07:02:43

PILOT see it lost it again. shows no uh no vector. don't see any vector on 'em.

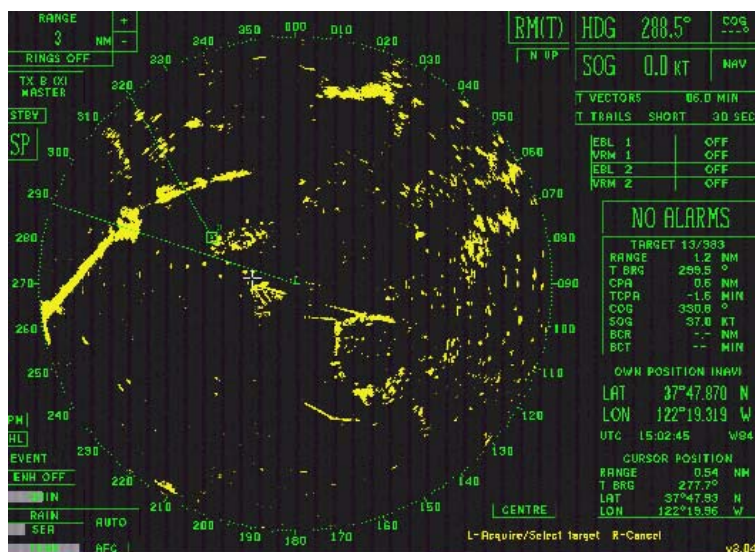


TIME and
Source

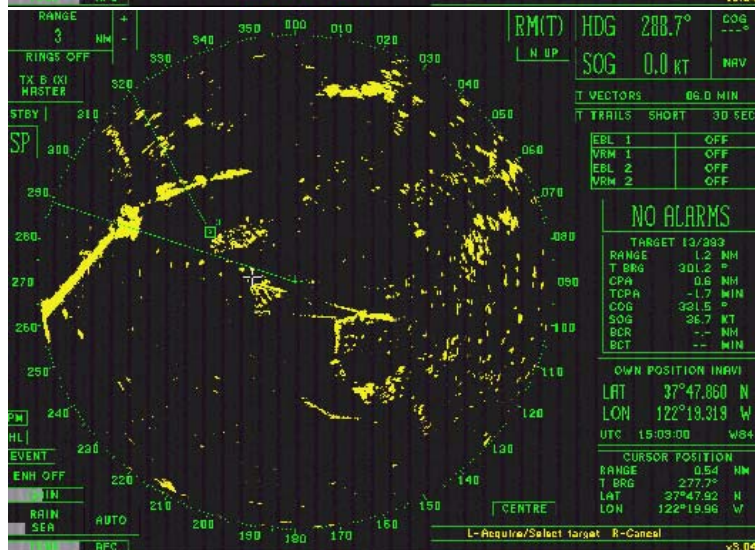
Communication

Radar Imagery

07:02:45



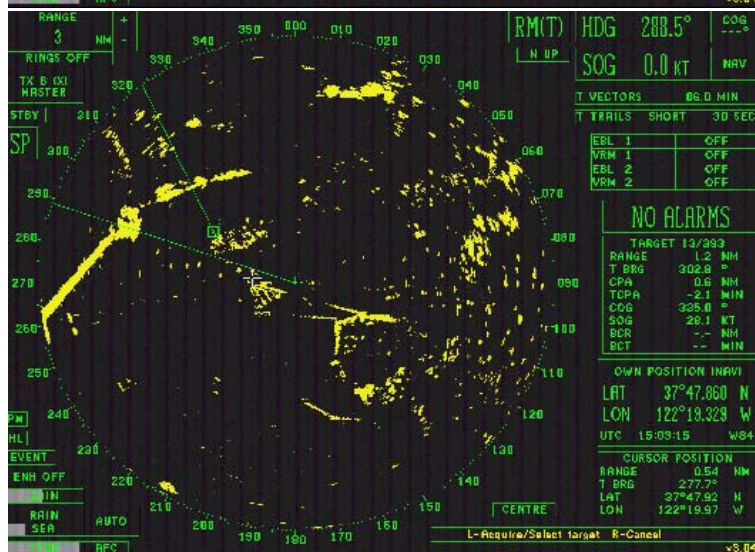
07:03:00



07:03:21

PILOT

yeah that's a buoy *. maybe it's working on this one. no see now it's—. that's that's wrong.



TIME and
Source

Communication

Radar Imagery

07:03:35
CREW **.

07:03:38

PILOT oh yeah but the ship the boat's coming up here.

07:03:53

PILOT * six minutes * as long as I get an arrow.

07:04:01
CREW **.

07:04:04

PILOT ** yeah but that's— the target is now right about here. so that that's not very encouraging if you can't plot anything. I gotta be able to get in and out of here. if I can't plot anything we can't go.

07:04:05

CREW ** moving it.



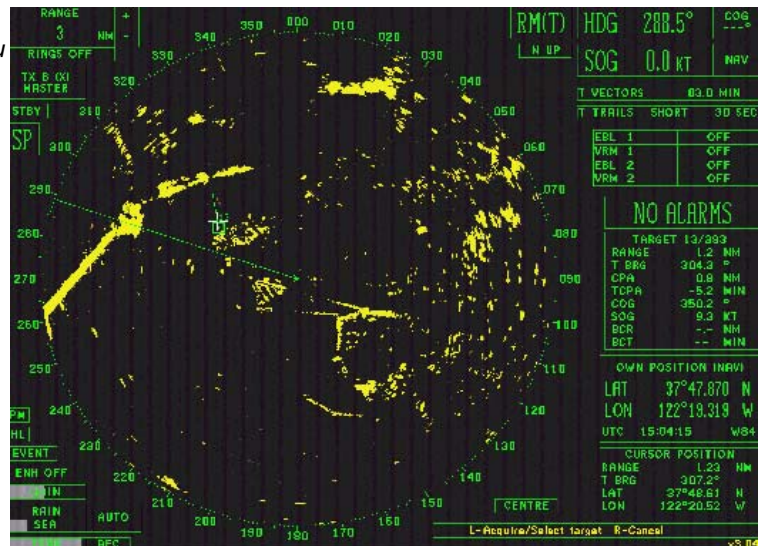
TIME and
Source

Communication

Radar Imagery

07:04:29

CREW-UHF position number one. number one. how are you doing?



07:04:32

CREW-UHF uhh received.

07:04:32

PILOT-VHF William R romeo. where are you at?

07:04:33

CREW-UHF now the superintendent is off the ship.

07:04:35

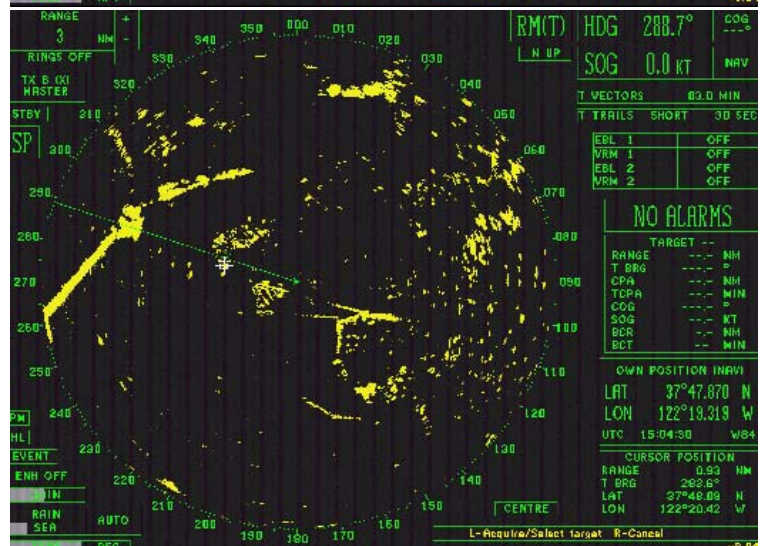
WILLR William R.

07:04:37

PILOT-VHF yeah where are you now?

07:04:38

CREW-UHF once they leave do ** immediately.



TIME and
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Radar Imagery

07:04:57

CREW * flag is flying. but not the American flag right?

07:04:58

PILOT that's him that's him now.

07:05:01

CREW the national flag. the national flag. it is flying.

07:05:02

CREW **.

07:05:08

PILOT it's not plotting captain. I've tried to plot this target five times never plots. didn't plot. that's not good for fog.

07:05:18

CAPT ohh. **.

07:05:27

PILOT it won't.

07:05:29

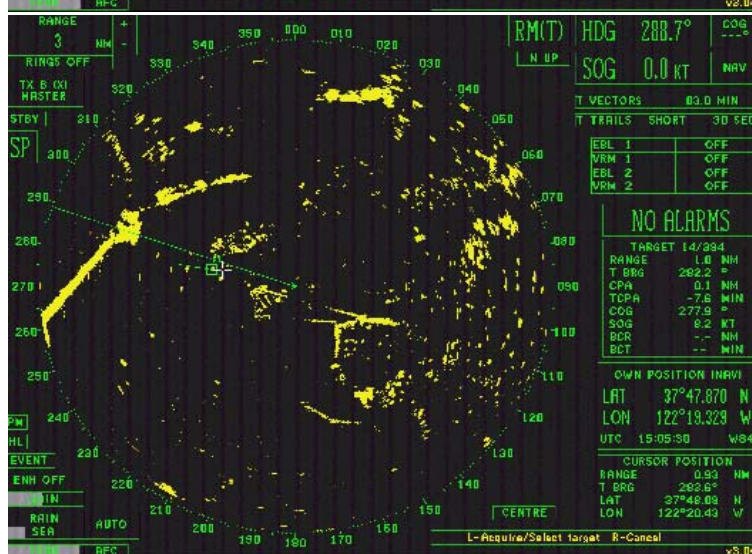
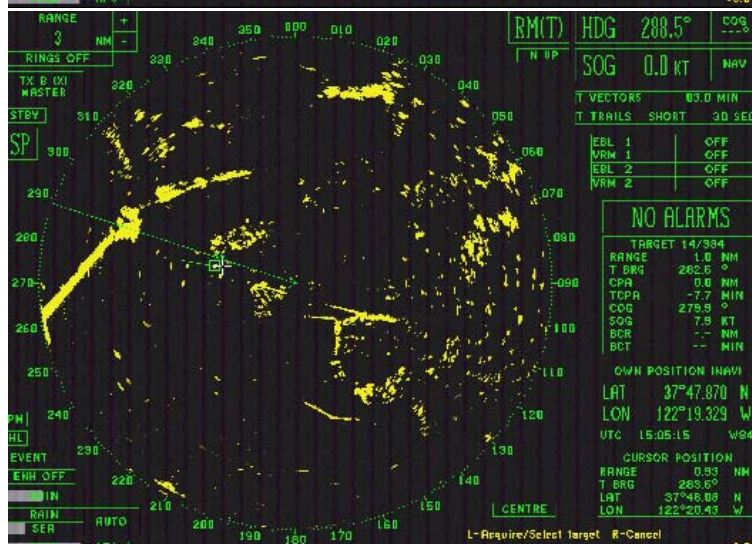
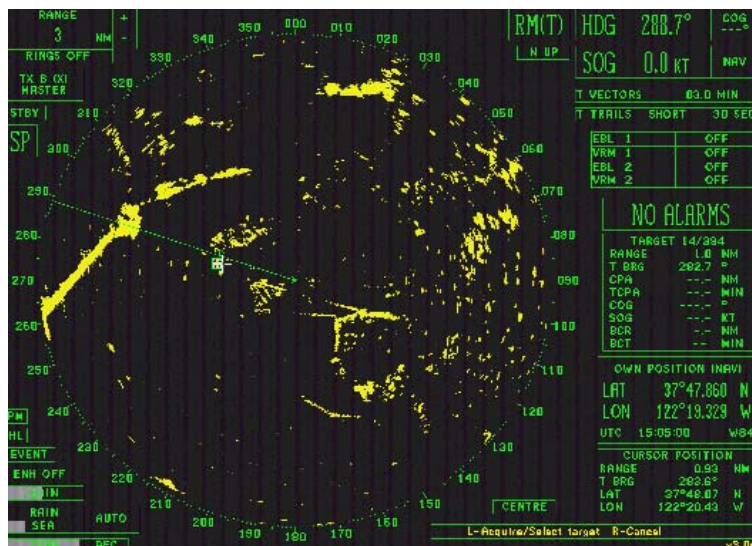
CAPT * delete.

07:05:31

PILOT yeah delete.

07:05:44

PILOT yeah but can we delete it? no this is the target we've been trying to plot but he lost it it won't it won't plot it. but can we get rid of eighteen and?



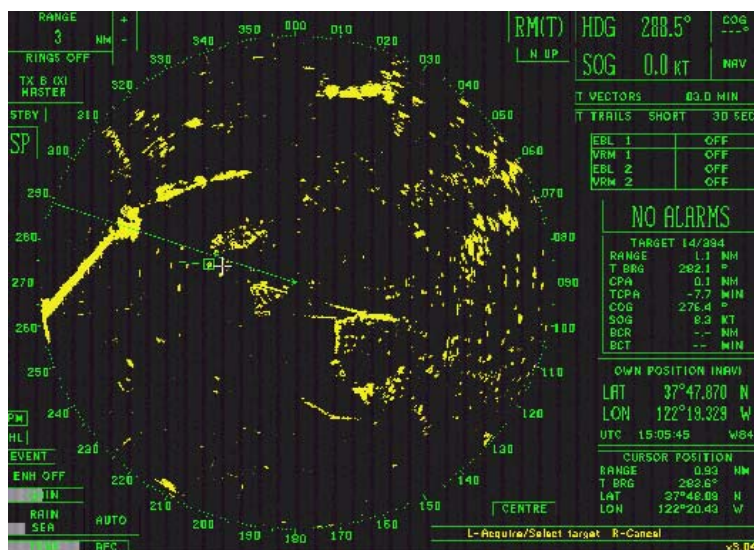
TIME and Source

Communication

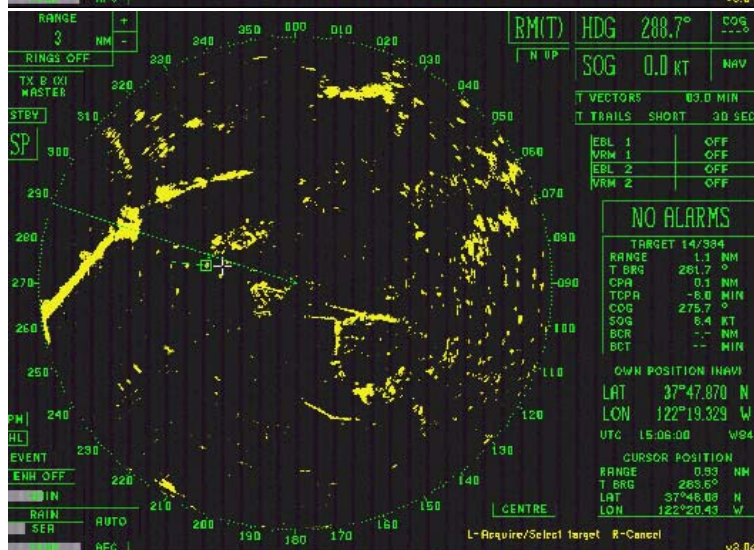
Radar Imagery

07:05:48

CAPT aww yeah. yeah yeah. okay.



07:06:00

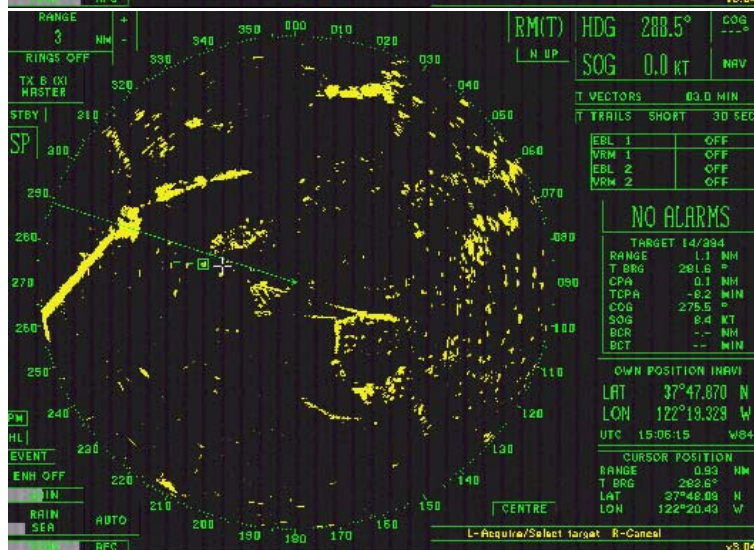


07:06:24

PILOT and where's the tune for this *?

07:06:27

CAPT **.



TIME and Source

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Radar Imagery

07:06:30

PILOT in tune. no because we've got no dock nothing here there's a whole terminal here. there's another big terminal here that's not show—. yeah this isn't showing up this isn't yeah.

07:06:33

CAPT **, tune *.

07:06:46

PILOT oh okay.

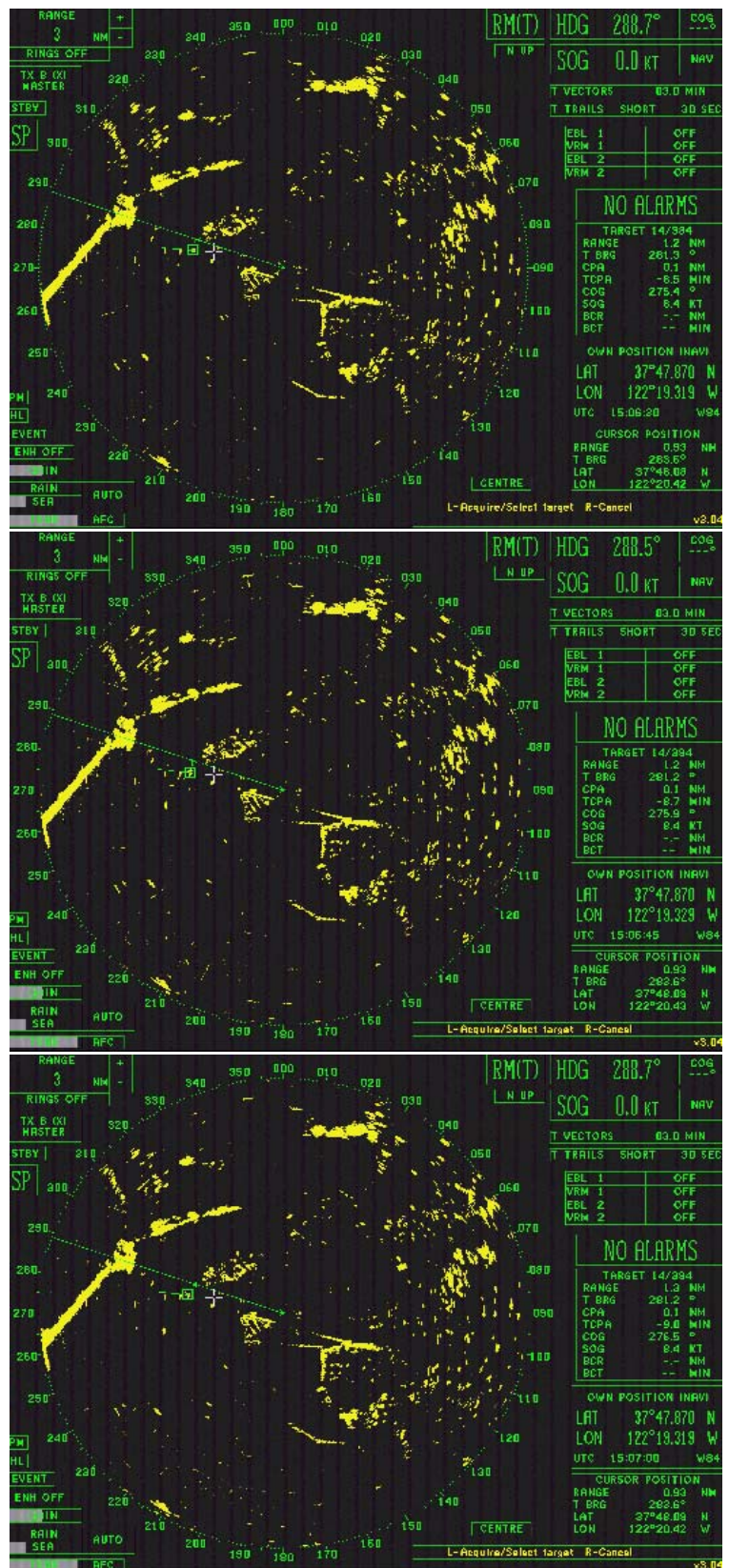
07:06:51

CAPT gain.

07:06:52

PILOT more gain. now see if you can— see can get rid of these? delete seventeen eighteen.

07:07:00



TIME and
Source

Communication

Radar Imagery

07:07:23

CAPT *

07:07:24

PILOT yeah but I can't get rid of I—I—. I don't want to go out if I can't can't see anything. now here's another target going outbound but—. picture's not very good.

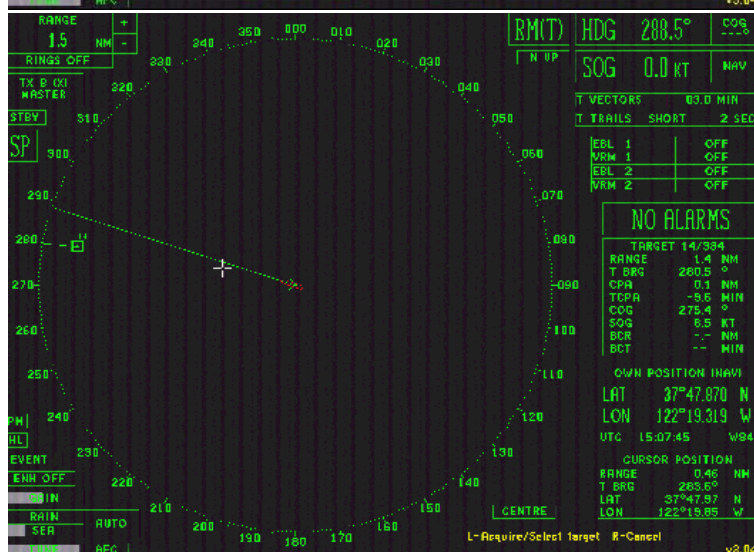
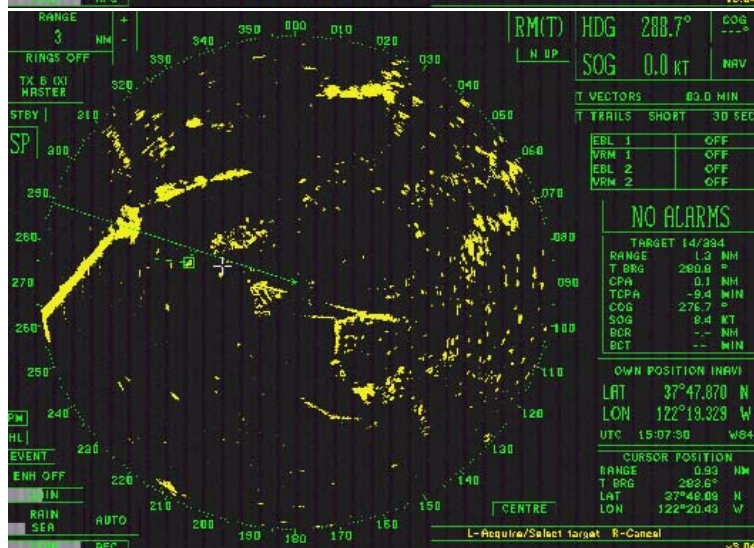
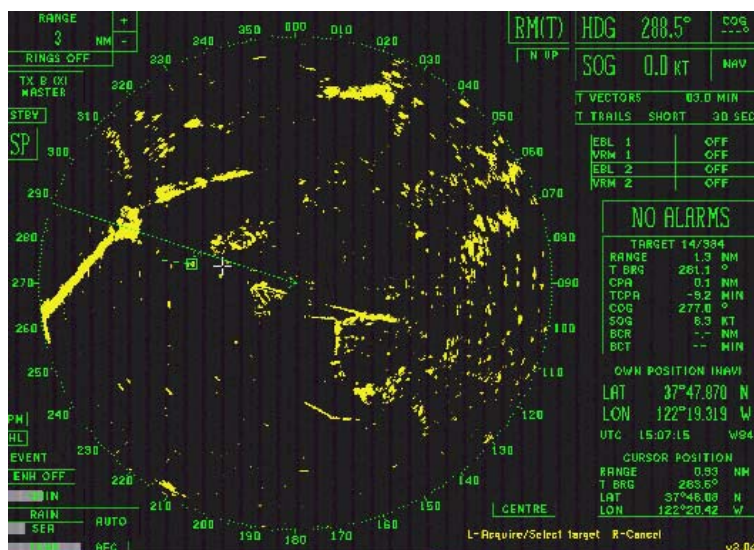
07:07:27

CAPT **. yeah yeah *.

07:07:40

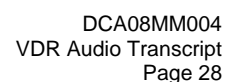
[thirteen seconds of unintelligible Chinese conversation]

07:07:45



Radar Imagery

07:08:44
MF pretty much zero.



TIME and Source

Communication

Radar Imagery

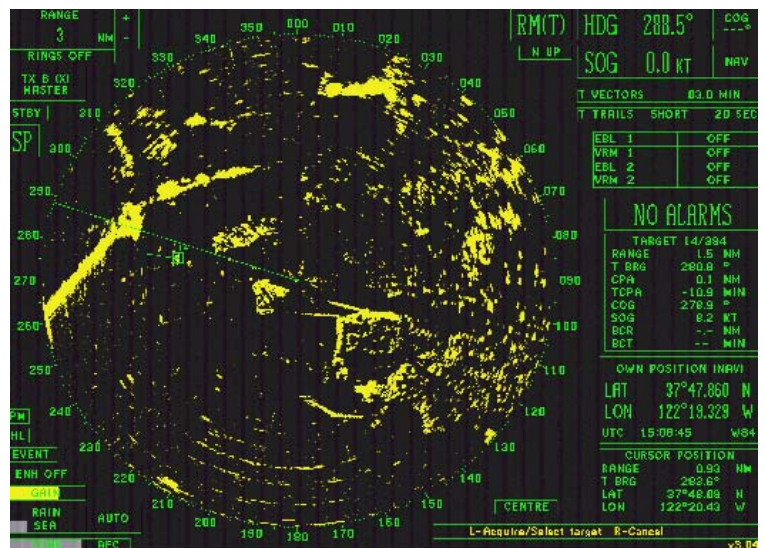
07:08:46

UNIT 7 I can barely see the bow. I know I have five hundred and fifty feet.

07:08:51

CREW *.

07:08:00



07:09:16

CAPT uh these two problems have been deleted already.

07:09:18

? captain *.

07:09:19

PILOT-VHF Falcon romeo.

07:09:21

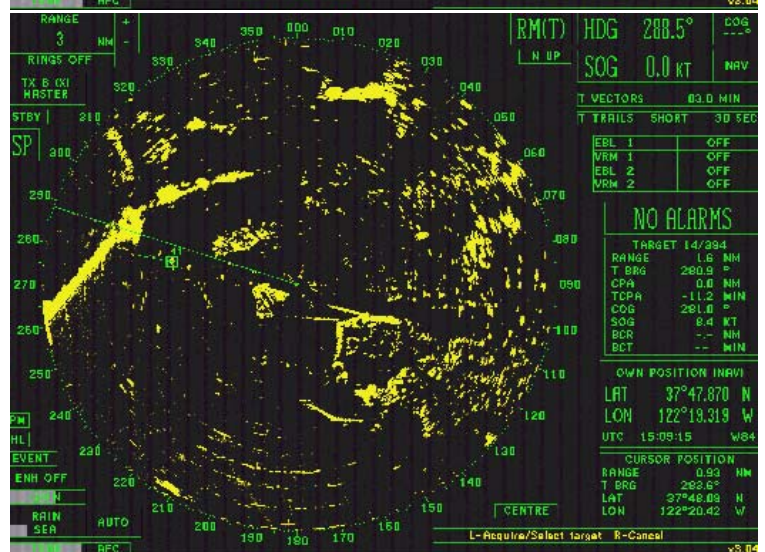
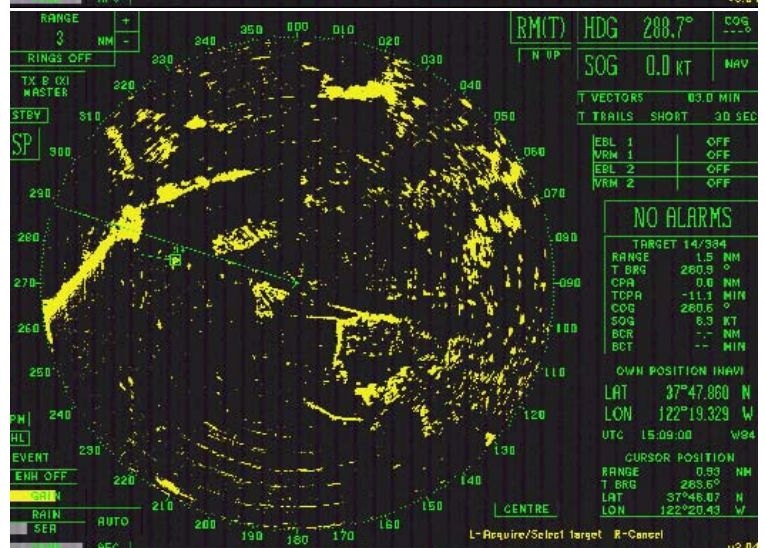
MF Falcon good morning.

07:09:23

PILOT-VHF yeah good morning you you just getting up to uh number one there?

07:09:27

MF yes sir.



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Communication

Radar Imagery

07:09:28

PILOT-VHF okay then outbound I see.

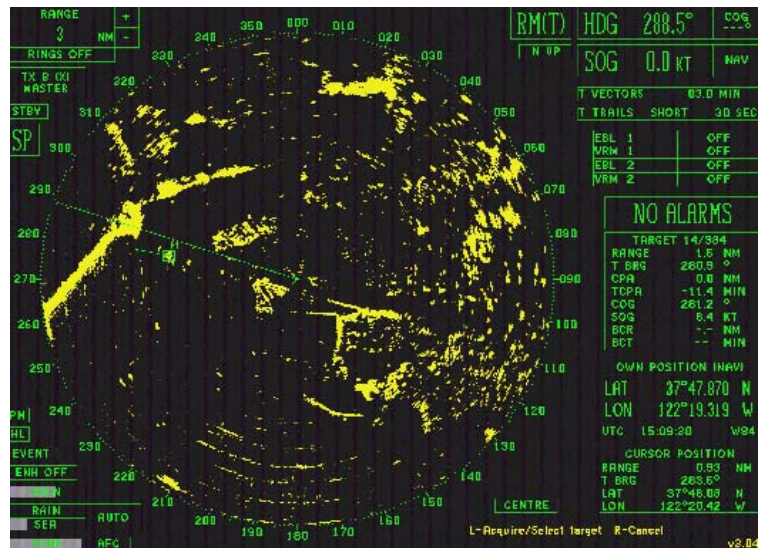
07:09:32

MF yes sir.

07:09:33

PILOT-VHF okay thanks.

07:09:45



07:10:02

PILOT yeah I think this one is a little bit better for the channel.

07:10:04

CAPT what?

07:10:07

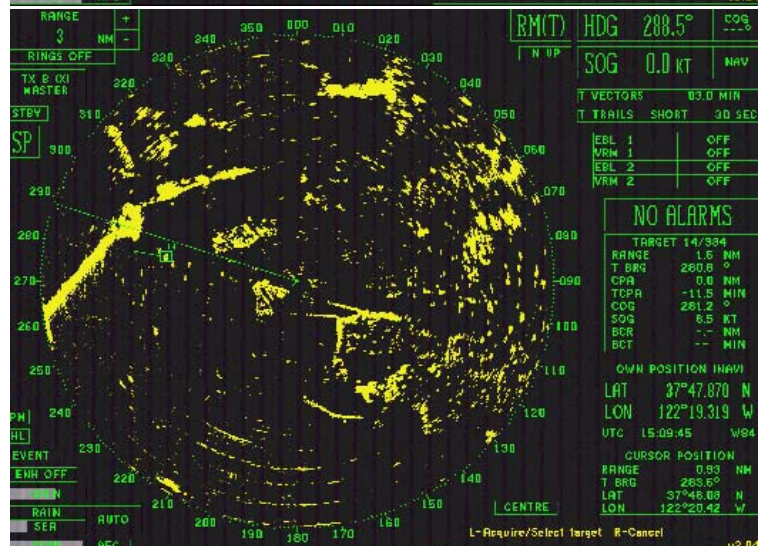
SUPER-PHONE good morning @.

07:10:09

PILOT what is this? three centimeter? ten centimeter? they change it to X and the other one I don't know which is which. three should be best.

07:10:12

CAPT yes uh.



TIME and Source

Communication

Radar Imagery

07:10:25

PILOT and the tune is automatic.

07:10:27

CAPT yeah yeah.

07:10:28

[sound of unintelligible background conversation]

07:10:31

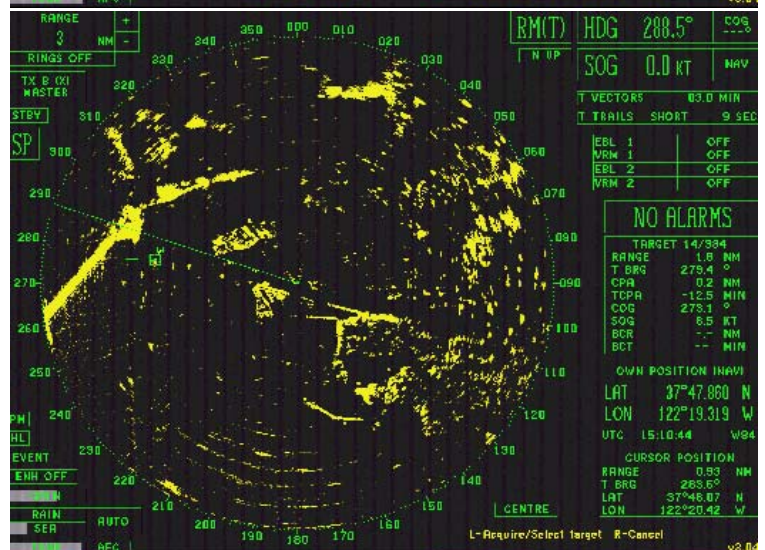
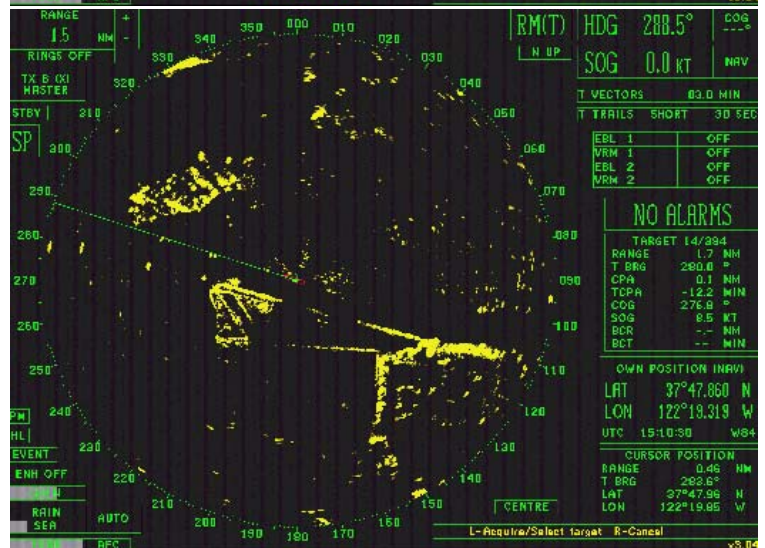
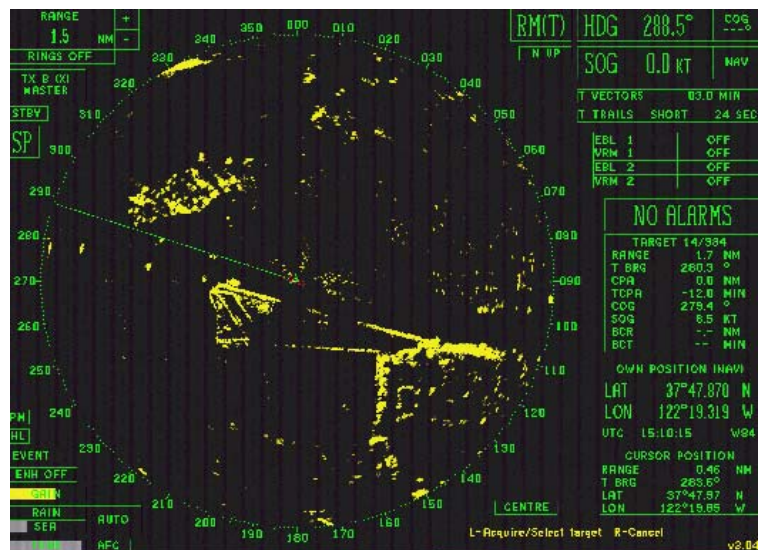
PILOT nothing shows up nothing there. looks like ocean. this one shows up. the bridge shows up. * whenever your superintendent is finished.

07:10:50

CREW *.

07:10:55

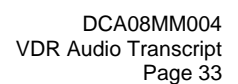
PILOT and uh let's see...EBL. oh we have to go up here somewhere. oh there it is okay and uh variable range marker?



Radar Imagery

Radar Imagery

[sound similar to fog signal]

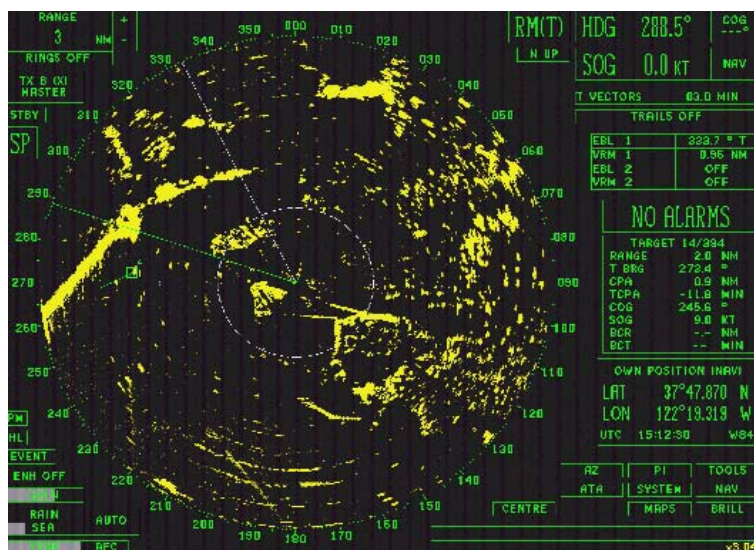


TIME and Source

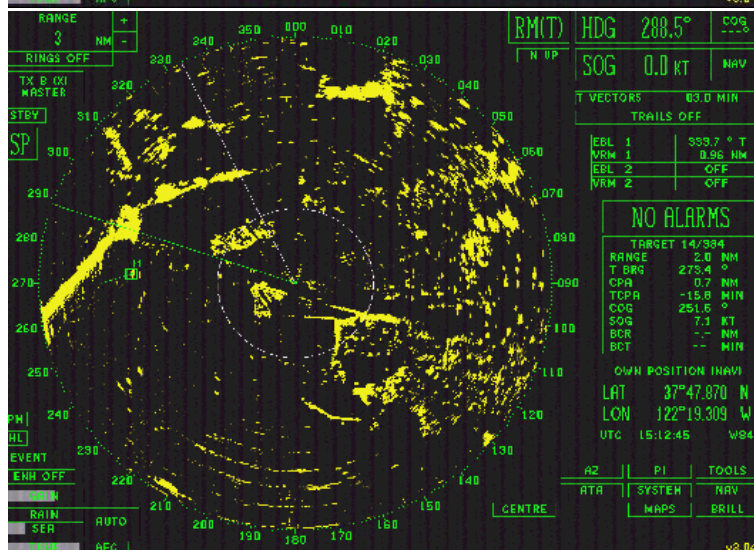
Communication

Radar Imagery

07:12:30



07:12:45



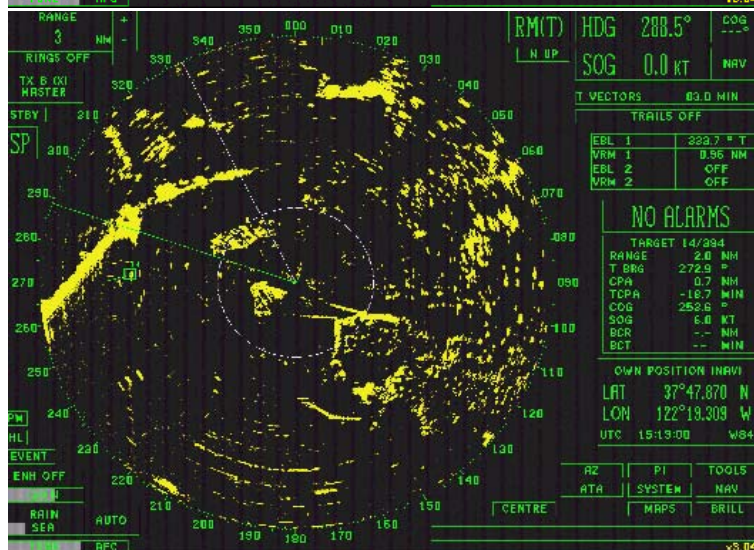
07:13:00
PILOT- traffic romeo.
VHF

07:13:01
CREW- ***.
UHF

07:13:02
VTS romeo traffic

07:13:06
PILOT- yeah we're gonna be delayed for a little bit
VHF waiting for paperwork. I'll give you a call before we start.

07:13:13
VTS uh roger copy romeo and uh the tug Solana pushing two barges greater than is off of the Oakland Bay Bridge going to Oakland sixty five.



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Source

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Radar Imagery

07:13:24

PILOT-VHF well which span of the Bay Bridge is he comin' through?

07:13:27

VTS golf hotel.

07:13:29

PILOT-VHF golf hotel and he's headed up the estuary. okay thank you.

07:13:34

[twelve seconds of unintelligible Chinese conversation]

07:13:34

VTS you're welcome. traffic out.

07:13:36

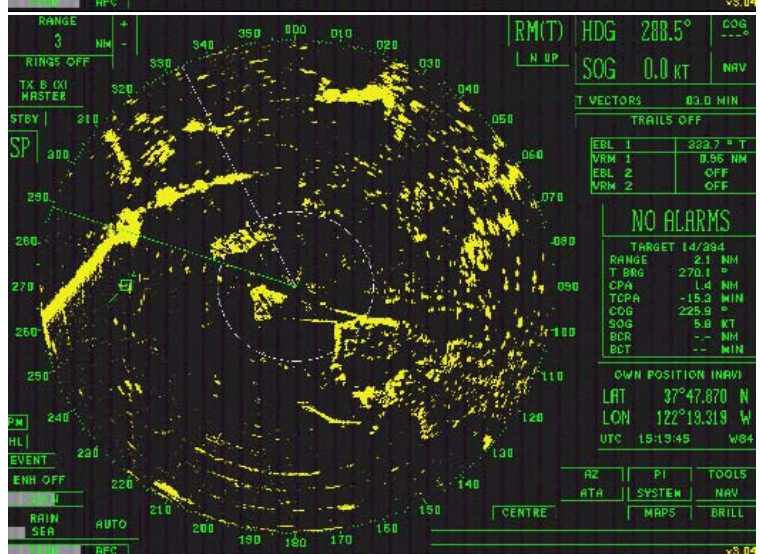
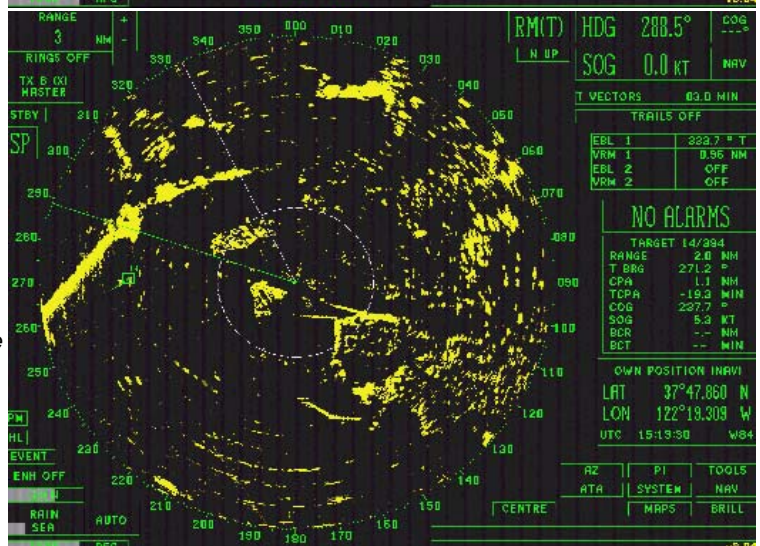
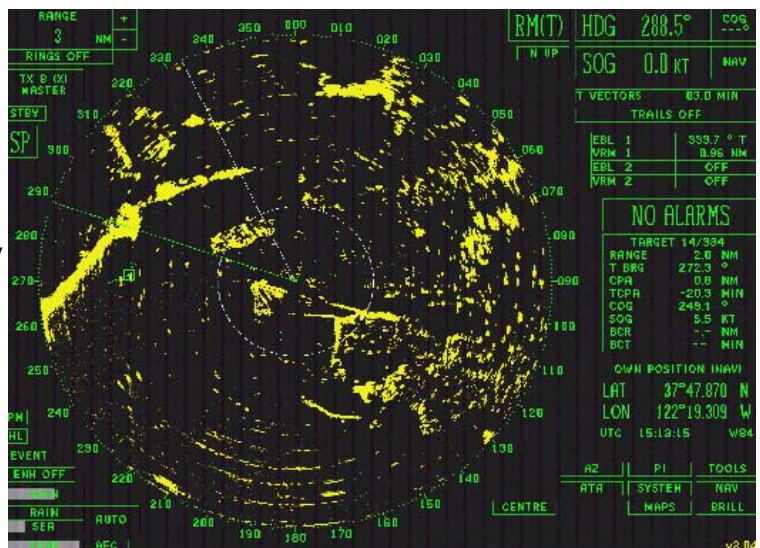
PILOT we got another tug.

07:13:44

CREW what about that marker over there? can't delete it?

07:13:55

PILOT we've got another tug now coming from here. he's coming so.



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Radar Imagery

07:14:03

CREW to **.

07:14:05

CREW okay okay.

07:14:09

CREW my superintendent has left.

07:14:11

PILOT oh * okay well now we have to wait for this tug.

07:14:14

CREW * okay.

07:14:23

CAPT I have never seen ** this strange before.

07:14:24

CREW the icon **.

07:14:26

CREW ***.

07:14:28

CAPT okay. wait a little while and then let down the ladders on the port side.

07:14:35

CREW- *.

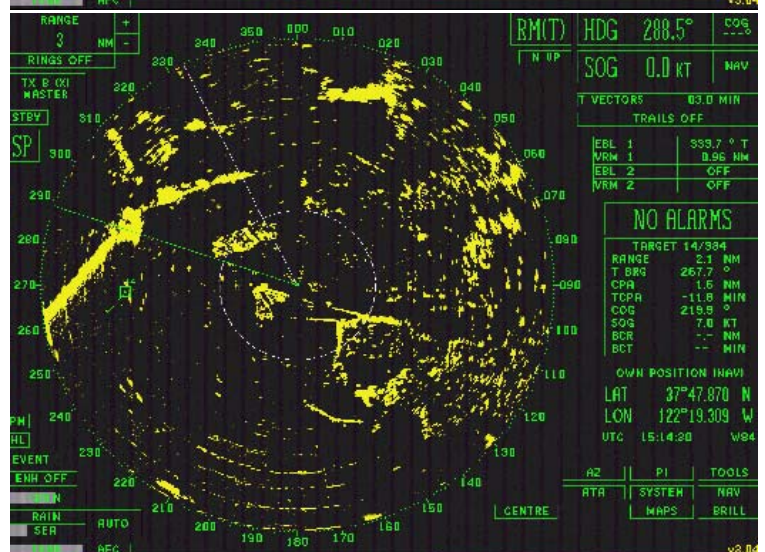
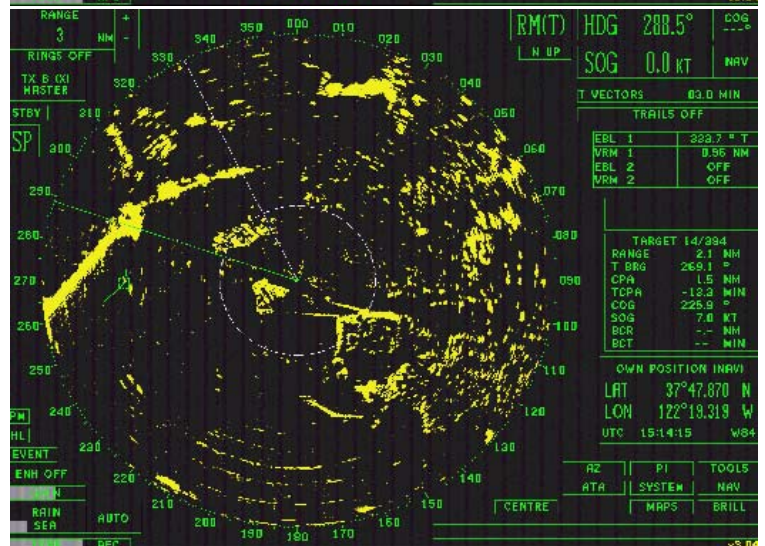
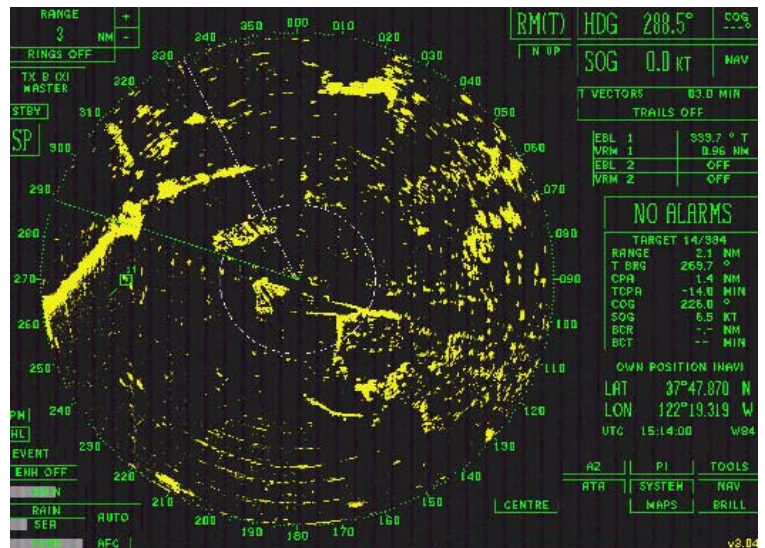
UHF

07:14:36

CAPT we normally handle the ladder **.

07:14:40

CREW yes yes.



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Radar Imagery

07:14:47

CAPT-UHF okay okay. can you put it down to try?

07:14:56

PILOT-VHF dredge Njord romeo.

07:15:00

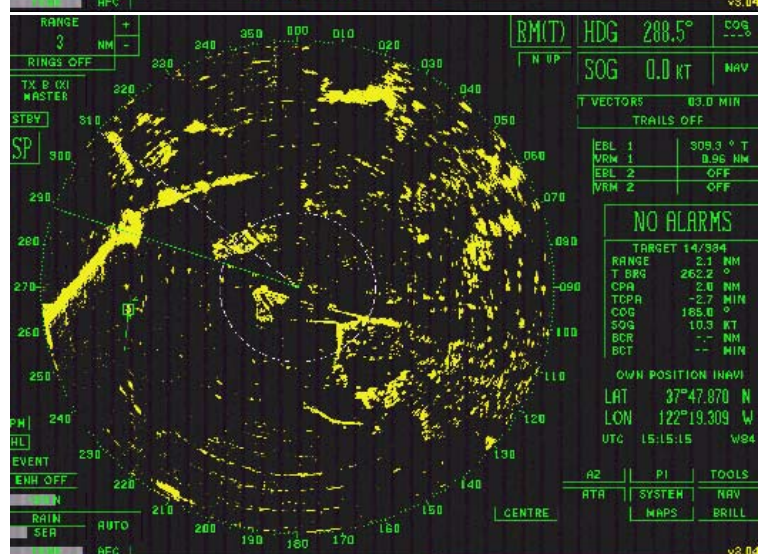
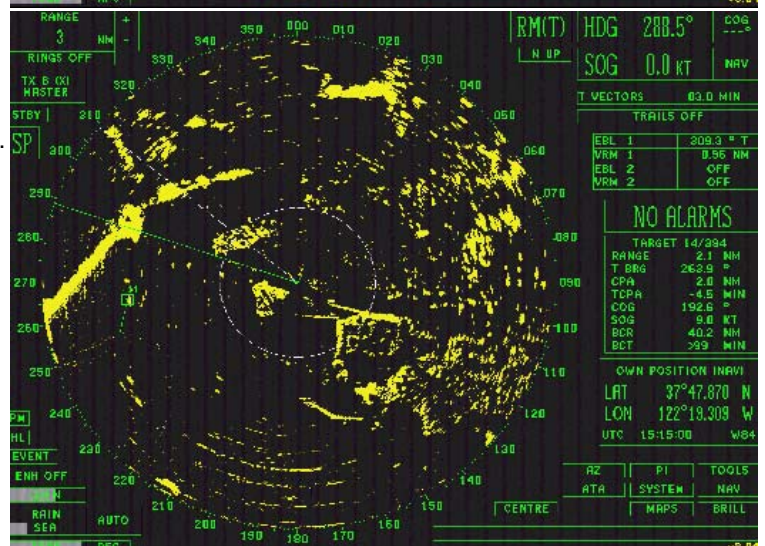
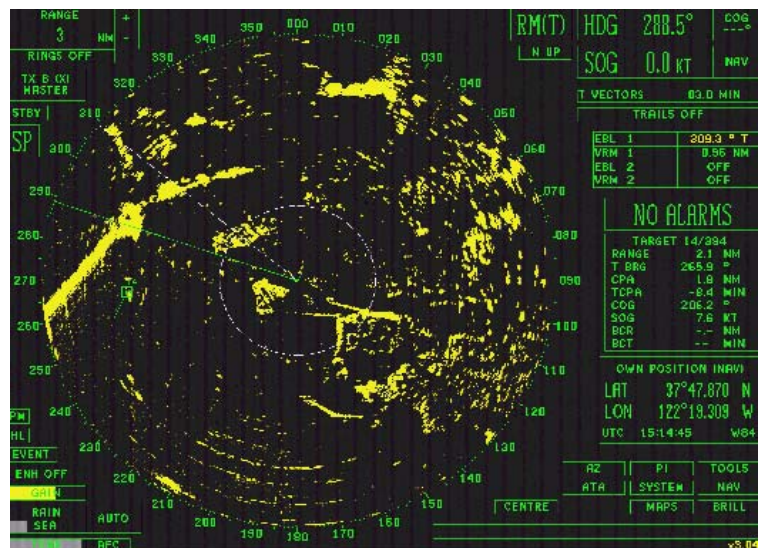
NJORD Njord to the unit calling.

07:15:02

PILOT-VHF yeah Njord this is romeo on the Cosco Busan *

07:15:20

NJORD little by little * about a hundred and fifty feet I won't be getting any wider.



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Radar Imagery

07:15:30

PILOT-VHF yeah okay and are you headed eastbound or westbound?

07:15:33

NJORD I'm headed westbound toward the bridge.

07:15:35

PILOT-VHF okay thanks.

07:15:36

NJORD have a good morning captain appreciate the call.

07:15:41

CREW now we have two tugs?

07:15:44

PILOT no no no there's another tug coming here now that we have to wait for because we can't be in the channel at the same time as the tug because he's too big. there's a size restriction for the channel.

07:15:50

CREW yeah yeah. ** dredge.

07:15:59

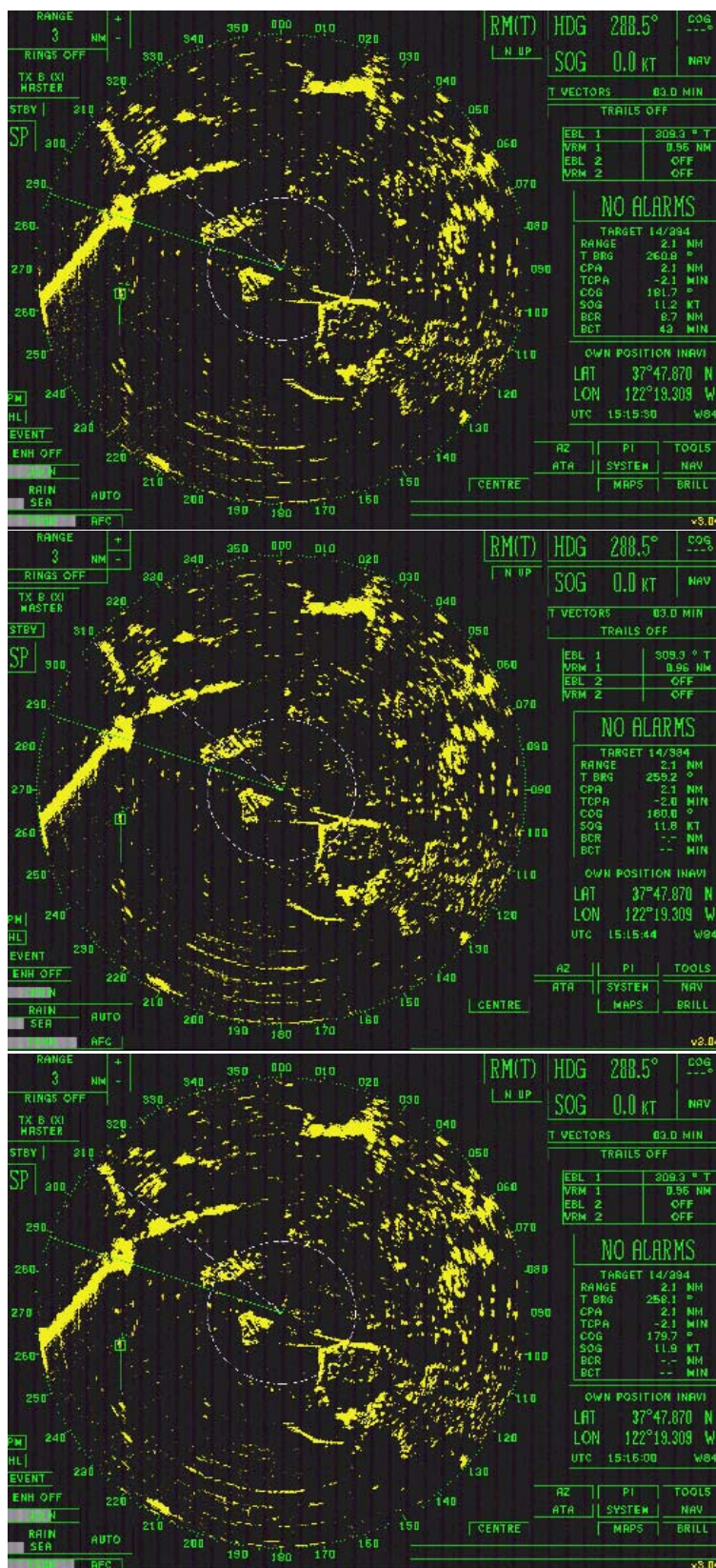
PILOT no that's the dredge. no that's us. okay no we're looking for the William R just *.

07:16:00

CREW * okay. * no no AIS.

07:16:10

PILOT **.



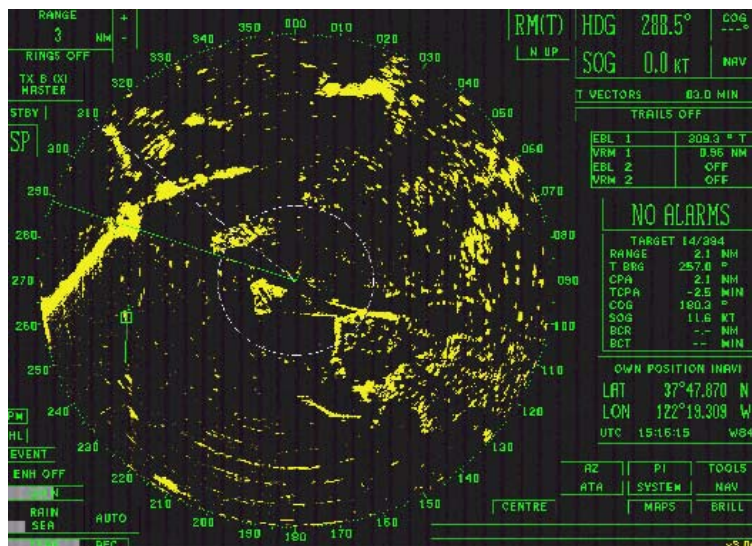
TIME and
Source

Communication

Radar Imagery

07:16:24

PILOT-VHF traffic romeo what was the name of that boat coming from um golf hotel to the estuary?



07:16:35

VTS that's the tug Solana.

07:16:38

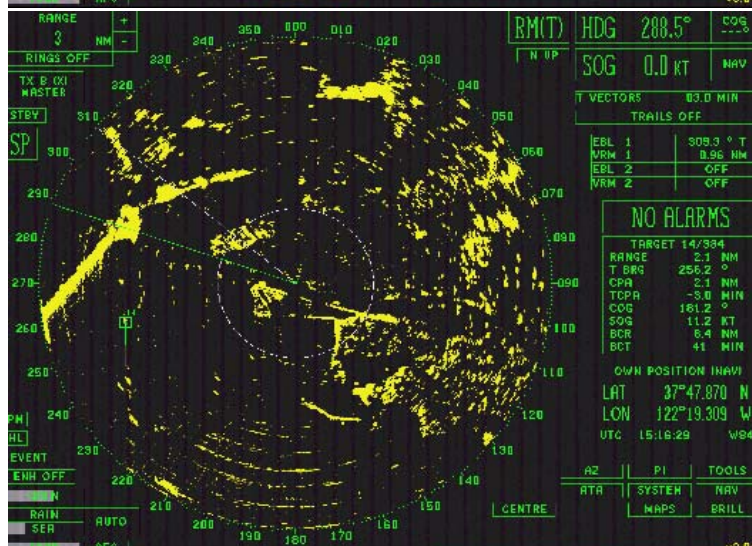
PILOT-VHF okay Solana okay thank you.

07:16:40

VTS you're welcome. traffic out.

07:16:42

PILOT okay Solana. do you have anything in here on the Solana?

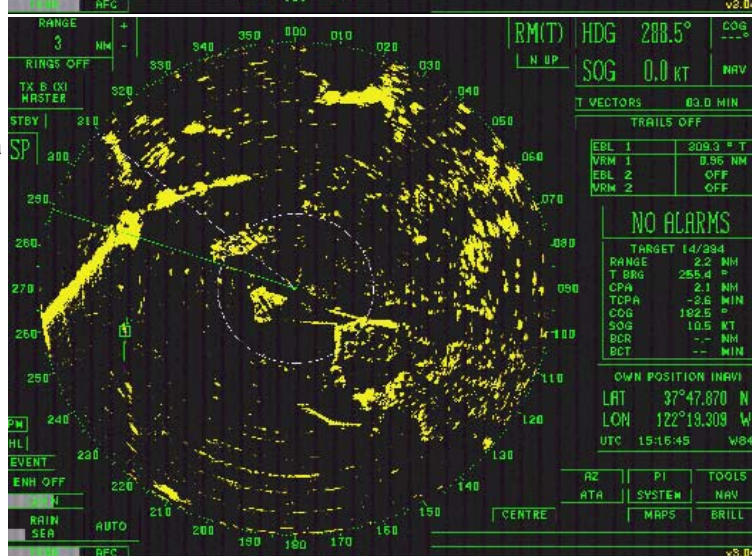


07:16:48

CREW Solana. **.

07:16:50

PILOT Solana yeah no no not that tug I'm looking for a different tug. see 'em on it.



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07:17:03

PILOT yeah maybe I ought to check.

07:17:05

PILOT-VHF traffic romeo.

07:17:09

VTS romeo traffic.

07:17:11

PILOT-VHF yeah sorry to bug you again but I— do you get an AIS signal from that Solana? I don't get one on this ship.

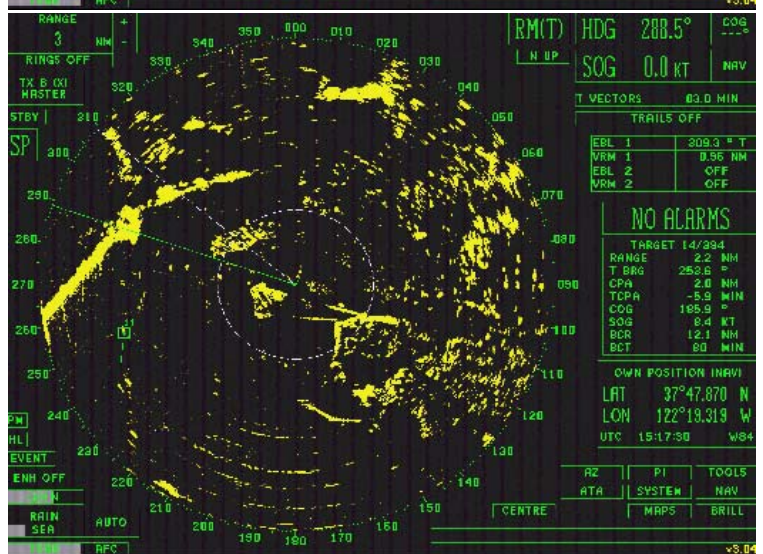
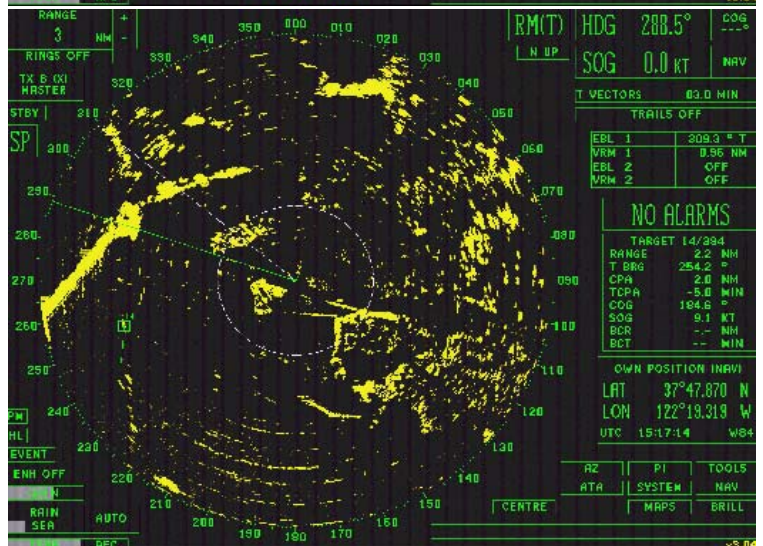
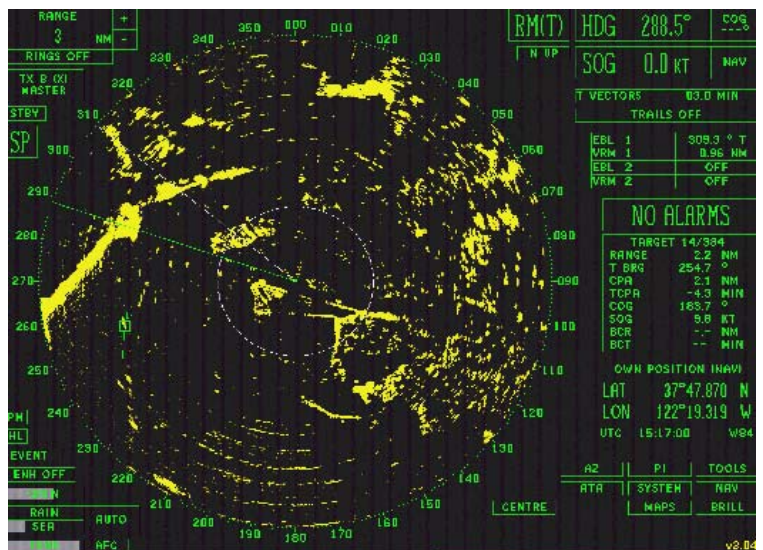
07:17:20

VTS uh roger I'm copying him on AIS on my display. let me check on my system.

07:17:25

PILOT-VHF okay.

07:17:30



TIME and
Source

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Radar Imagery

07:17:47

PILOT-VHF Revolution now we gotta wait for the Solana.

07:17:52

REV okay copy that um and also I got him on my AIS **.

07:17:59

PILOT-VHF okay thanks. yeah for some reason we're not getting him. we got everyone else in the bay but for some reason on Solana it's not showing up on this one.

07:18:08

REV yeah ours gets that sometimes too but uh we got it now.

07:18:15

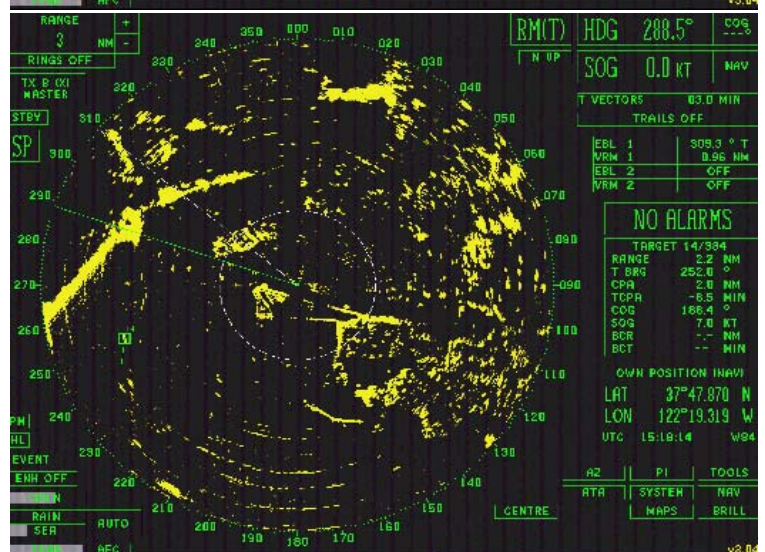
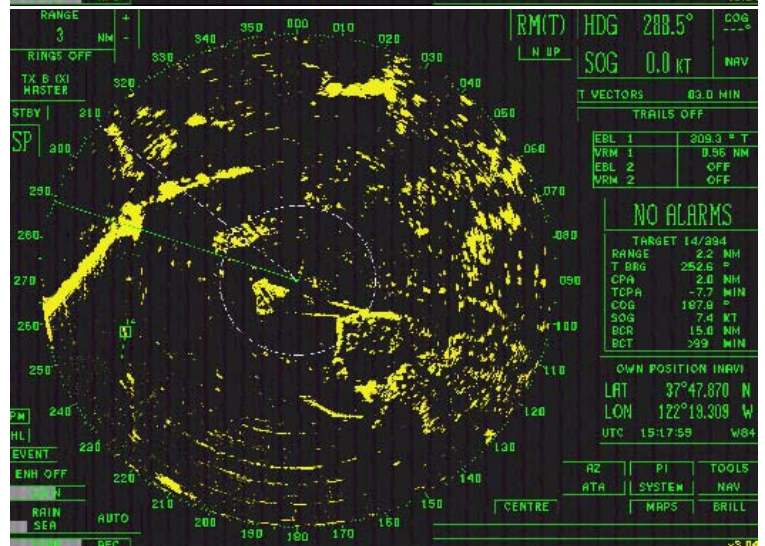
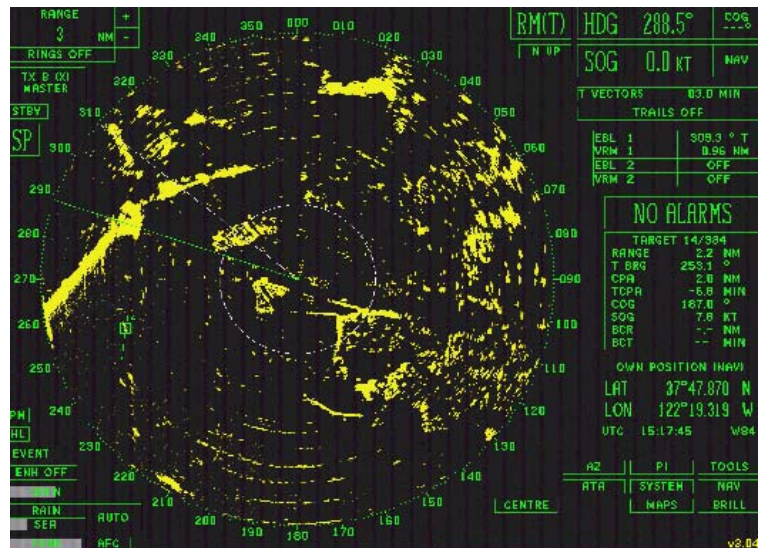
PILOT-VHF where do you see him?

07:18:17

REV he just got underway. just coming under golf hotel right now.

07:18:23

PILOT-VHF okay I'm gonna try and plot him then follow him. as soon as he gets by we'll get outta here.



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Communication

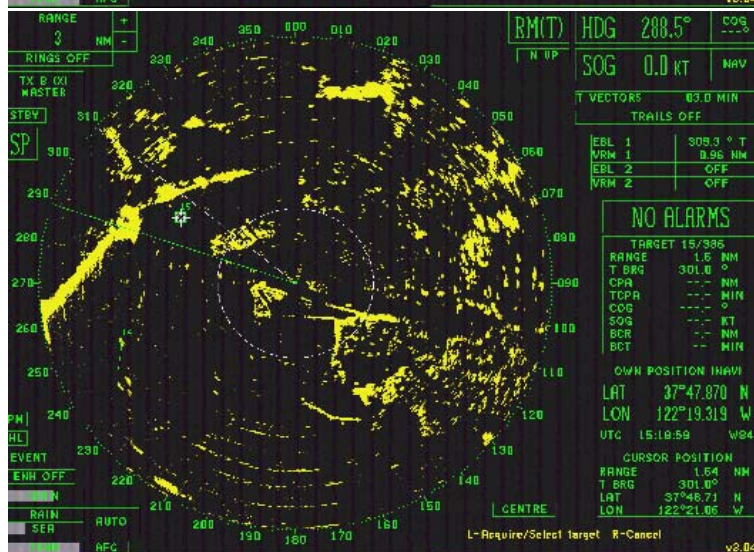
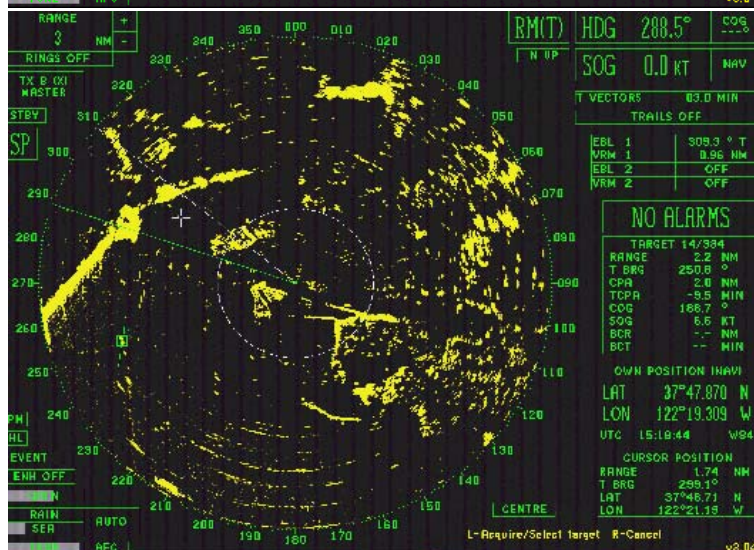
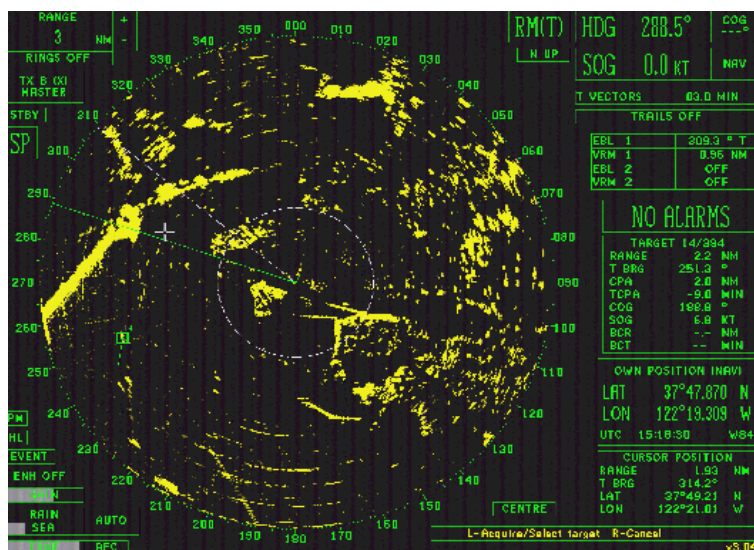
Radar Imagery

07:18:30
REV copy that they're just making three knots.

07:18:32
PILOT great.

07:18:45

07:19:00



TIME and Source

Communication

Radar Imagery

07:19:16

PILOT does this get AIS? AIS?

07:19:23

CREW can you see ship maneuvering information?

07:19:25

CREW I see it. I see it.

07:19:26

PILOT no no no okay.

07:19:28

CREW well I didn't *.

07:19:31

PILOT oh okay. some you can see that.

07:19:39

CREW you can see the signal?

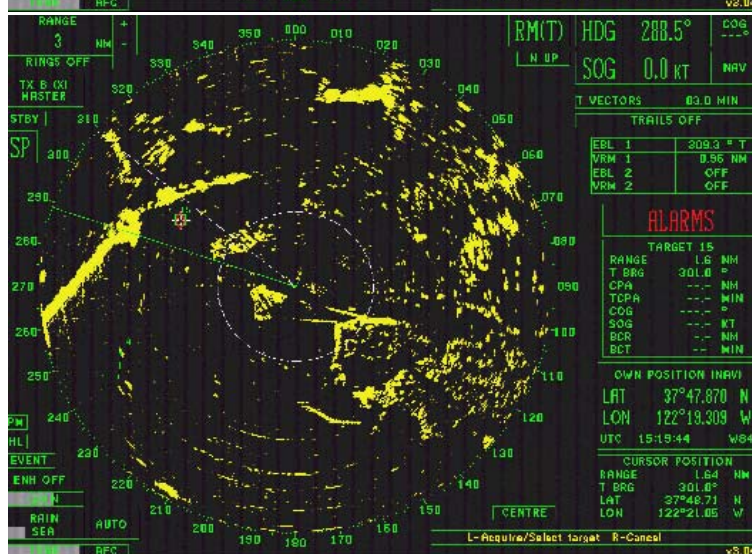
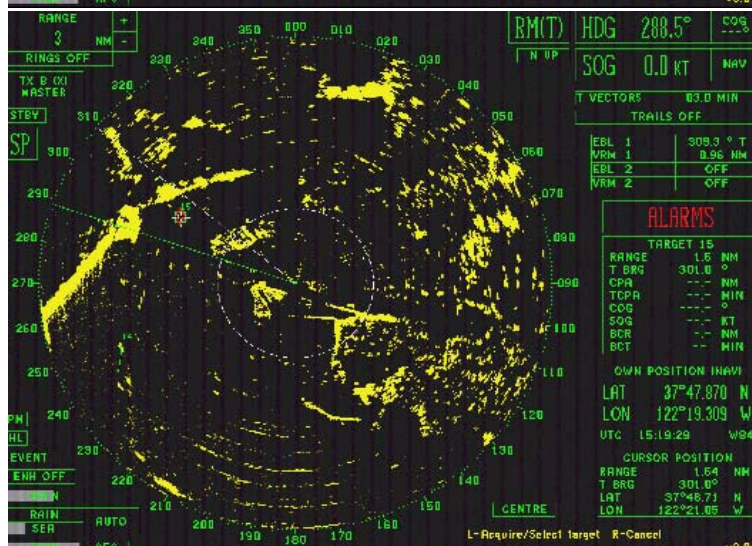
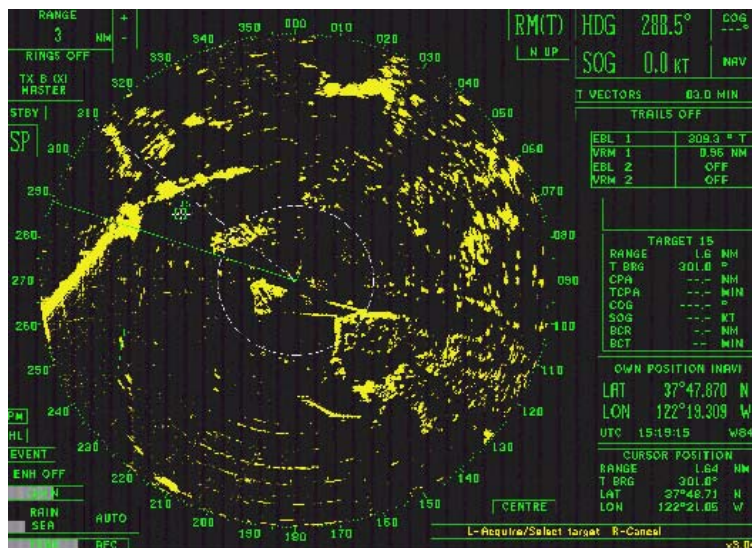
07:19:41

CREW it's been selected.

07:19:43

CREW it's been selected. it's been selected.

07:19:45

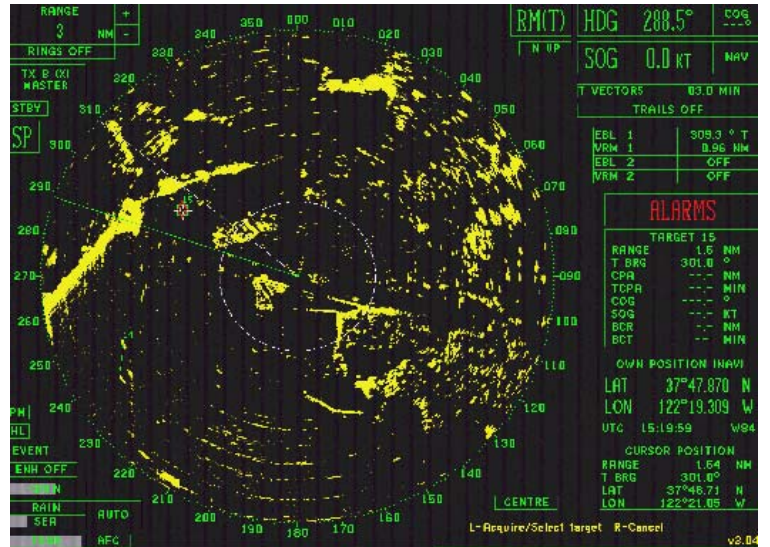


TIME and Source

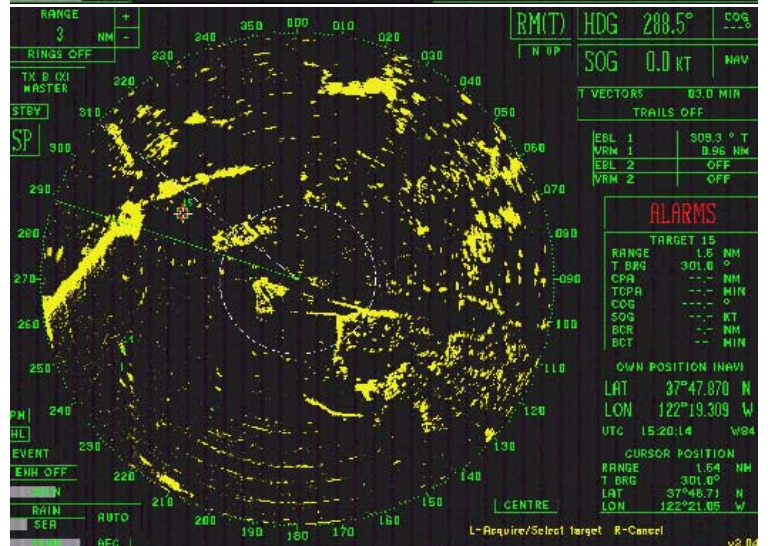
Communication

Radar Imagery

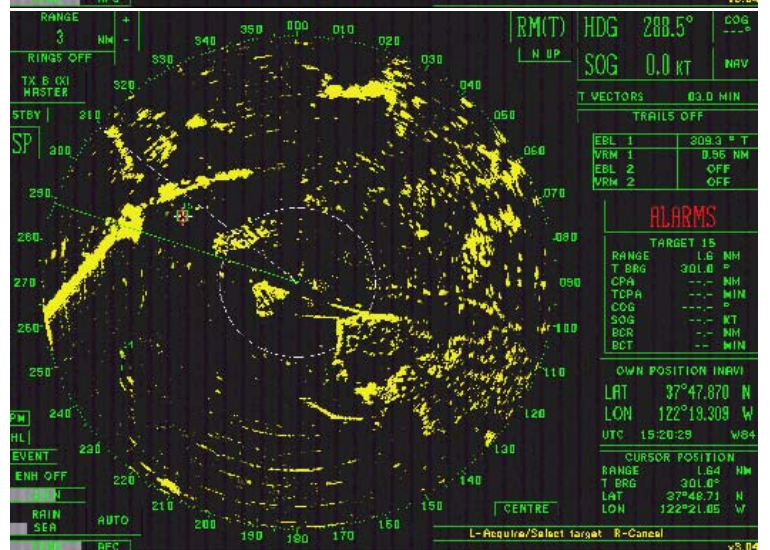
07:20:02
PILOT *



07:20:15



07:20:30

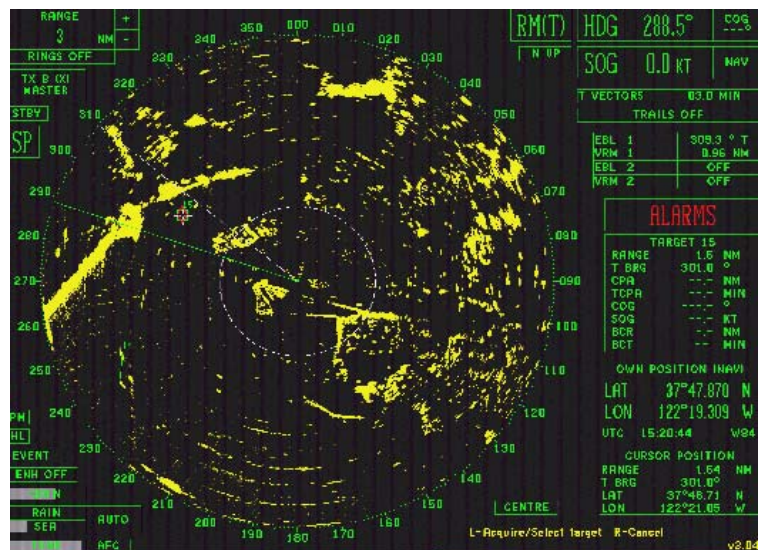


TIME and Source

Communication

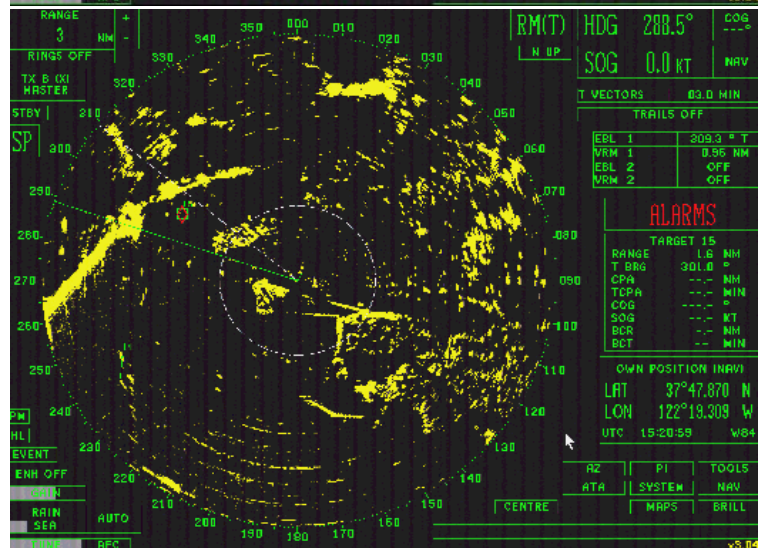
Radar Imagery

07:20:45



07:21:13

CAPT ** why is still not filled out?



07:21:19

CAPT the fog is so heavy.

07:21:22

PILOT you can single up captain if you want.

07:21:23

CAPT okay single up.

07:21:24

PILOT yeah you can single up and then we'll wait for this guy to get by.

07:21:26

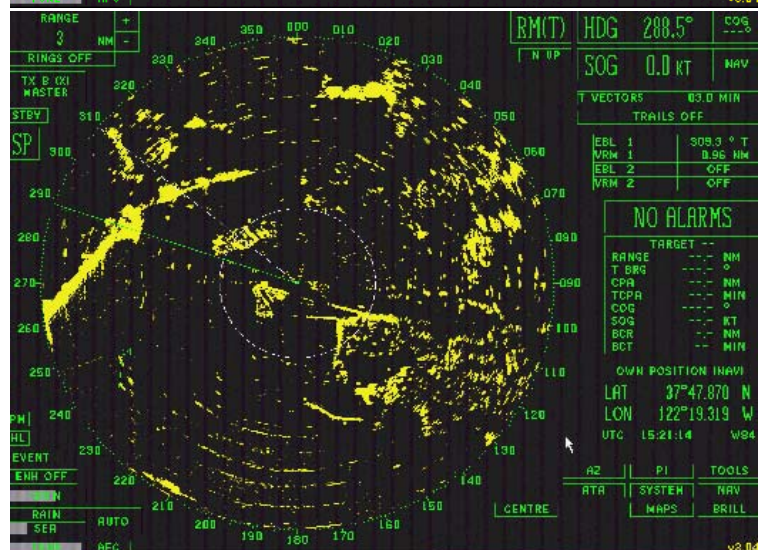
CAPT-UHF chief officer second officer did you hear?

UHF

07:21:29

CREW-UHF ***.

UHF



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Radar Imagery

07:21:32

CAPT-UHF single up forward and aft.

07:21:33

CREW-UHF single up forward and aft.

07:21:35

CREW-UHF roger single up forward and aft.

07:21:44

PILOT can you make this picture a little bit further bigger distance? I want to see I want to see out a little more of the channel.

07:21:46

CREW **.

07:21:57

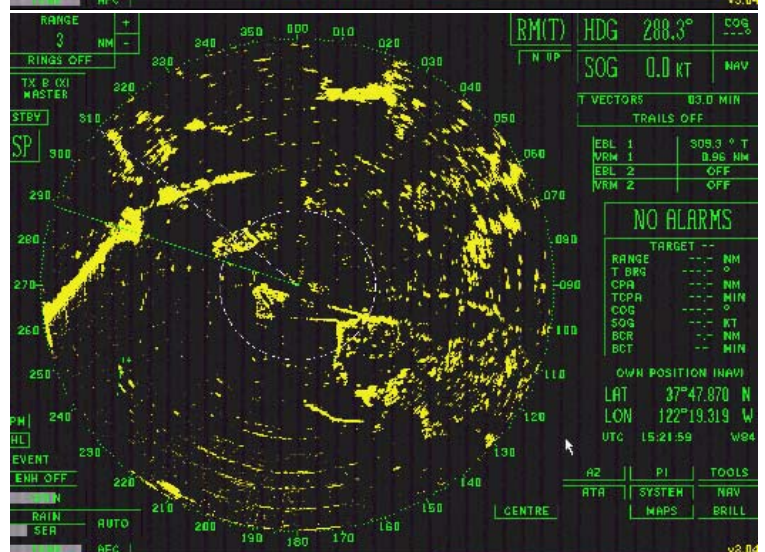
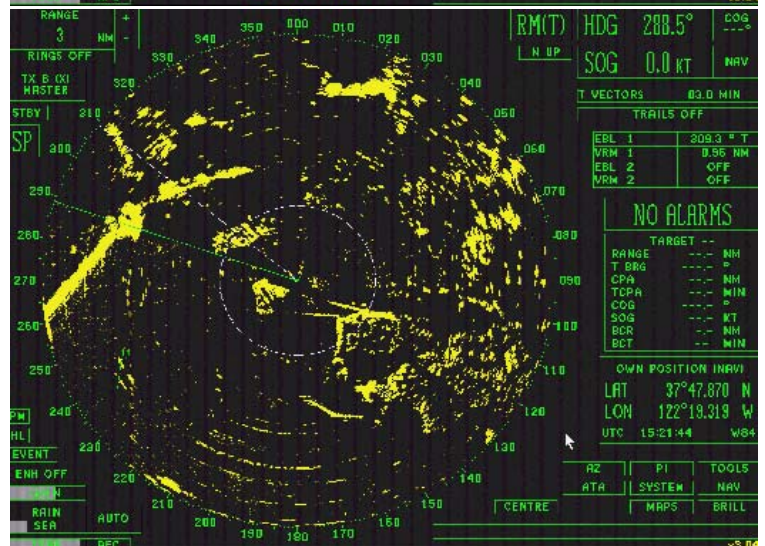
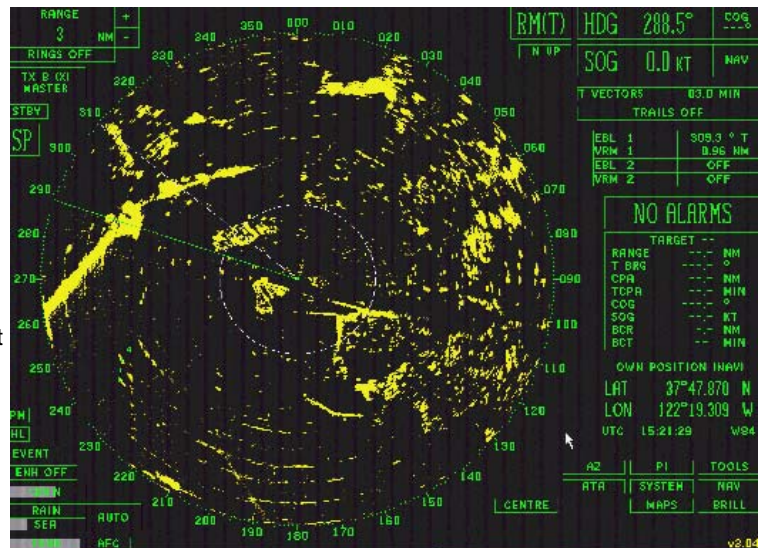
CREW **.

07:22:09

PILOT yeah so I want to see the channel yeah. and actually the bridge if you can get the bridge.

07:22:13

CREW yeah.



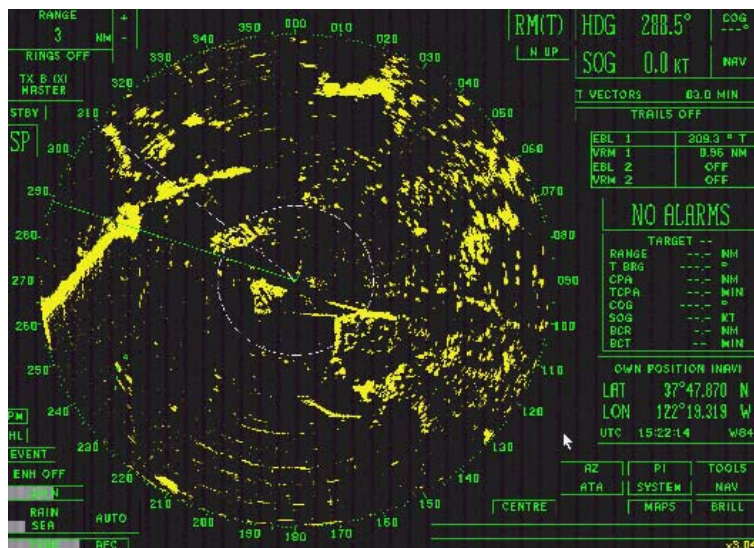
TIME and
Source

Communication

Radar Imagery

07:22:22

PILOT yeah that's alright you can just see just a little more out here.



TIME and
Source

Communication

Radar Imagery

07:23:04

PILOT yeah that's good. and as we move the bridge *.

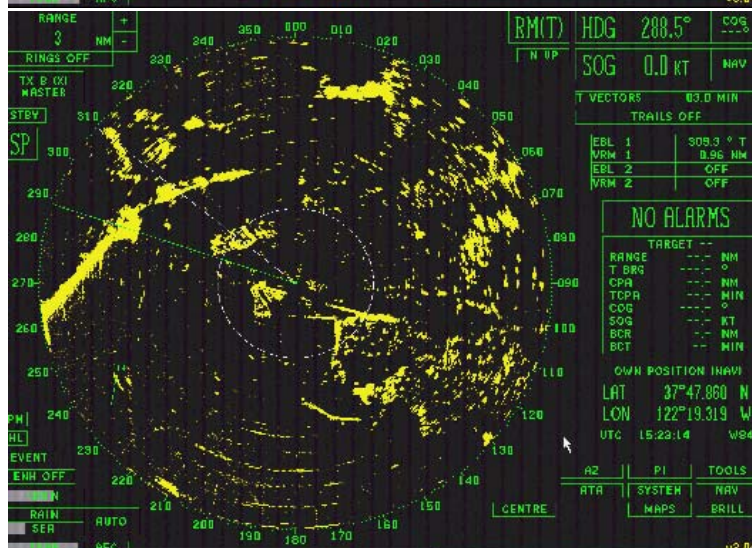
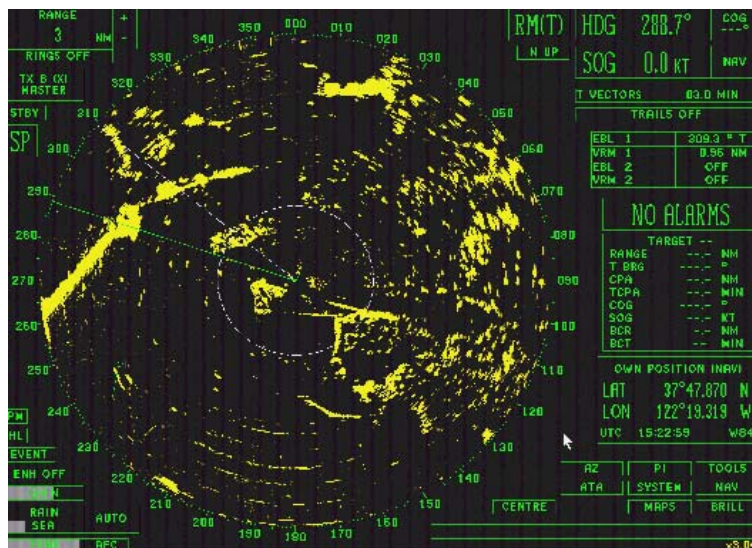
07:23:08

CREW yeah *.

07:23:11

PILOT this may be— I hope this is the tug here. we'll see if it—.

07:23:15



07:23:34

PILOT-VHF Solana romeo.

07:23:38

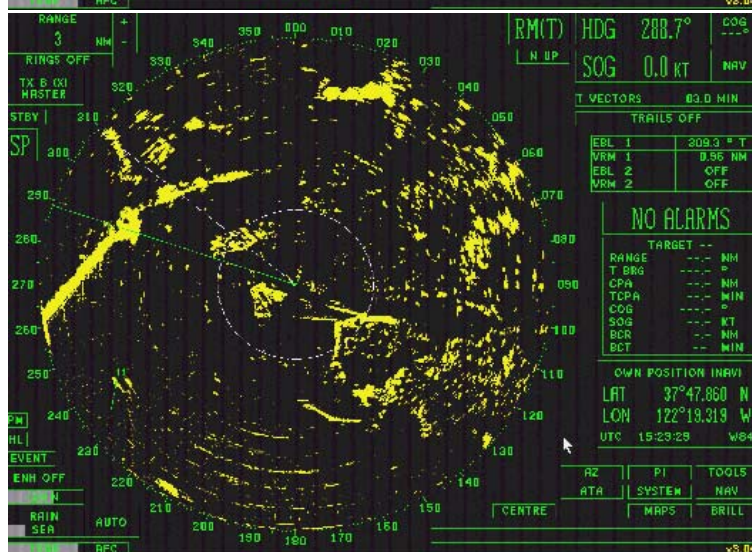
SOLNA Solana.

07:23:40

PILOT-VHF yeah where are you now?

07:23:42

SOLNA I'm just uh halfway between the bridge and the bar channel.



TIME and
Source

Communication

Radar Imagery

07:23:48

PILOT-VHF okay I'm at fifty six I'm gonna wait until you get by before I do anything so uh—. I think I'm plotting you so I'll keep an eye on you.

07:23:58

SOLNA okay well we're really taking our time here but we'll we'll proceed on in thank you.

07:24:04

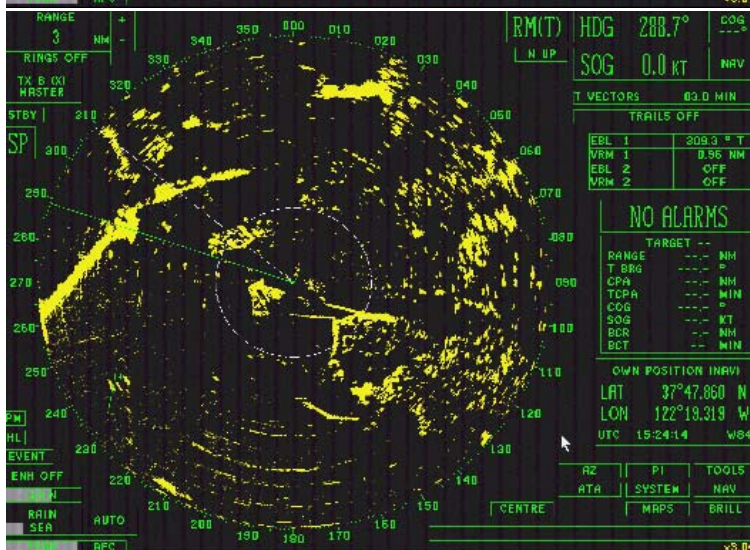
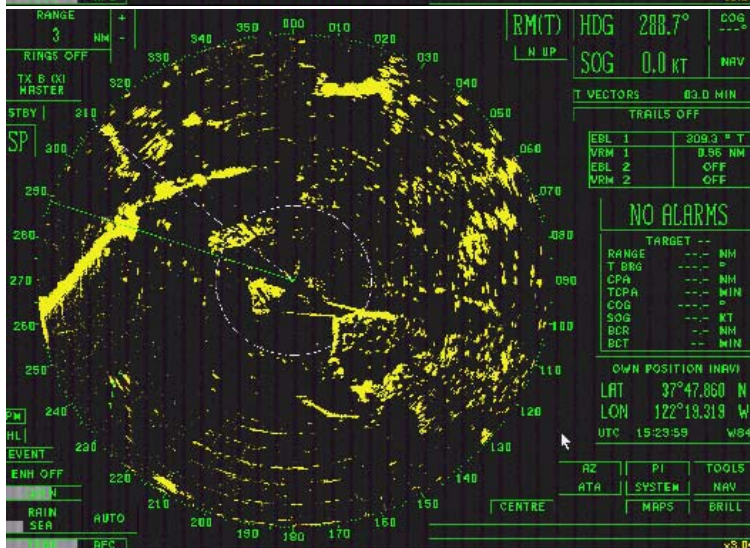
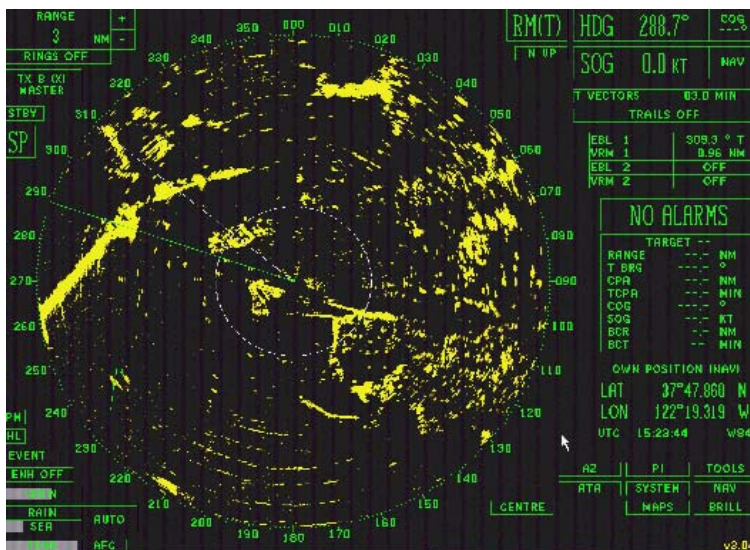
PILOT-VHF yeah that's all right um visibility is getting a little better all the time so that's okay.

07:24:13

SOLNA okay thank you.

07:24:15

PILOT yeah I think this is him. unfortunately he's only going three knots.



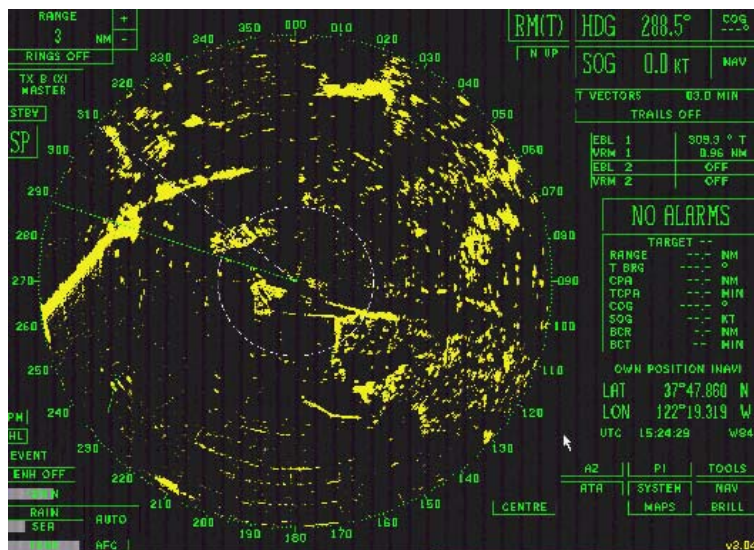
TIME and
Source

Communication

Radar Imagery

07:24:37

PILOT and this should—. okay good. **.

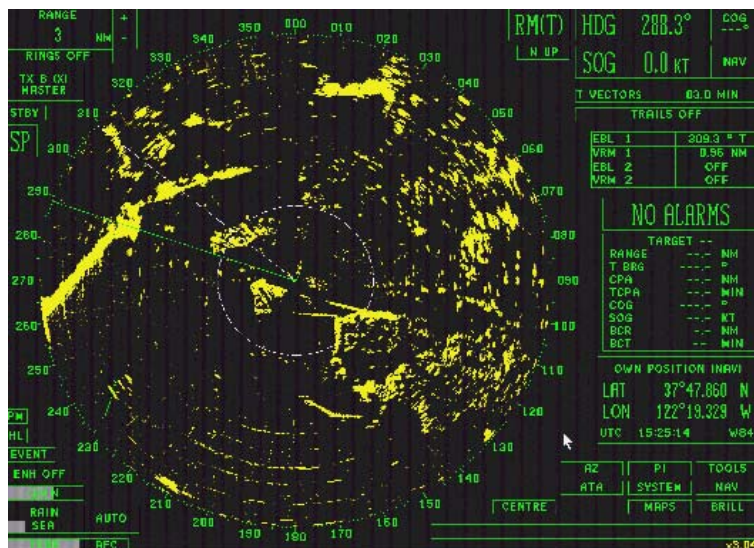


TIME and
Source

Communication

Radar Imagery

07:25:15

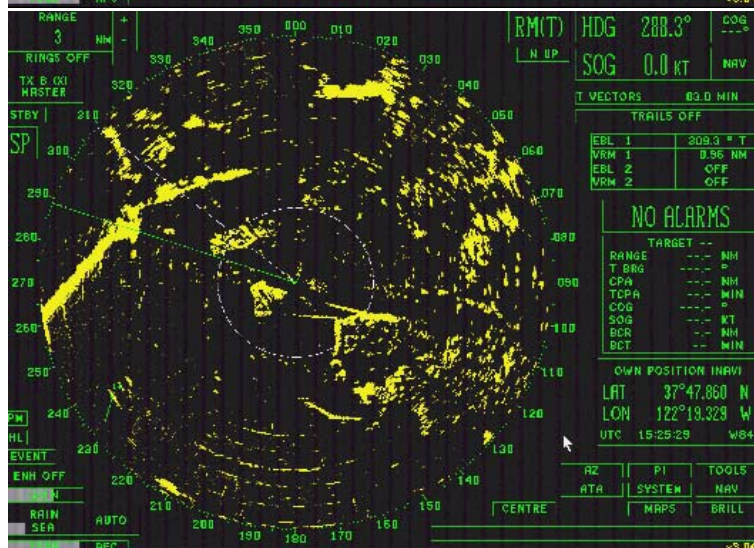


07:25:31

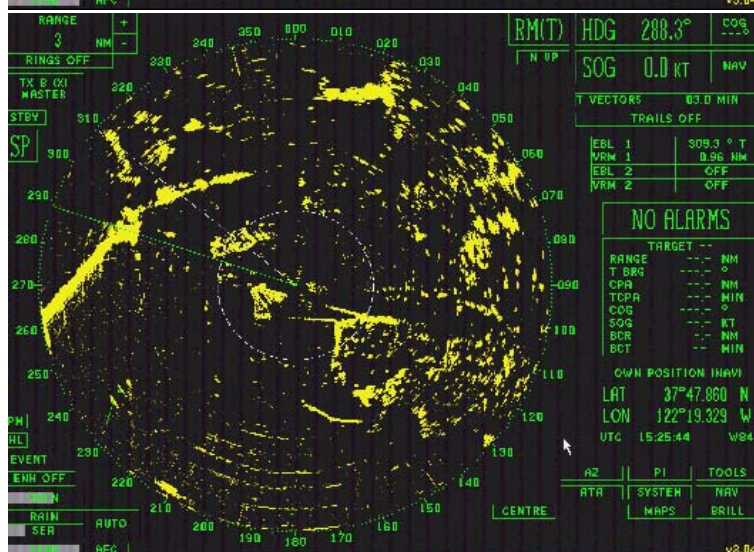
PILOT tugboat *. but see it didn't stay with him. oh yeah you have to get so so exact with it.

07:25:44

CREW *.



07:25:45



TIME and
Source

Communication

Radar Imagery

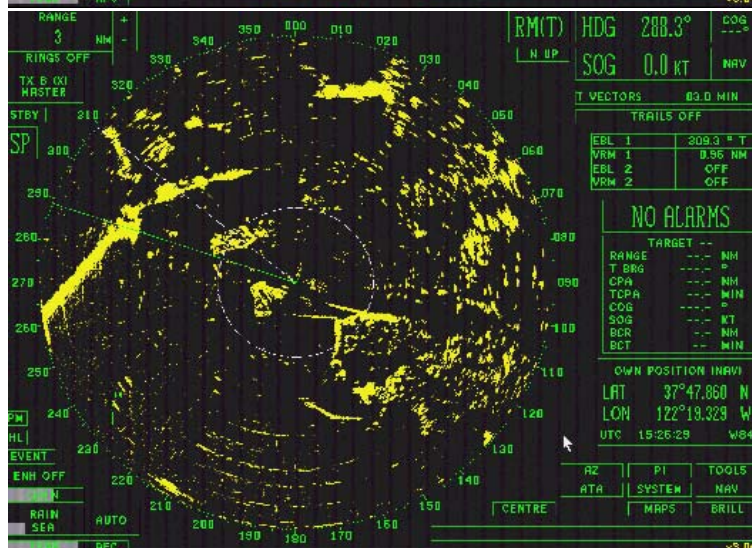
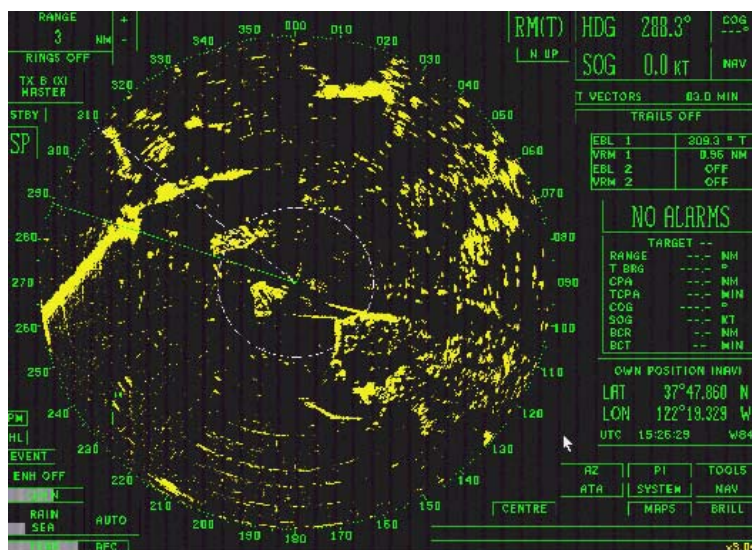
07:26:07

CREW **.

07:26:14

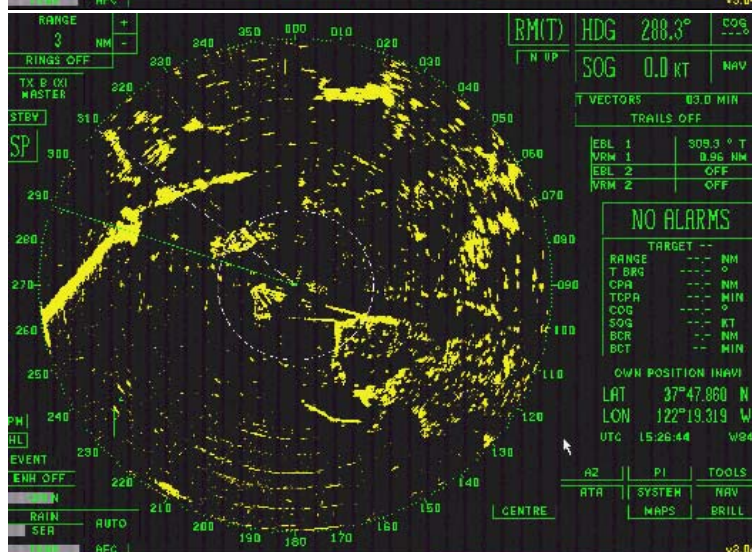
PILOT yeah let's see if we can get this is the one...seems to be disappearing.

07:26:30



07:26:52

PILOT and twenty— I guess we can get rid of the twenty four. yeah yeah * I don't even know what that is.



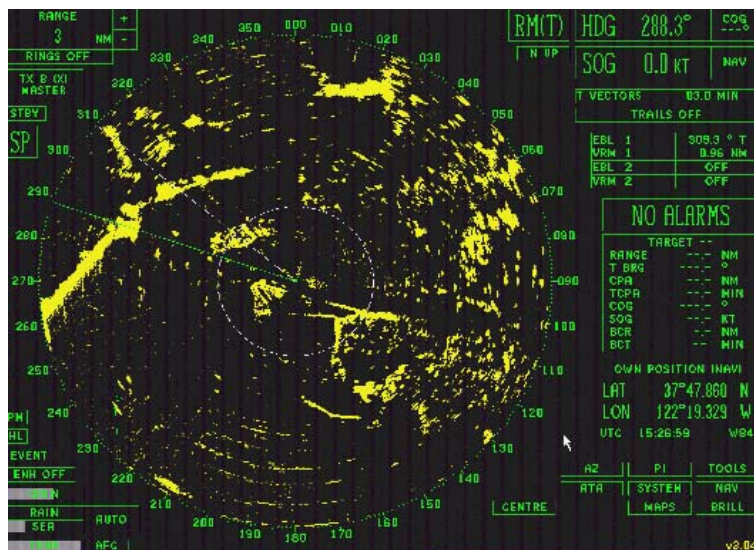
TIME and
Source

Communication

Radar Imagery

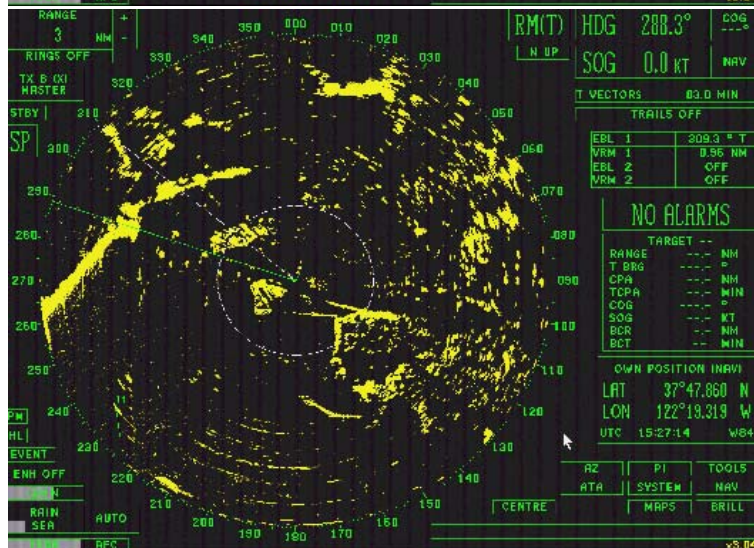
07:27:09

PILOT yeah please.

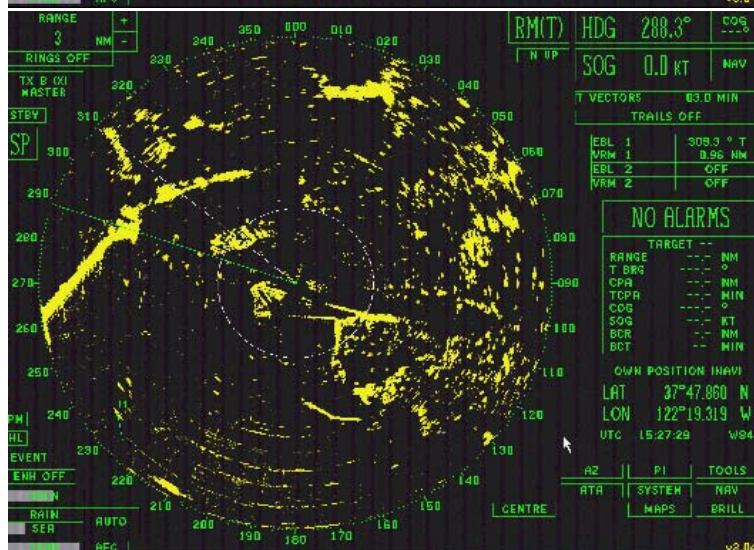


07:27:20

PILOT why don't you make your vectors uh six minutes or something get a little— something three minutes doesn't show enough.



07:27:30



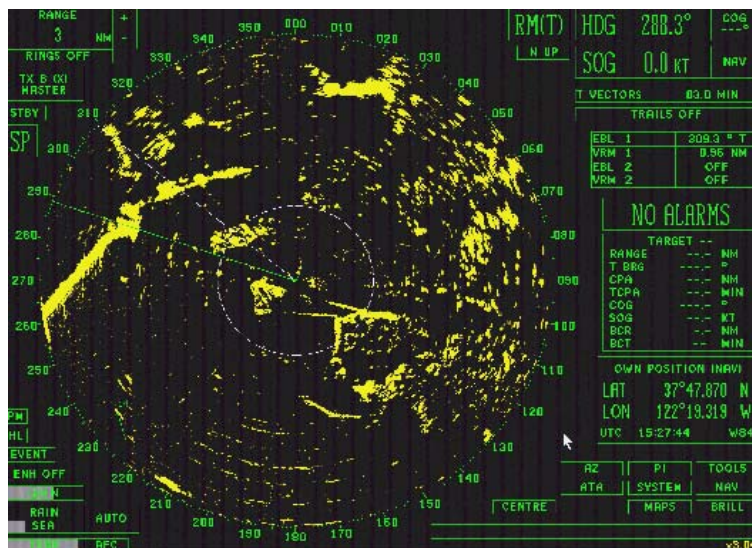
TIME and
Source

Communication

Radar Imagery

07:27:49

PILOT yeah...yeah. not not as good as—. yeah. is it safe to leave?



07:28:02

CREW- the forward * is singled up.

UHF

07:28:03

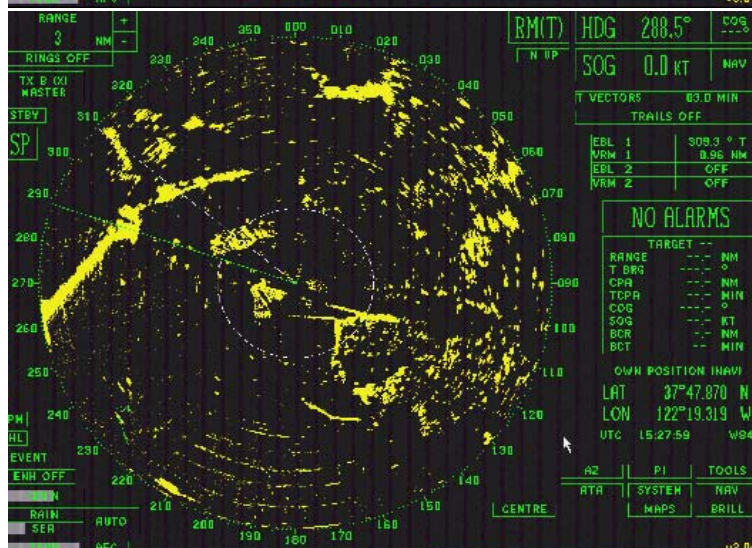
CAPT- okay.

UHF

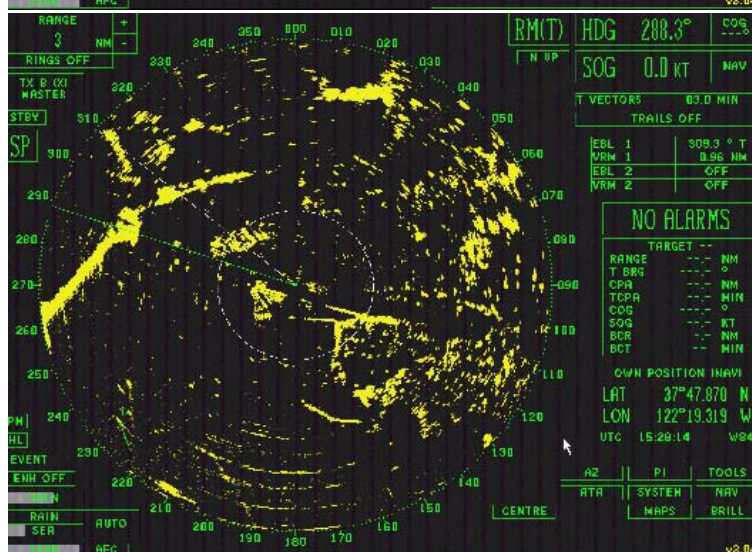
07:28:04

CREW- the forward * is singled up.

UHF



07:28:15



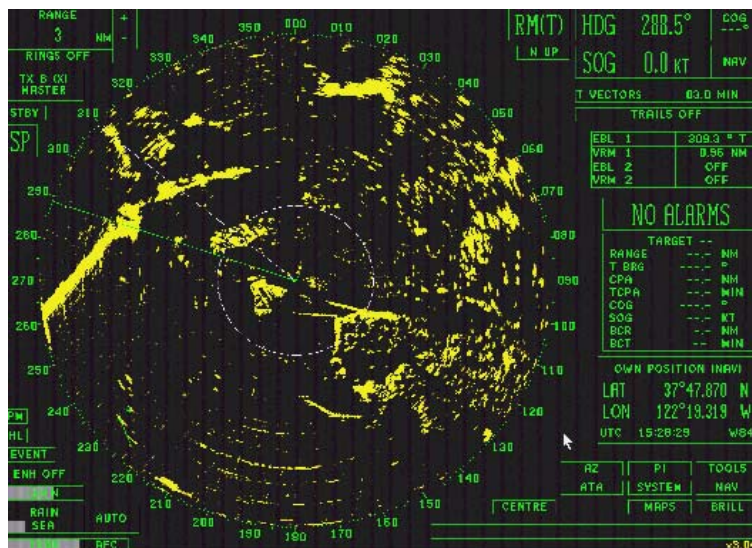
TIME and Source

Communication

Radar Imagery

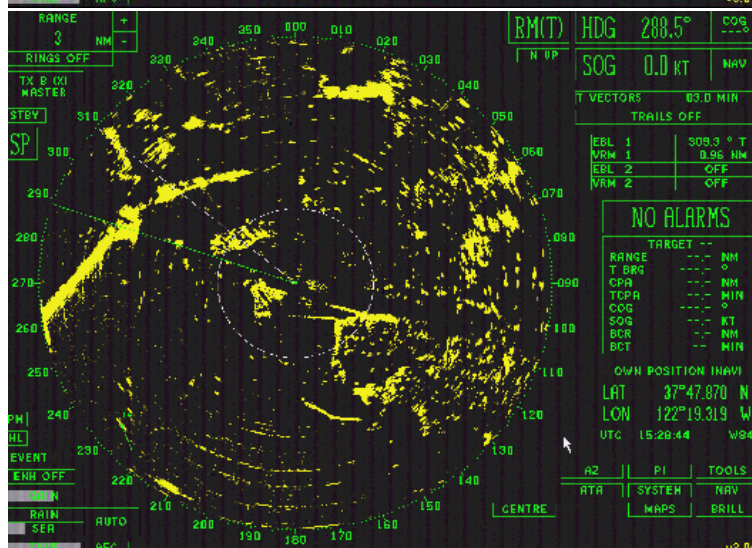
07:28:44

CREW how do you turn off the light outside in front?



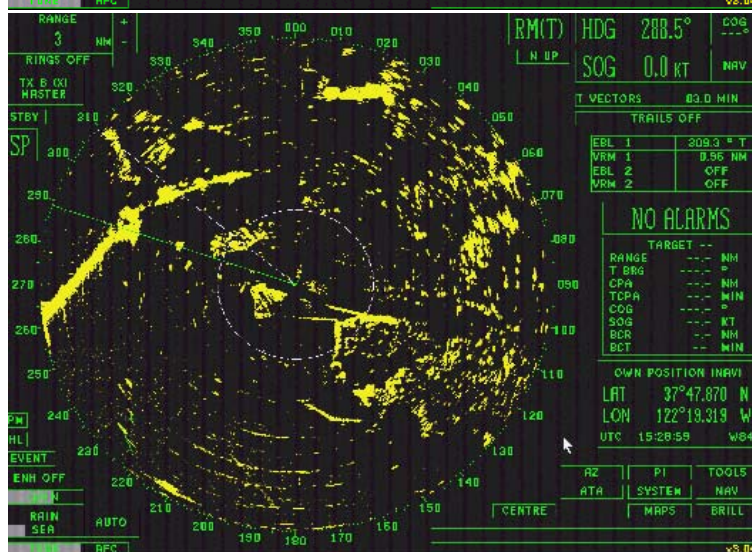
07:28:47

CREW which one?



07:28:52

CREW good.



07:29:00

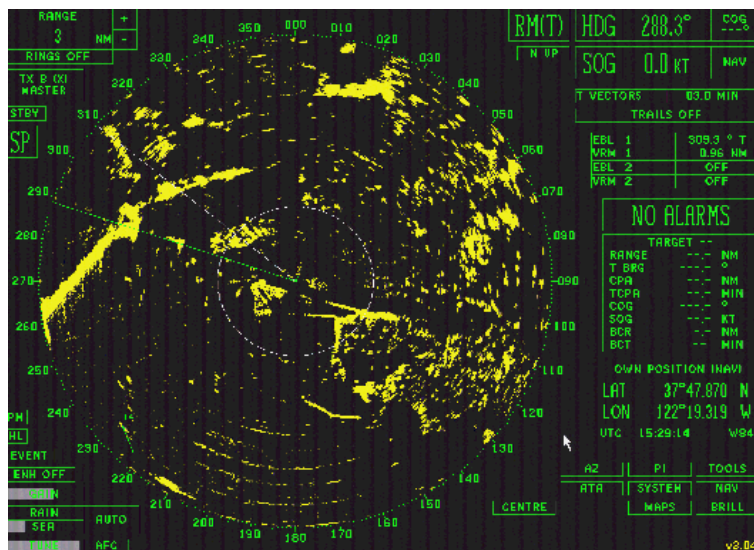
TIME and
Source

Communication

Radar Imagery

07:29:28

[fourteen seconds of unintelligible Chinese conversation]

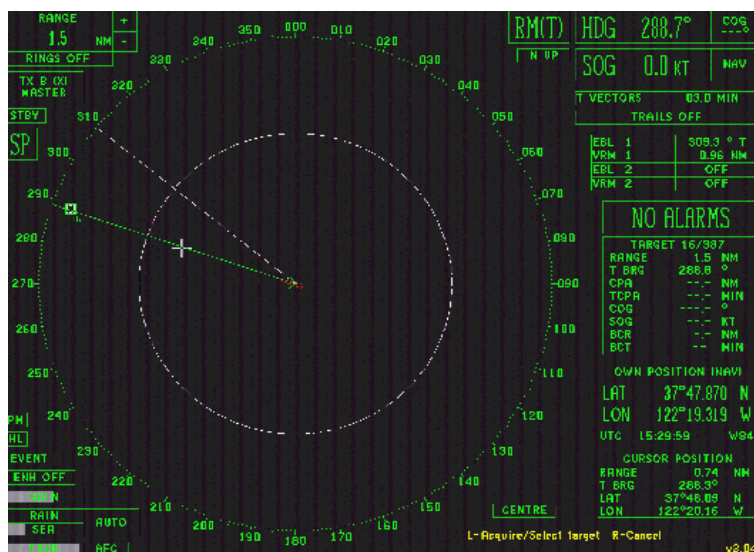


TIME and Source

Communication

Radar Imagery

07:30:00



TIME and
Source

Communication

Radar Imagery

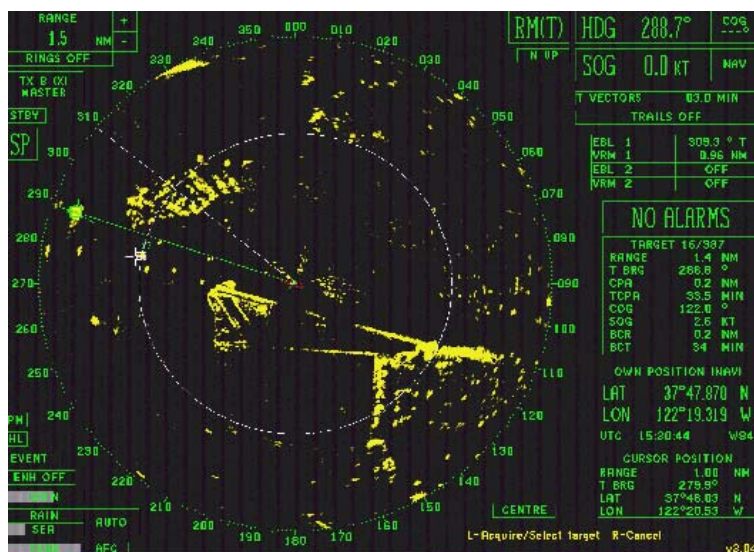
07:30:48

CREW yeah this dot here.

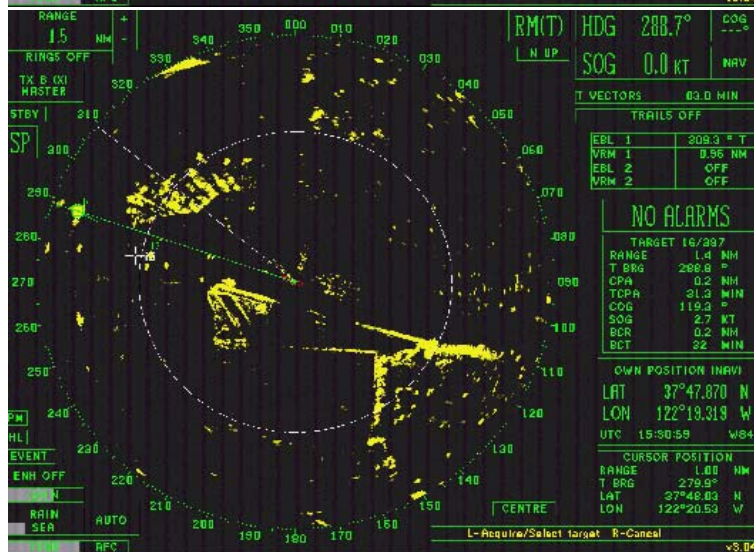
07:30:51

CREW over there over there. there is a record of that dot. **.

07:31:00



07:31:15



TIME and Source

Communication

Radar Imagery

07:31:41
CREW *

07:31:41
PILOT yeah.

07:32:12
VTS Solana traffic. how's the visibility captain?

07:32:17
SOLNA has not improved.

07:33:22
[fourteen seconds of unintelligible Chinese conversation]

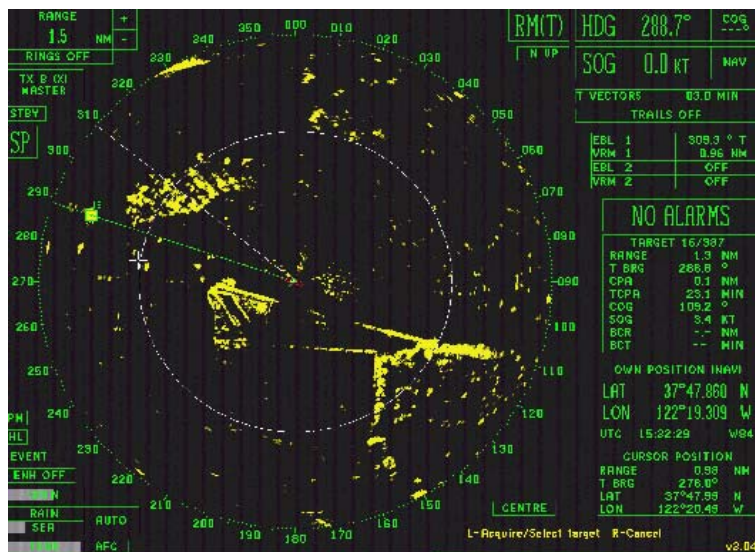


TIME and
Source

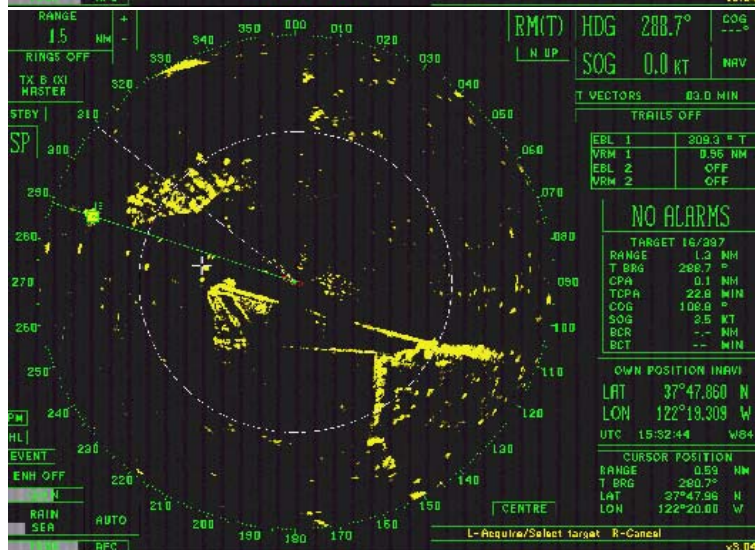
Communication

Radar Imagery

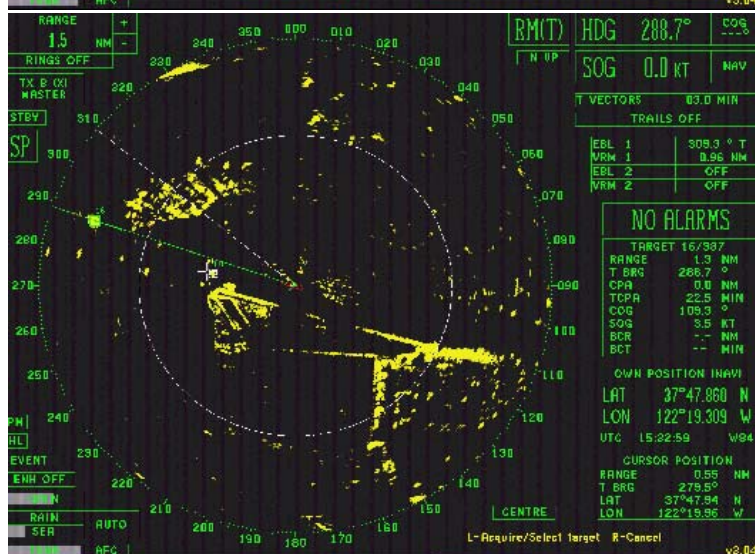
07:32:30



07:32:45



07:33:00

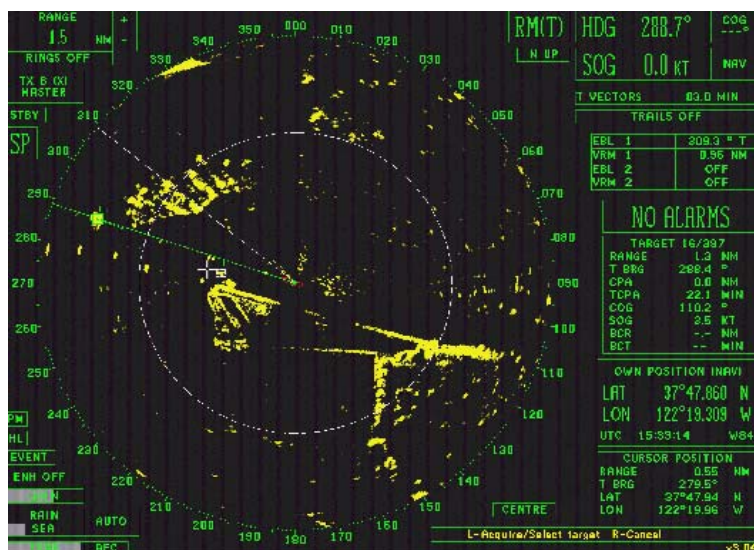


TIME and
Source

Communication

Radar Imagery

07:33:15

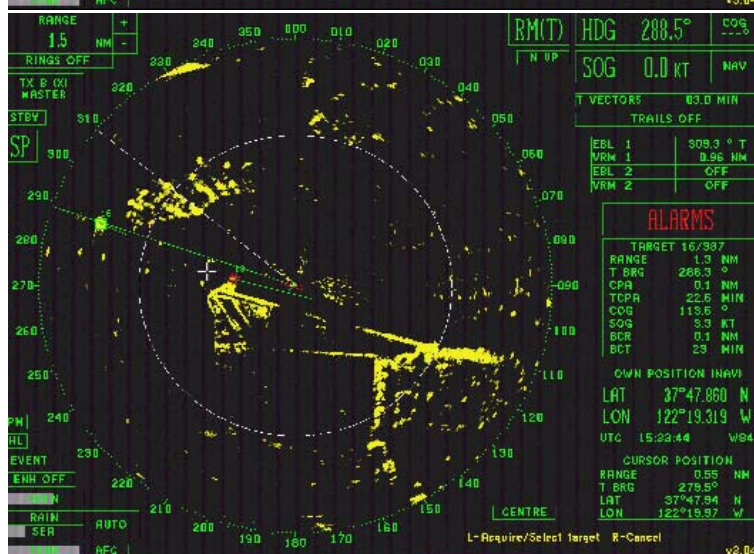


07:33:30



07:33:52

PILOT yeah this is the one we're waiting for. there's somebody else *. cancel that one. I don't know who that was. maybe a ferry boat.



07:34:00

07:34:15

07:34:30

The figure displays three identical radar interface panels stacked vertically. Each panel features a circular radar plot with a range scale from 0 to 350 NM and a bearing scale from 0 to 360 degrees. A target track is visible on each plot, starting from the bottom left and moving towards the top right. The data block on the right of each panel contains the following information:

- Header:** RM(T) HDG 288.5° COG ---°
- Speed:** SOG 0.0 kt NAV
- Trail Status:** T VECTORS 03.0 MIN TRAILS OFF
- Alarms:**
 - Target 16/997
 - Range 1.2 NM
 - T BRG 288.0°
 - CPA 0.2 NM
 - TCPR 22.4 MIN
 - COG 116.7°
 - SOG 3.2 kt
 - BCR --- NM
 - BCT --- MIN
- Own Position (INAV):**
 - LAT 37°47.860 N
 - LOM 122°19.309 W
 - UTC 15:53:59 W94
- Cursor Position:**
 - Range 1.50 NM
 - T BRG 262.4°
 - LAT 37°47.98 N
 - LOM 122°21.15 W
- Footer:** L-Acquire/Select target R-Cancel v5.04

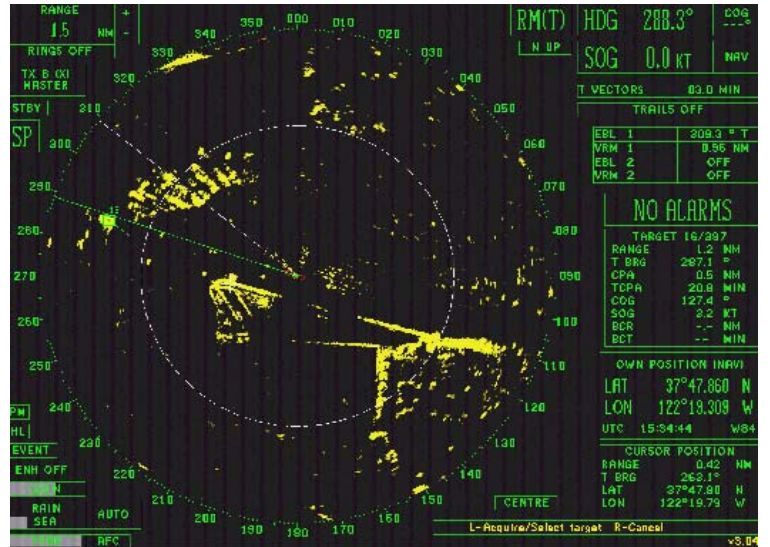
The middle and bottom panels show 'NO ALARMS' instead of the alarm details seen in the top panel. The radar plots and target tracks are consistent across all three panels.

TIME and
Source

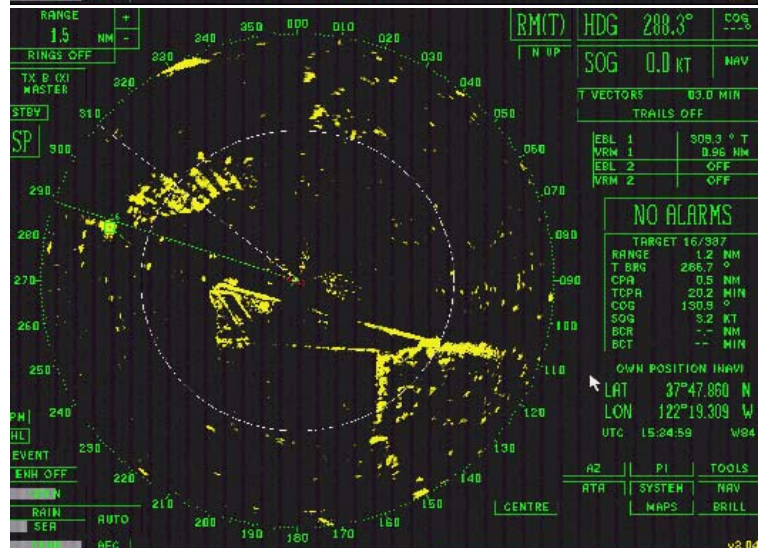
Communication

Radar Imagery

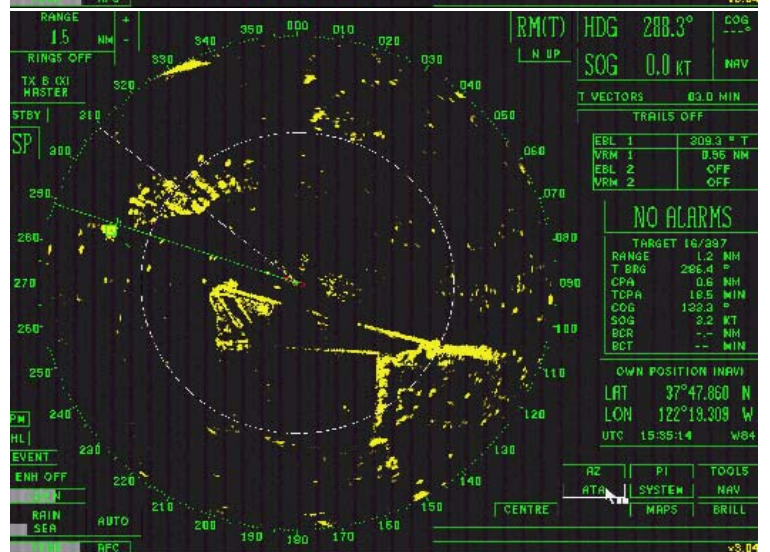
07:34:45



07:35:00



07:35:15

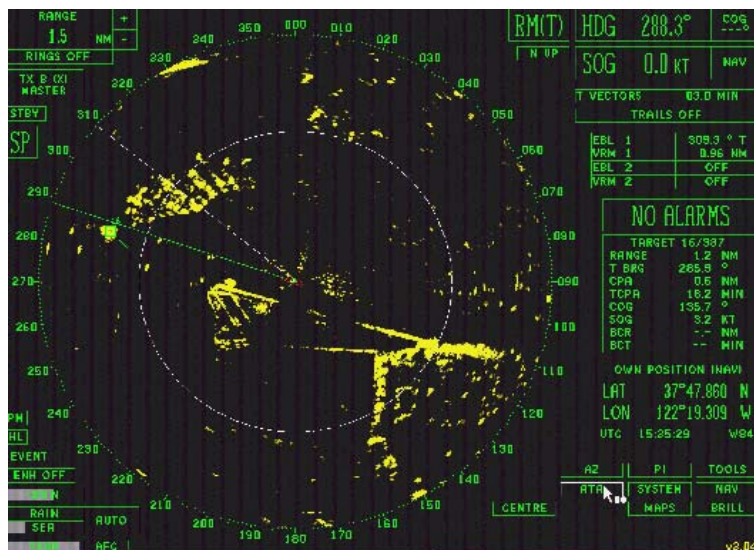


TIME and Source

Communication

Radar Imagery

07:35:30



07:35:53

PILOT and uh which direction do you go from the pilot station? north? south?

07:35:58

CAPT north.

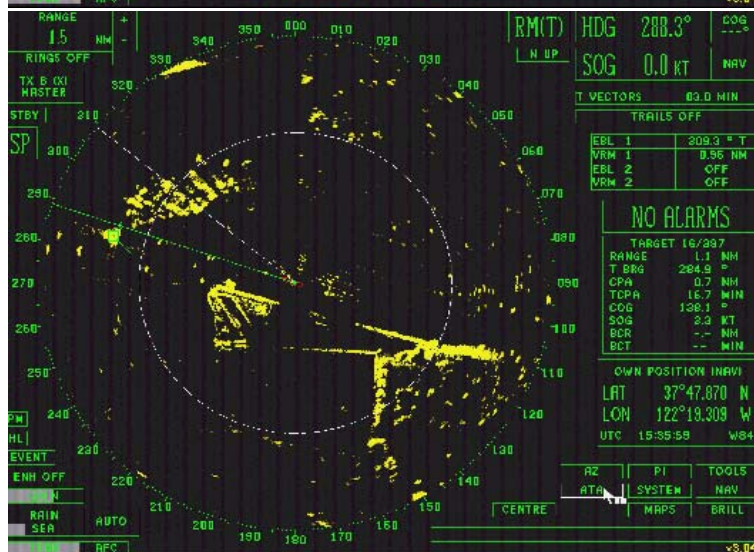


07:36:00

PILOT north channel? you take the north channel?

07:36:02

CAPT yeah yeah yeah.



07:36:15

07:36:30

07:36:45

The figure consists of three vertically stacked radar displays, each showing a target ship's movement over time. Each display includes a range scale (0-350 NM) and a heading scale (0-360 degrees). The target ship is consistently identified as 'T 16/397' with a range of 284.5 NM and a heading of 288.3 degrees. The displays show the ship's position relative to the own ship (OWH) and the surrounding environment, with the own ship's position fixed at 37°47.870 N, 122°19.309 W.

Display 1 (Top): Shows the target ship at a range of 284.5 NM and heading of 288.3°. The own ship's position is 37°47.870 N, 122°19.309 W. The target ship's position is 37°47.870 N, 122°19.309 W. The target ship's position is 37°47.870 N, 122°19.309 W.

Display 2 (Middle): Shows the target ship at a range of 284.5 NM and heading of 288.3°. The own ship's position is 37°47.860 N, 122°19.319 W. The target ship's position is 37°47.860 N, 122°19.319 W. The target ship's position is 37°47.860 N, 122°19.319 W.

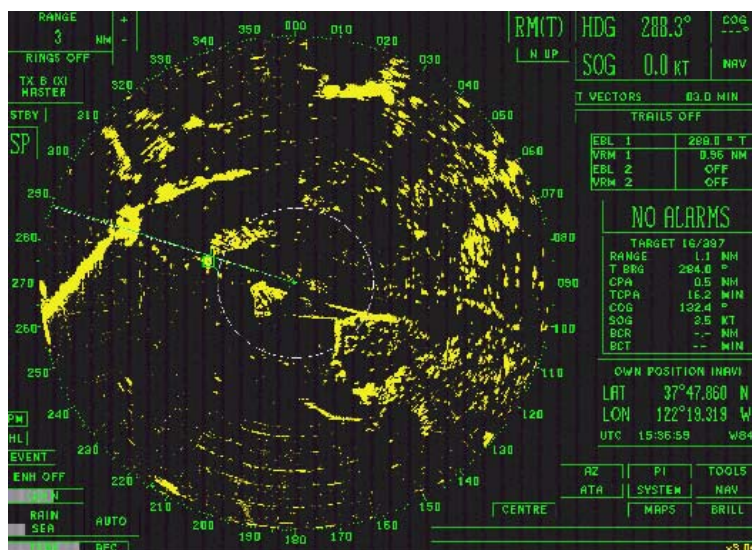
Display 3 (Bottom): Shows the target ship at a range of 284.5 NM and heading of 288.3°. The own ship's position is 37°47.850 N, 122°19.329 W. The target ship's position is 37°47.850 N, 122°19.329 W. The target ship's position is 37°47.850 N, 122°19.329 W.

TIME and
Source

Communication

Radar Imagery

07:37:00



07:37:15

CREW- oh this thing outside **. UHF

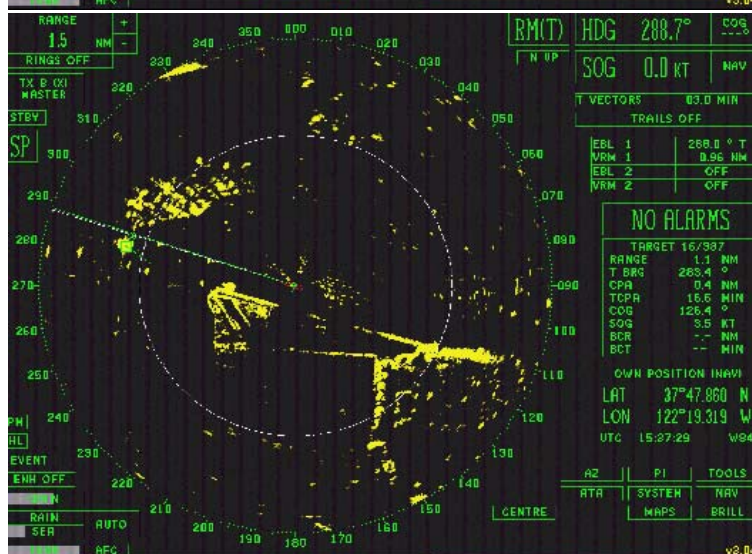


07:37:30

CREW- captain how much time is left? UHF

07:37:33

CAPT- *. UHF

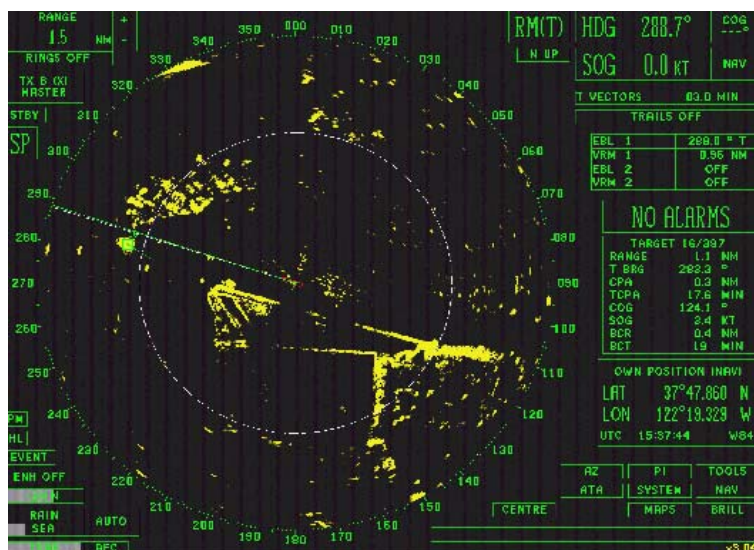


TIME and Source

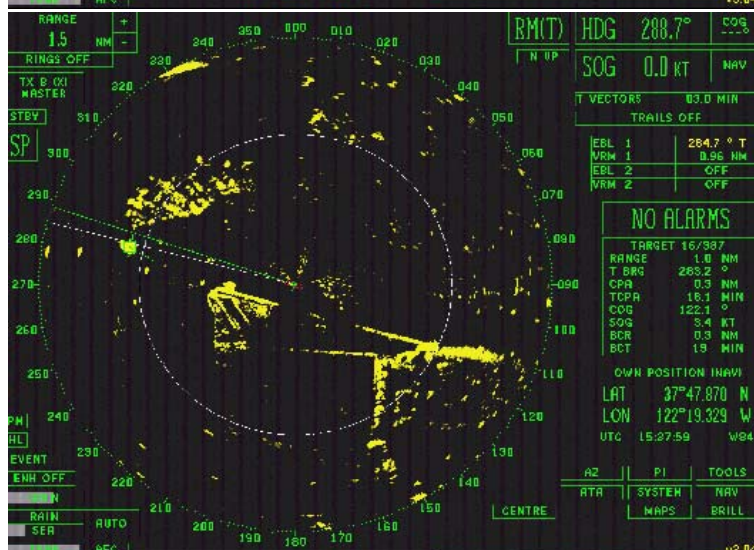
Communication

Radar Imagery

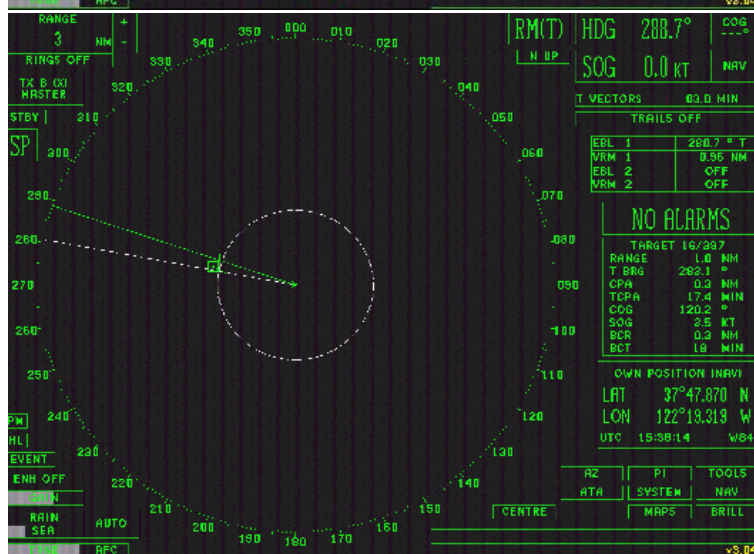
07:37:52
CREW ***.



07:38:00



07:38:15

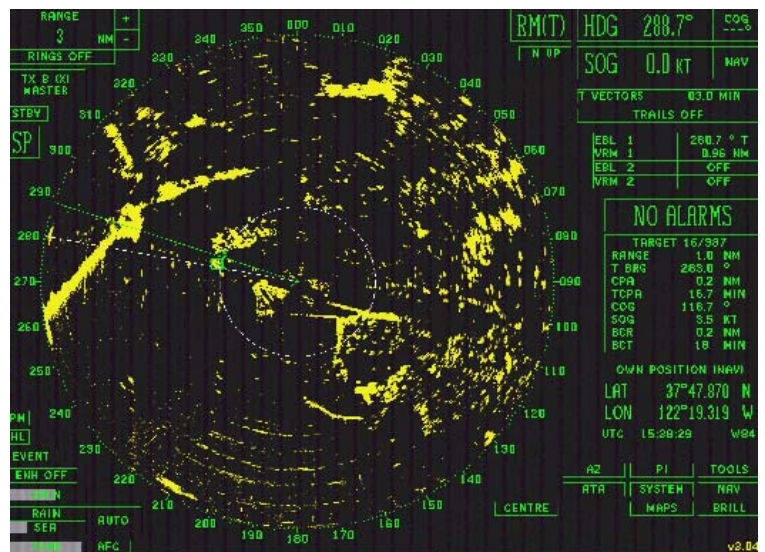


TIME and Source

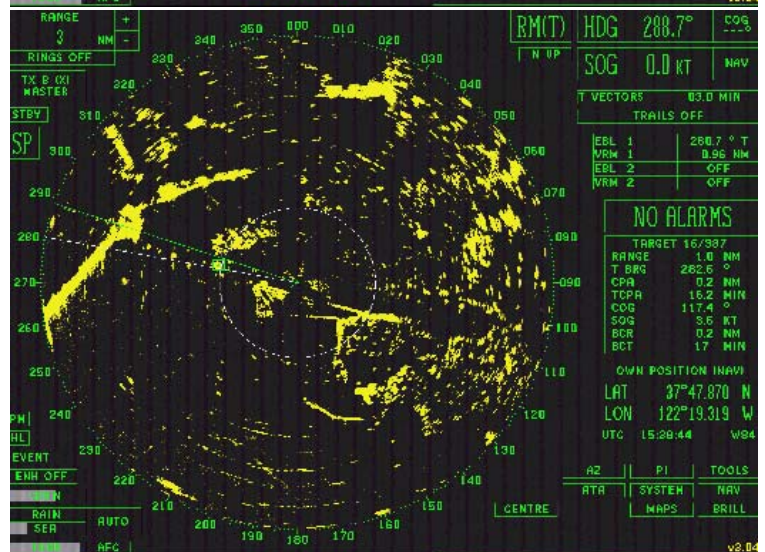
Communication

Radar Imagery

07:38:30



07:38:45



07:39:01

CAPT-UHF chief officer it's all right to * anchor?

07:39:06

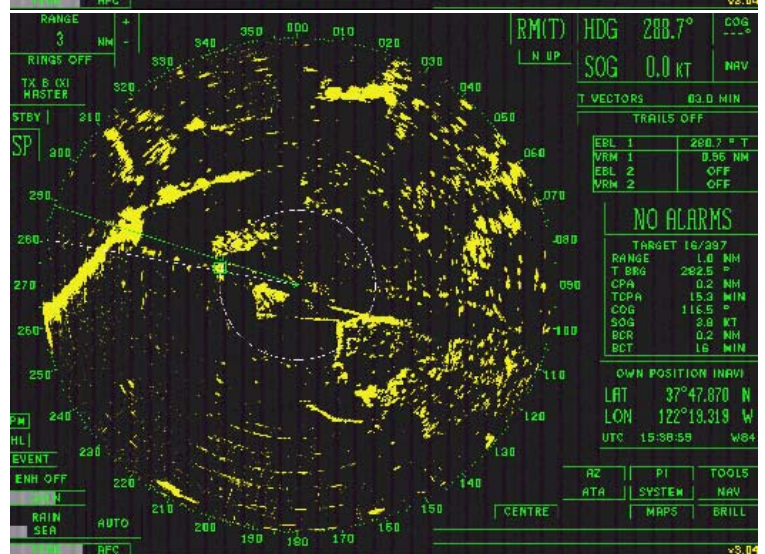
CHOFF-UHF ** the anchor is raised. * deck status.

07:39:09

CAPT-UHF okay.

07:39:12

PILOT yeah it will go off all the time until he gets past us.



TIME and
Source

Communication

Radar Imagery

07:39:16

CREW- calling ***.
UHF

07:39:23

CREW **.

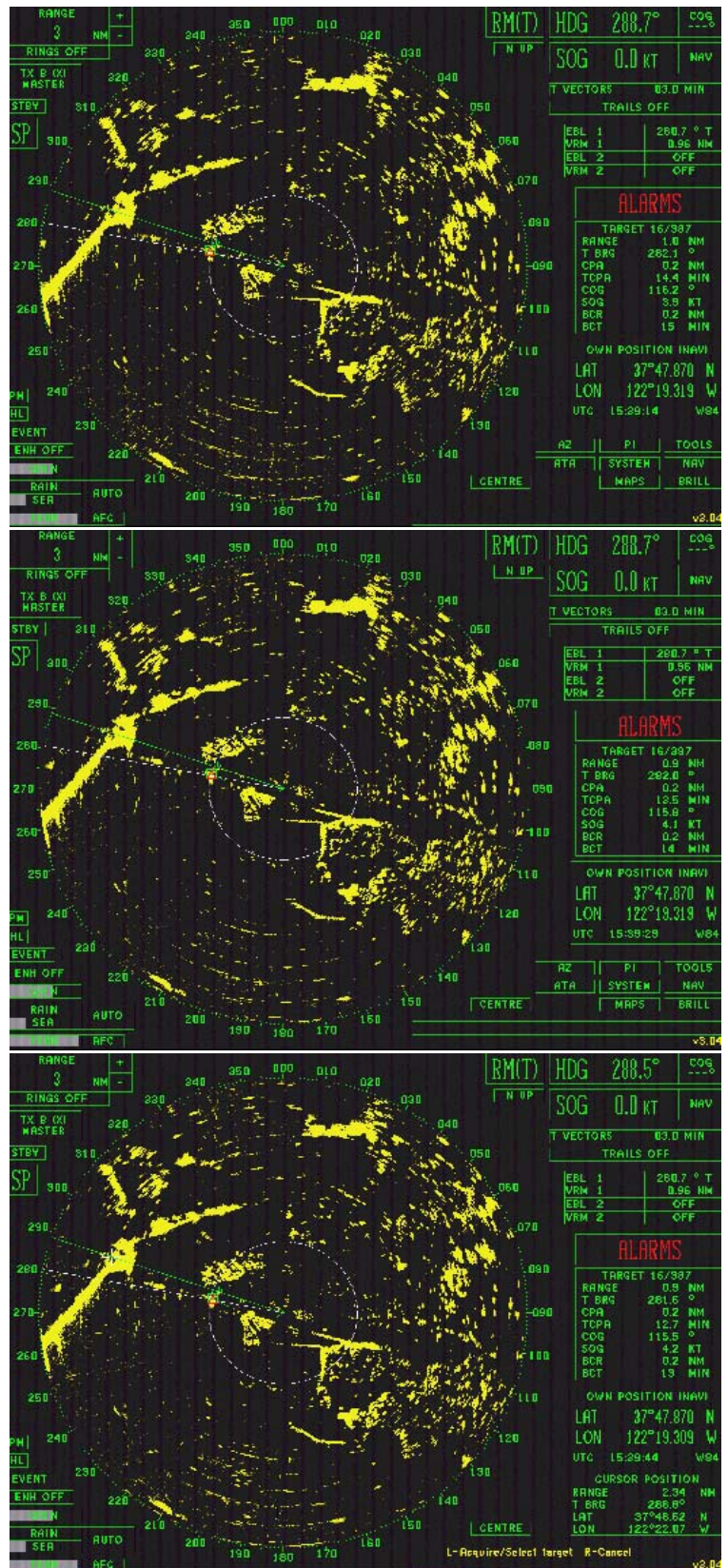
07:39:28

PILOT no I like it in the center. it would really # me up
if you did that.

07:39:30

07:39:55

VTS Solana traffic roger. uh visibility in the entire
central bay is reported eighth to a quarter
nautical mile.

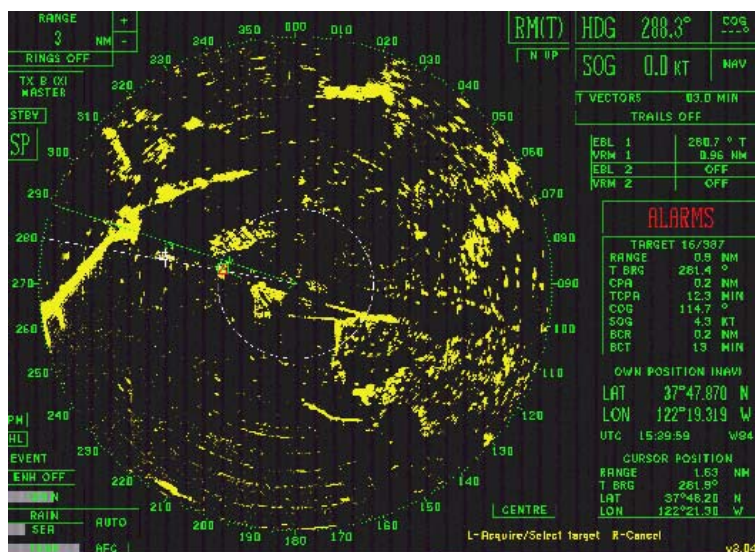


TIME and Source

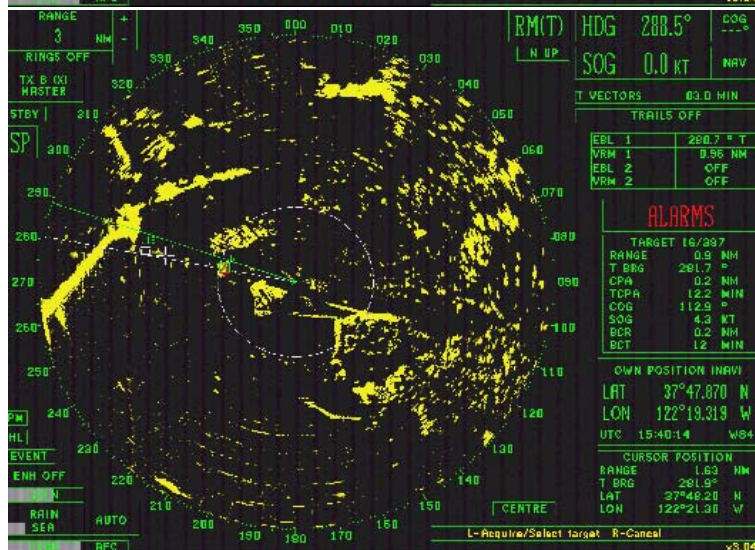
Communication

Radar Imagery

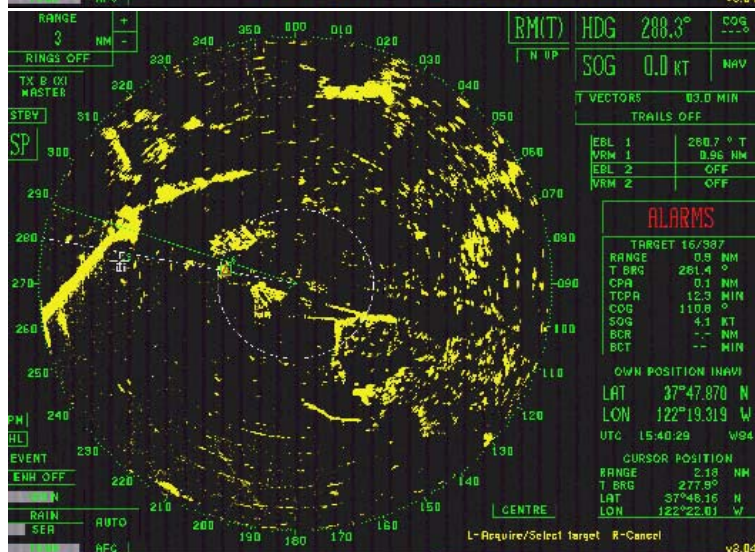
07:40:00



07:40:15



07:40:30

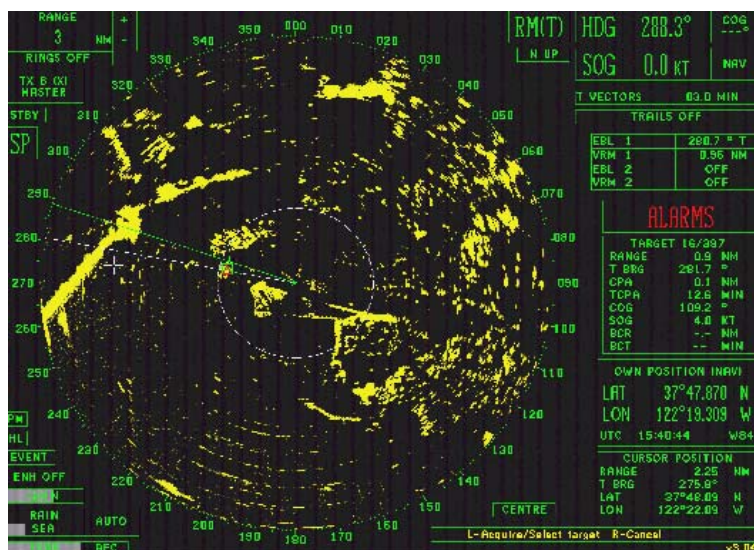


TIME and
Source

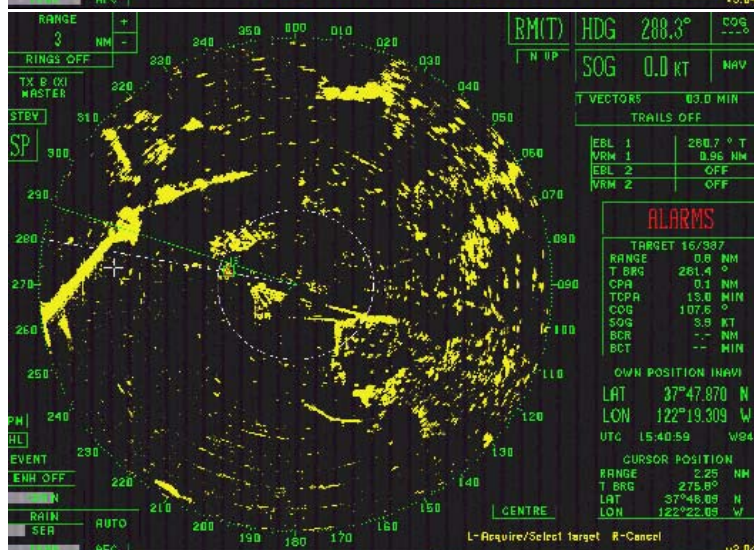
Communication

Radar Imagery

07:40:45

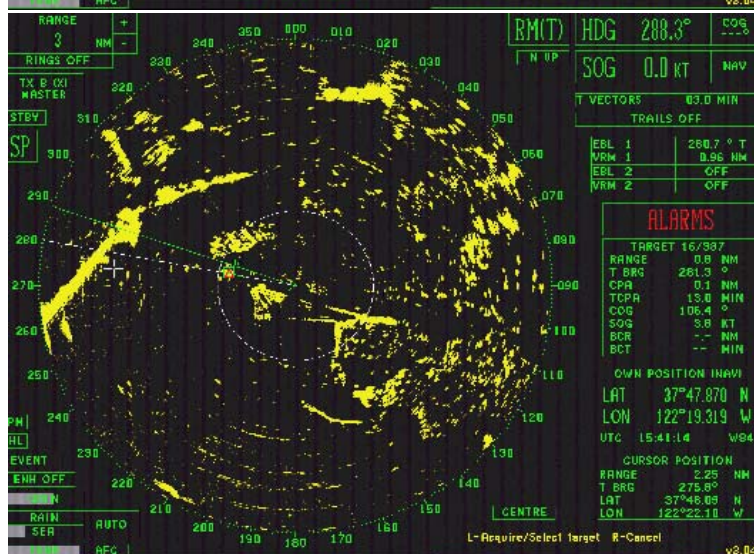


07:41:00



07:41:28

PILOT now— now that tug. now he's here. yeah. Solana. that's him now.



TIME and Source

Communication

Radar Imagery

07:41:31

CREW **.

07:41:40

CREW other vessel *.

07:41:45

PILOT pardon?

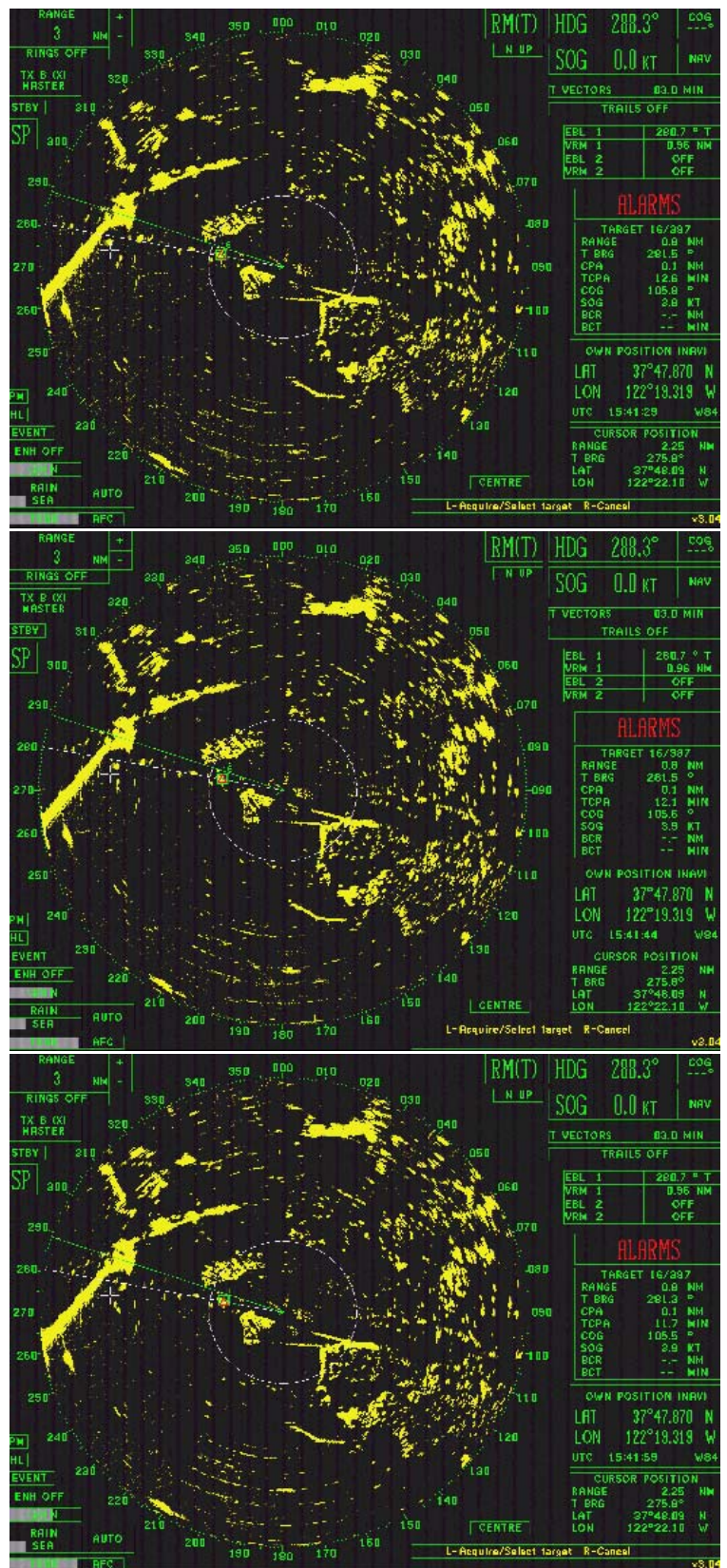
07:41:46

CREW other vessel *.

07:41:47

PILOT oh yeah I think that as soon as he goes by. yeah.

07:42:00



TIME and Source

Communication

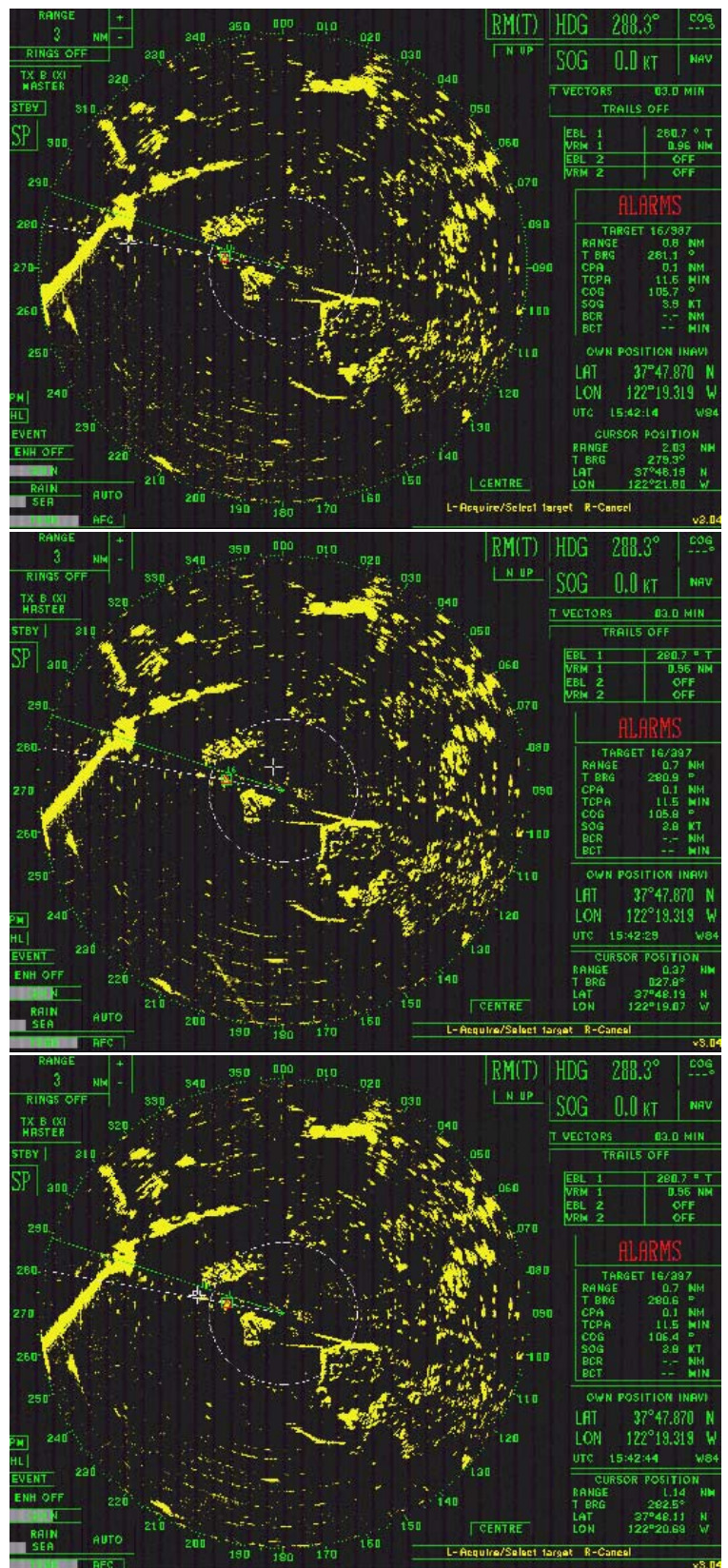
Radar Imagery

07:42:17
CREW **.

07:42:18
PILOT yeah * yeah yeah.

07:42:30

07:42:58
CREW **.



TIME and Source

Communication

Radar Imagery

07:43:01
PILOT oh yeah yeah. good. oh yeah yeah. we could.

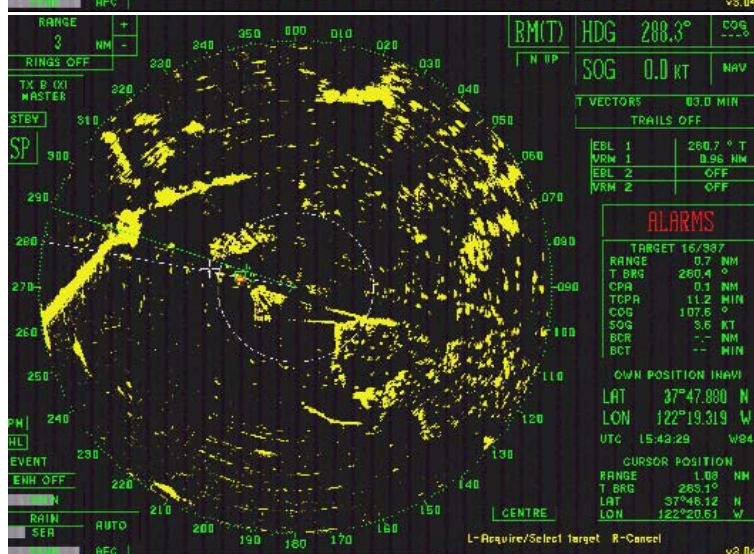
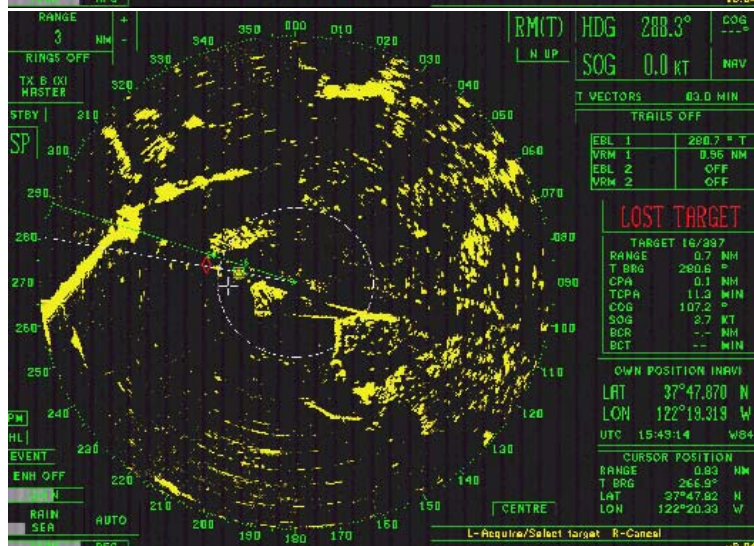
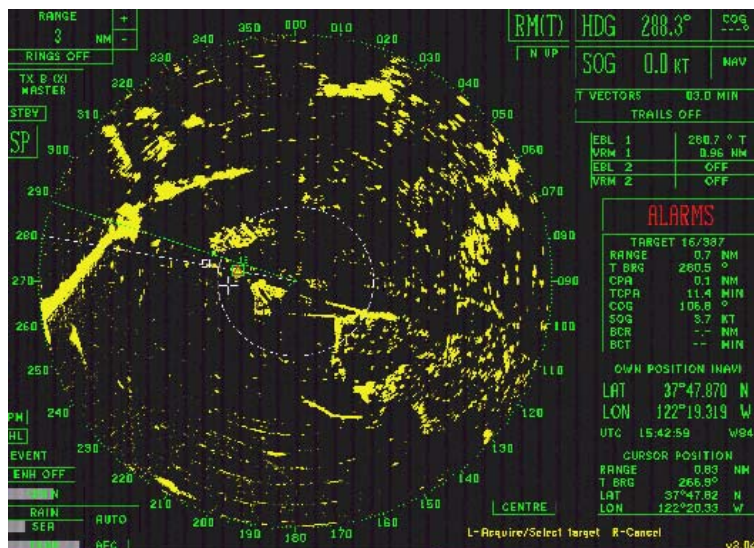
07:43:08
PILOT-VHF traffic romeo.

07:43:10
VTS unit romeo traffic.

07:43:12
PILOT-VHF yeah do you have somebody coming in astern of the Solana?

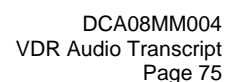
07:43:16
VTS unit romeo traffic uh negative. um Solana's the only thing checked in and I don't see AIS for anyone astern of her. uh unit twelve on the S-H Bright is uh abeam of Point Diablo intending eastbound lane he'll determine whether he'll go to anchor or proceed on to Sacramento.

07:43:30



Radar Imagery

PILOT yeah yeah yeah we can start letting go captain.



Radar Imagery

RANGE 1.5 NM +

TX B (X) MASTER

STBY

SP

ENH OFF

RAIN SEA

APC

EMT(D) HDG 288.5° DCG ---

N UP

SOG 0.0 KT NAV

T VECTORS 03.0 MIN

TRAILS OFF

EBL 1 280.7° T

VRM 1 9.96 NM

EBL 2 OFF

VRM 2 OFF

ALARMS

TARGET 16/297

RANGE 0.6 NM

T BRG 279.0°

CPA 0.1 NM

TCPA 9.0 MIN

COG 110.2°

SOG 2.7 KT

BCR 0.1 NM

BCT 1.0 MIN

OWN POSITION (NAVI)

LAT 37°47.860 N

LOX 122°19.329 W

UTC 15:44:29 W04

CURSOR POSITION

RANGE 0.54 NM

T BRG 282.1°

LAT 37°47.97 N

LOX 122°19.96 W

L-Acquire/Select target R-Cancel

RANGE 1.5 NM

RINGS OFF

TX B (X) MASTER

STBY

SP

RANGE 05.987 NM

T BRG 278.7 °

CPA 0.1 NM

TCPA 9.5 MIN

COS 110.2 °

SOG 3.6 KT

BCR 0.1 NM

BCT 10 MIN

OWN POSITION (NAV)

LAT 37°47.860 N

LON 122°19.319 W

UTC 15:44.44 W084

CURSOR POSITION

RANGE 0.54 NM

T BRG 203.1 °

LAT 37°47.97 N

LON 122°19.95 W

RM(T) HDG 288.7° CCG

N UP

SOG 0.0 KT NAV

T VECTORS 63.0 MIN

TRAILS OFF

EBL 1 280.7 ° T

VRM 1 8.96 NM

EBL 2 OFF

VRM 2 OFF

BOW CROSS

TARGET 16.987

RANGE 05.987 NM

T BRG 278.7 °

CPA 0.1 NM

TCPA 9.5 MIN

COS 110.2 °

SOG 3.6 KT

BCR 0.1 NM

BCT 10 MIN

OWN POSITION (NAV)

LAT 37°47.860 N

LON 122°19.319 W

UTC 15:44.44 W084

CURSOR POSITION

RANGE 0.54 NM

T BRG 203.1 °

LAT 37°47.97 N

LON 122°19.95 W

CENTRE

L-Acquire/Select target R-Cancel

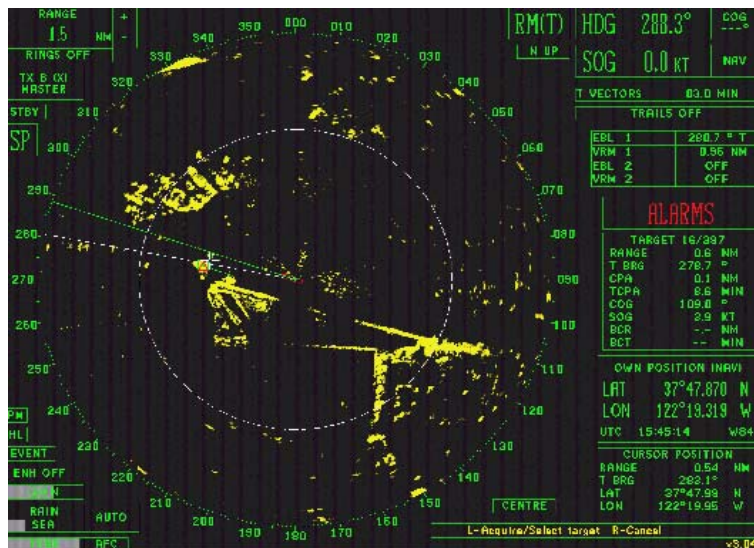
TIME and
Source

Communication

Radar Imagery

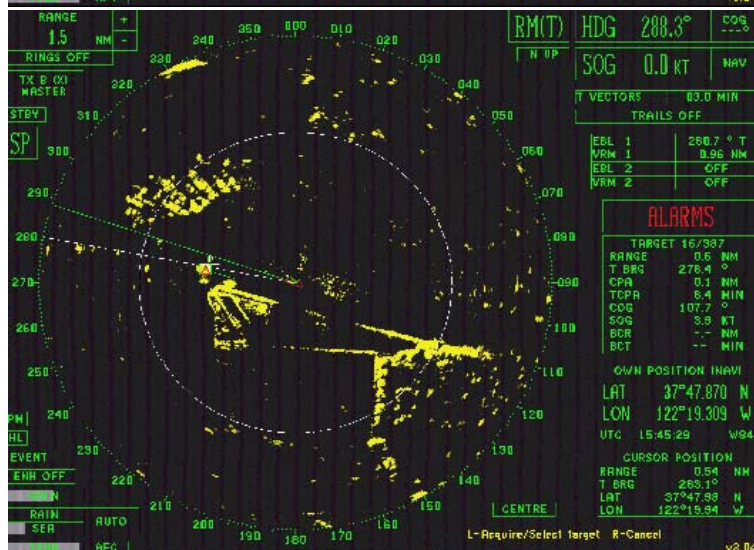
07:45:28

[sound similar to fog signal]



07:45:34

CAPT do not transfer the pilot ladder to the starboard side.



07:45:59

CREW- *
UHF

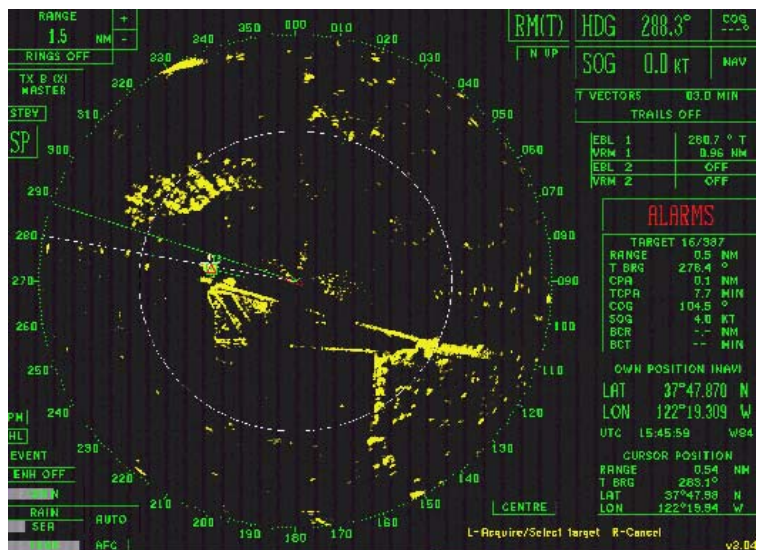


TIME and Source

Communication

Radar Imagery

07:46:00



07:46:17
CREW-UHF *** look look it's okay.

07:46:20
CREW-UHF ***

07:46:23
CREW-UHF already done.



07:46:32
PILOT-VHF Solana romeo.



TIME and Source

Communication

Radar Imagery

07:46:46

PILOT-VHF Solana romeo.

07:46:52

SOLNA Solana.

07:46:55

PILOT-VHF yeah I can see you coming up here when uh you get past me I'll be uh comin' off I'll be on seven A if you need me.

07:47:02

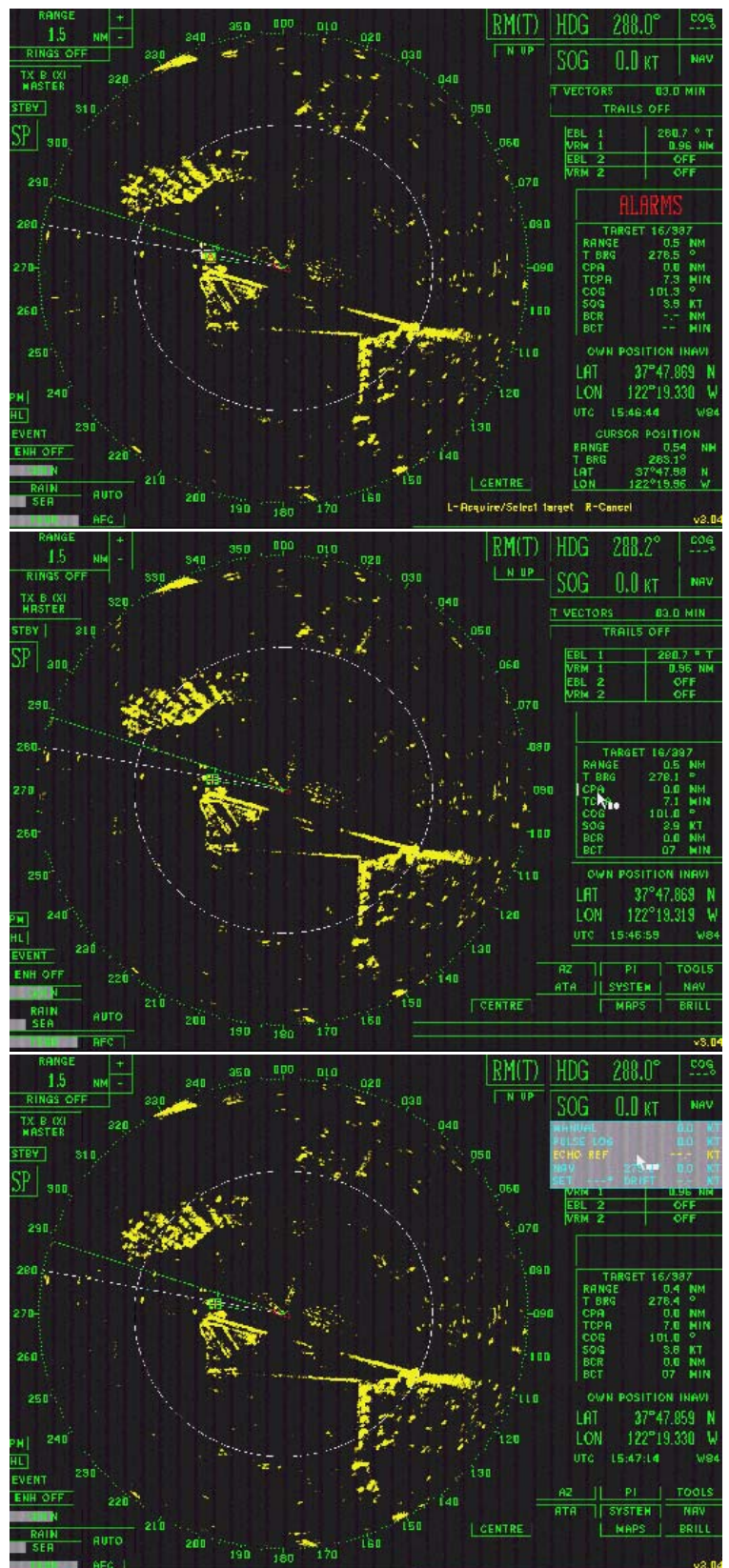
SOLNA roger that okay thank you.

07:47:26

CREW-UHF ***.

07:47:29

CAPT-UHF good. understood.



Radar Imagery

07:47:35

PILOT can I get uh yeah two sugars please.

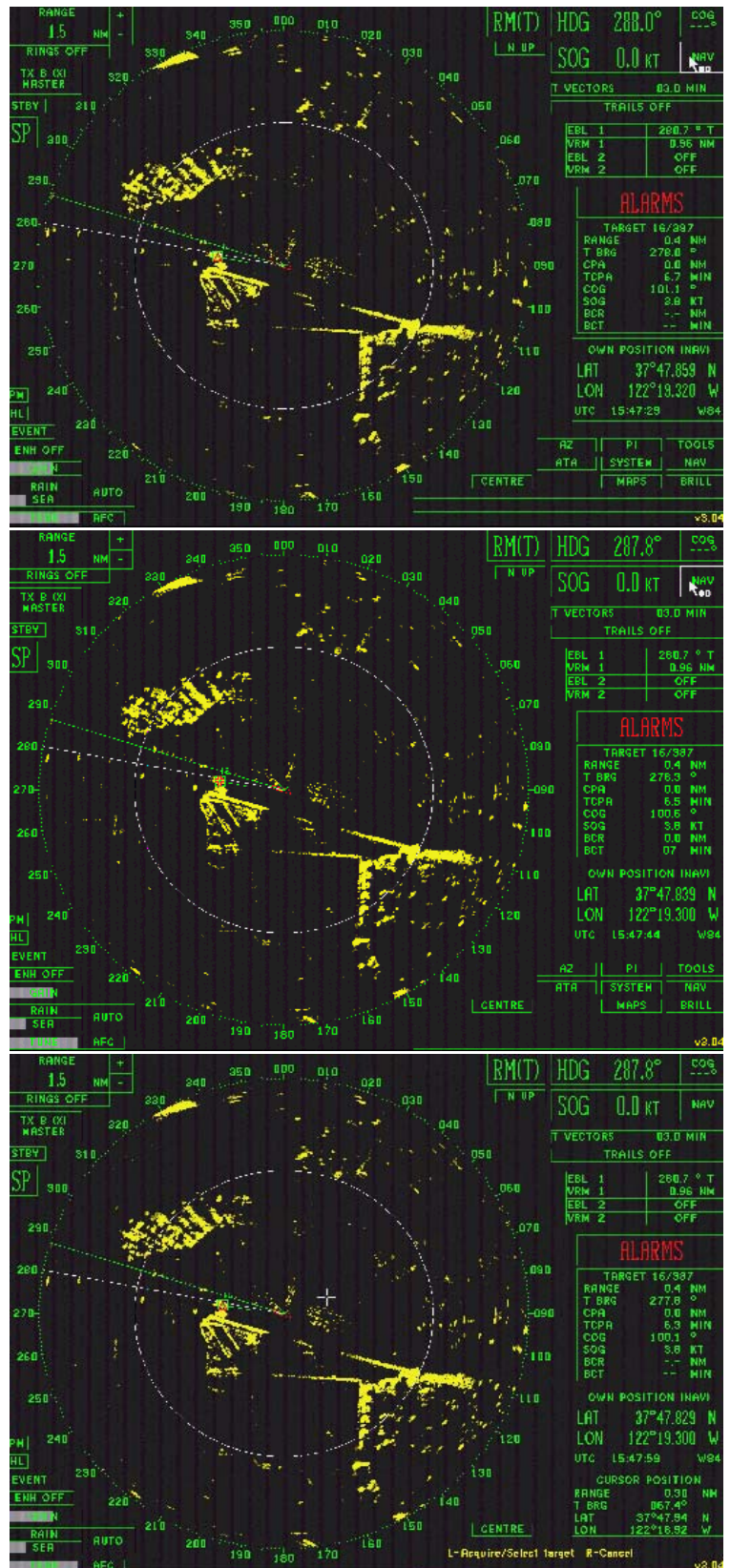
07:47:46

CHOFF- *the backspring on the bow and the stern has*
UHF *been let go.*

07:47:49

CAPT- *okay.*
UHF

07:48:00



TIME and Source

Communication

Radar Imagery

07:48:22

CHOFF-UHF *bridge stern calling.*

07:48:24

CAPT-UHF *good understood.*

07:48:30

07:48:53

CREW-UHF *somebody has left right?*

07:48:56

CAPT-UHF *good good.*

07:48:58

[twenty two second unintelligible Chinese conversation]

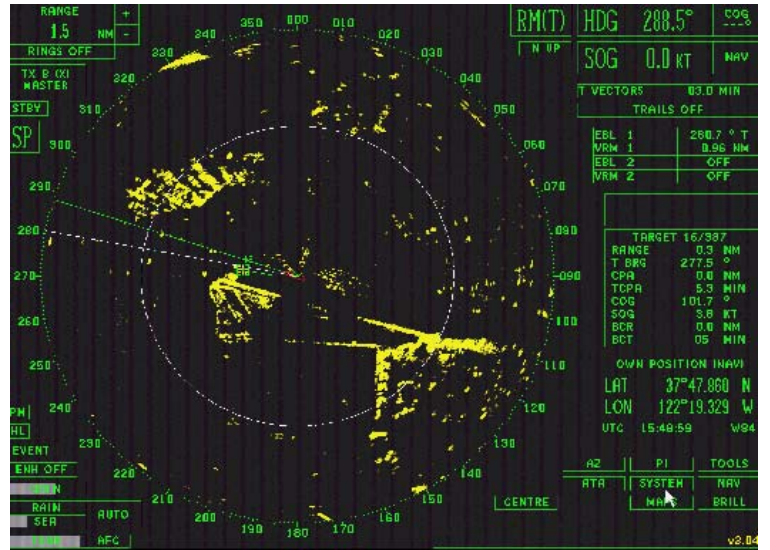


TIME and
Source

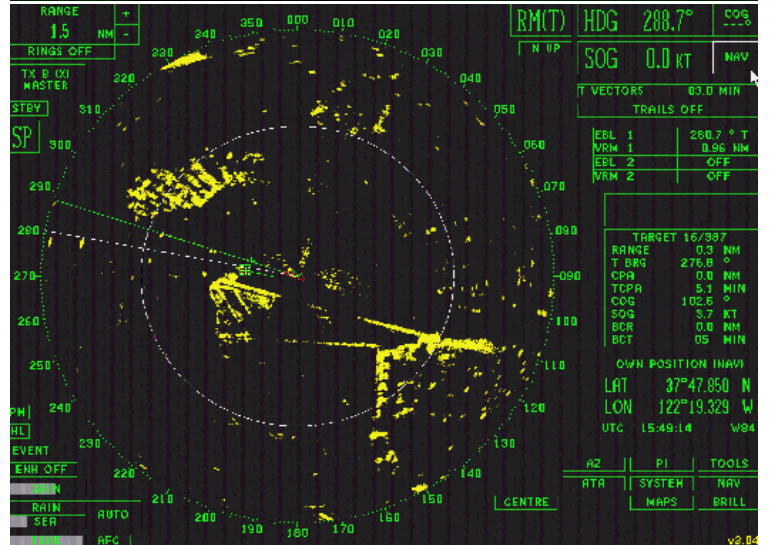
Communication

Radar Imagery

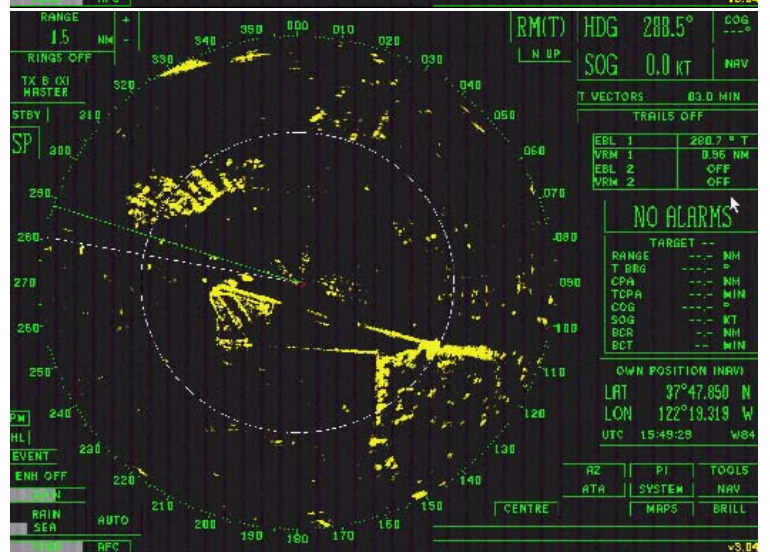
07:49:00



07:49:15



07:49:30



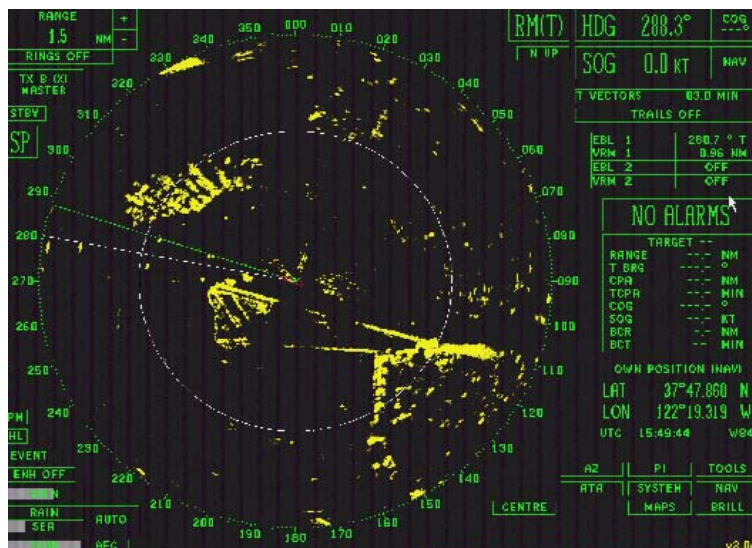
TIME and
Source

Communication

Radar Imagery

07:49:57

PILOT can you tell me when he's—? what did he just disappear?



07:50:01

CREW * alarm.

07:50:02

CREW punch alarm.

07:50:03

PILOT when he's abeam can you tell me? can you—, when he's abeam of the ship can you come out and tell me?



07:50:06

CREW wait until after it turns around.

07:50:07

CREW okay okay okay. uh-huh.

07:50:15

CAPT keep a lookout. you see it report it.

07:50:27

CAPT-UHF chief officer. let go the backspring.



TIME and Source

Communication

Radar Imagery

07:50:31

CHOFF-UHF *yes let go the backspring.*

07:50:41

CHOFF-UHF *bridge head rope engaged.*

07:50:43

CAPT-UHF *okay okay.*

07:50:45

CHOFF-UHF *

07:51:05

CREW *now ** is seen.*



TIME and Source

Communication

Radar Imagery

07:51:17

CHOFF-UHF *bridge head rope has been let go.*

07:51:17

CREW-UHF *bridge head rope has been let go.*

07:51:20

CAPT-UHF *okay okay head rope has been let go. understood.*

07:51:27

CREW *now we can see the light.*

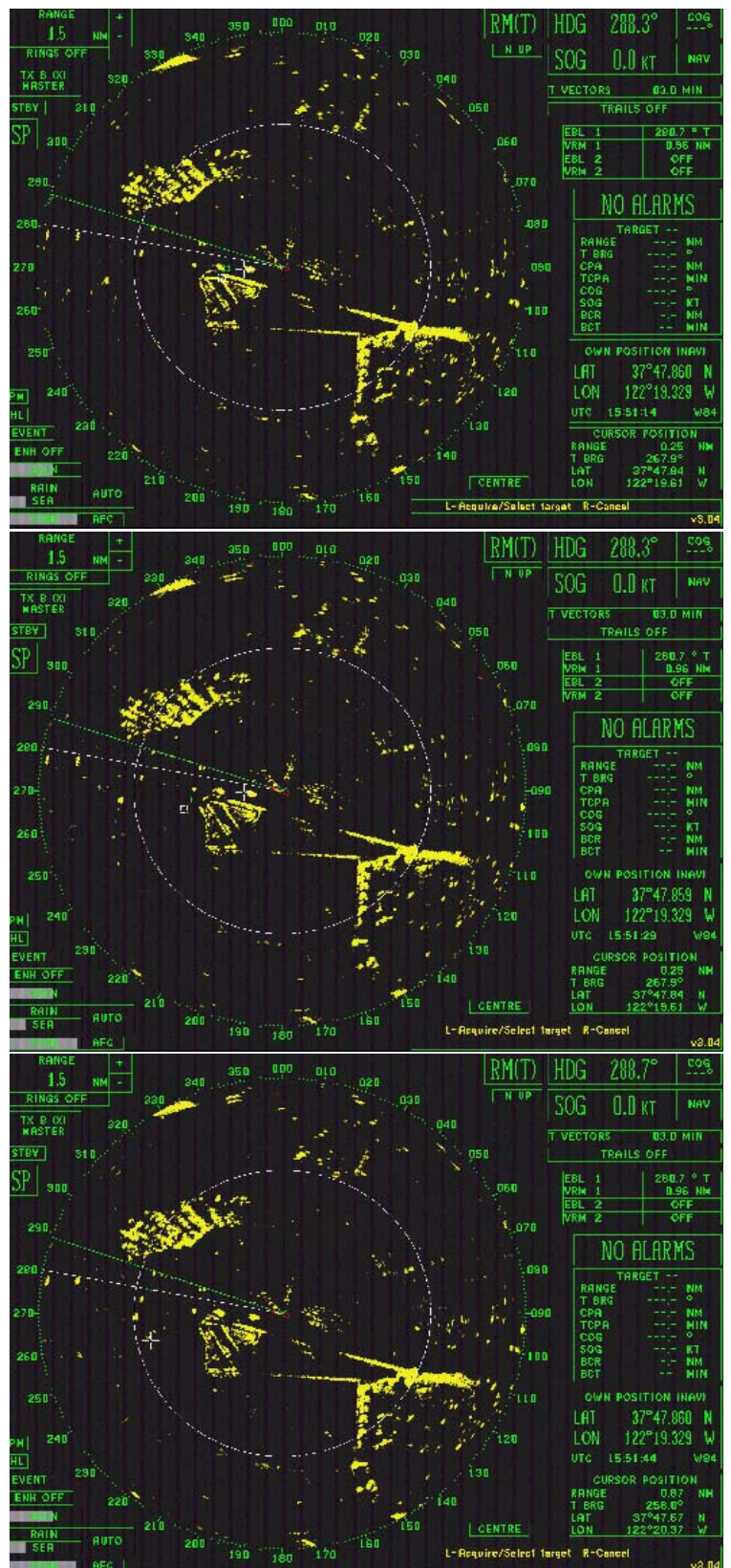
07:51:31

CREW *what about it?*

07:51:32

CREW *have seen two lights.*

07:51:45

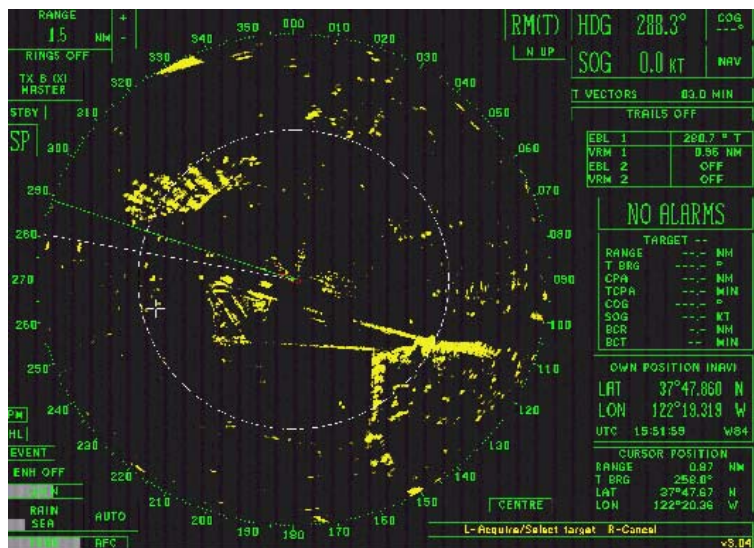


TIME and Source

Communication

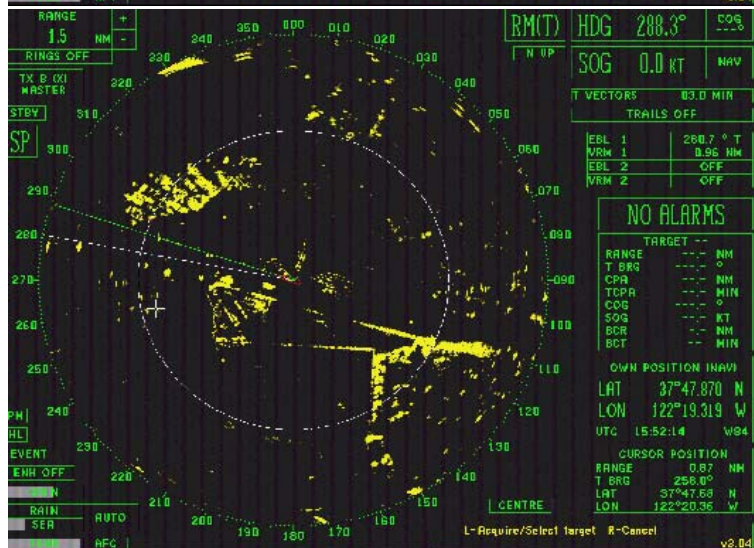
Radar Imagery

07:52:00



07:52:23

CREW *are there two ships there? are there two ships there?*



07:52:32

CREW *the two of us should ***.*

07:52:35

CREW *oh no the captain ***.*

07:52:36

CREW-UHF ****.*



TIME and
Source

Communication

Radar Imagery

07:52:45



07:53:00



07:53:15



TIME and
Source

Communication

Radar Imagery

07:53:37

CREW *lower the volume a little bit lower.*

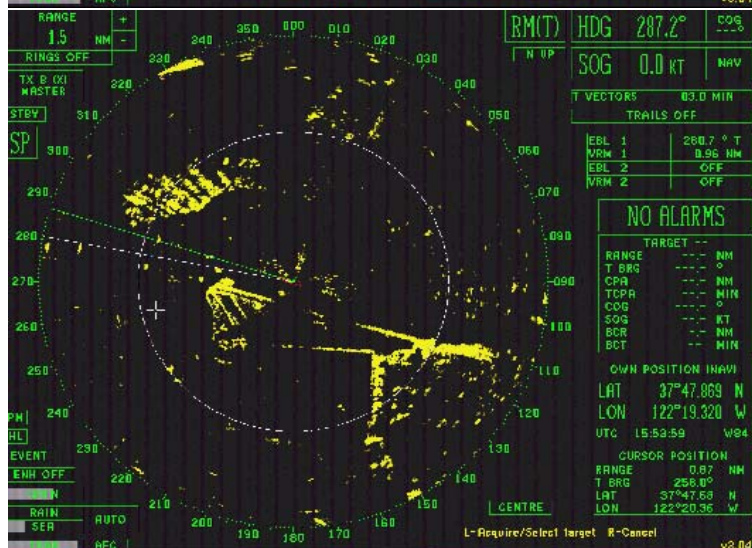


07:53:57

CREW *see the ship on the port side *** our bridge.*

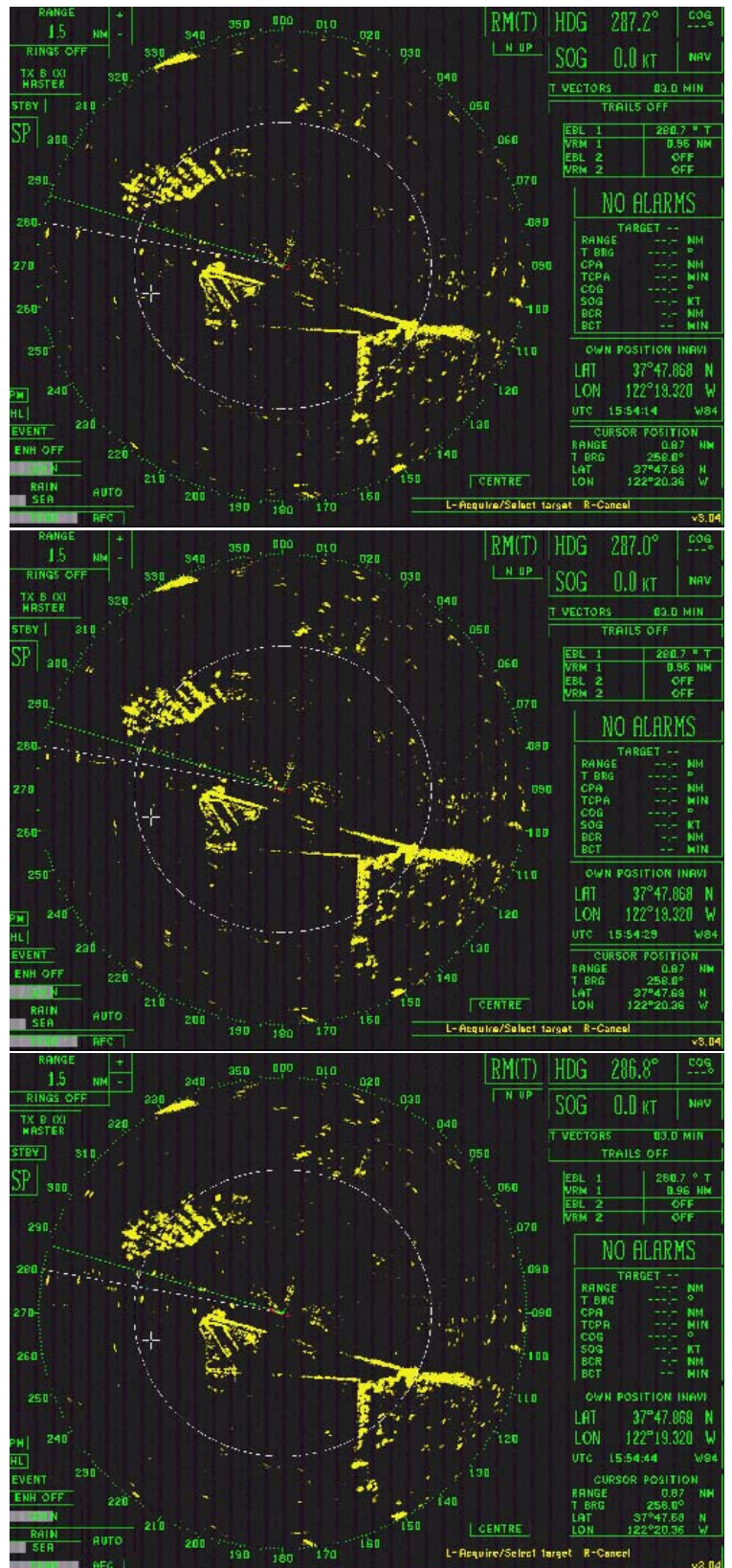


07:54:00



Radar Imagery

07:54:45



TIME and
Source

Communication

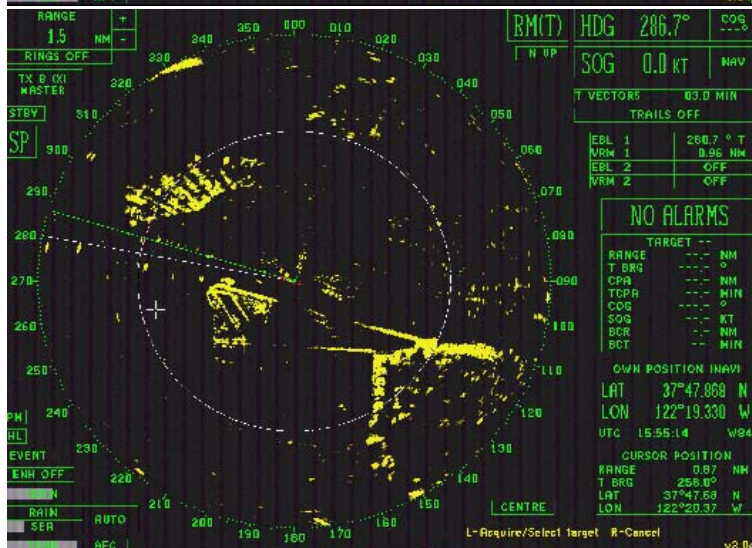
Radar Imagery

07:55:04

CREW *what a thick fog.*



07:55:15



07:55:30



TIME and
Source

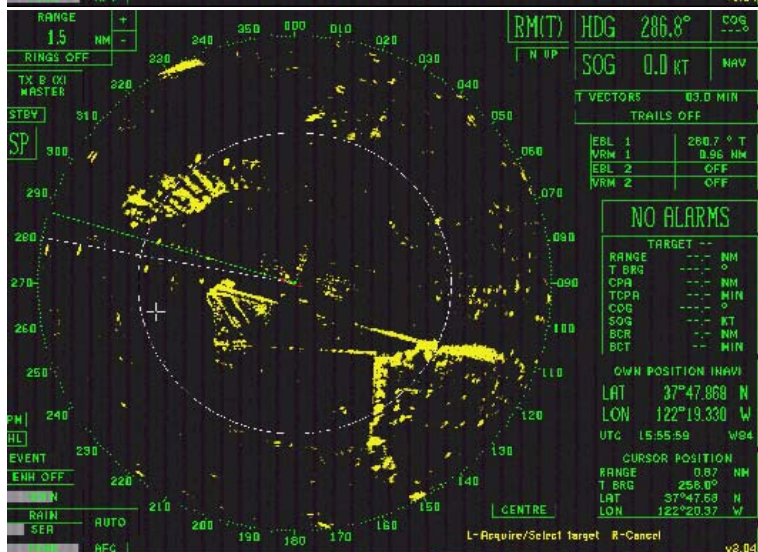
Communication

Radar Imagery

07:55:45



07:56:00



07:56:15

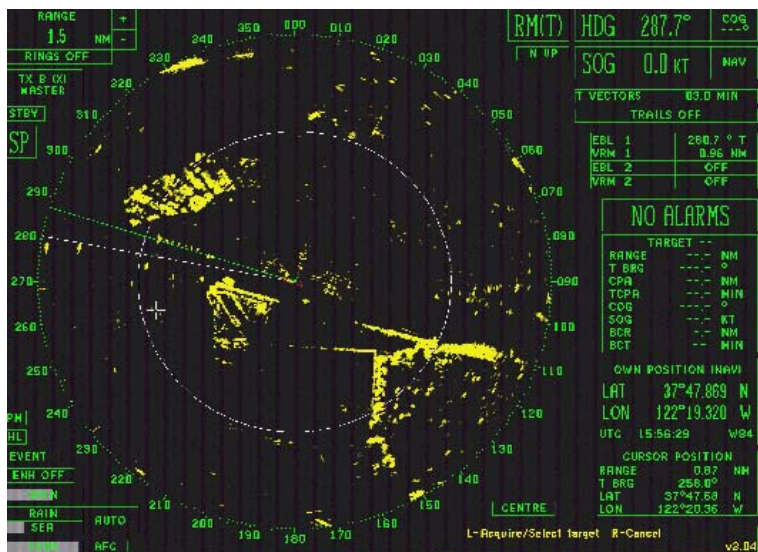


TIME and
Source

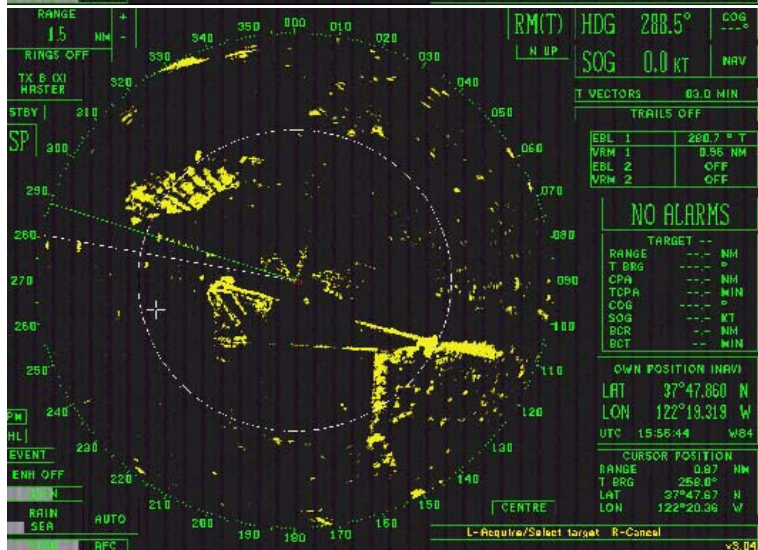
Communication

Radar Imagery

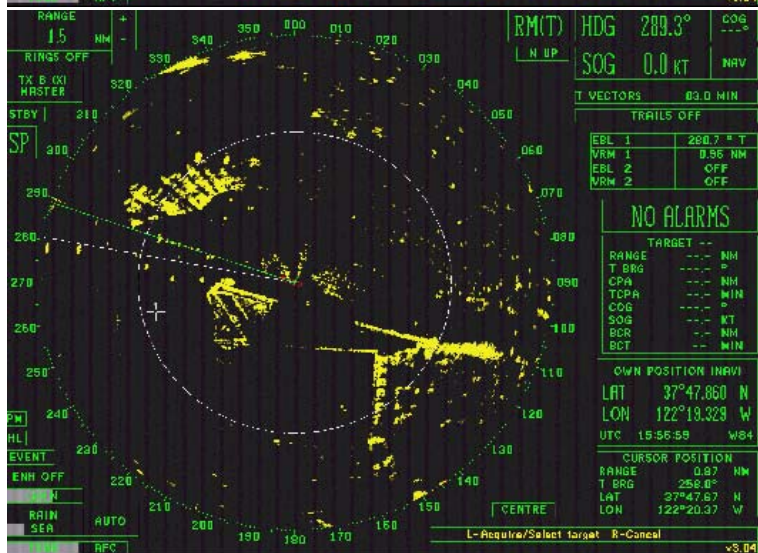
07:56:30



07:56:45



07:57:00

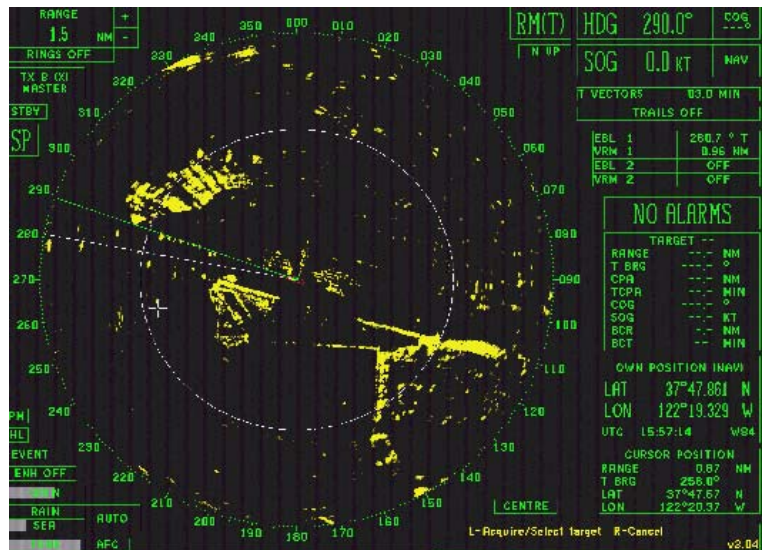


TIME and Source

Communication

Radar Imagery

07:57:15



07:57:35

CREW do you *** today?

07:57:37

CREW huh?

07:57:38

CREW do you *** today?

07:57:40

CREW I have not been on duty for the past few days.

07:57:42

CREW ***.

07:57:44

CREW ***.

07:57:49

CREW at five a little bit after five ***.

07:57:56

[several unintelligible comments between crewmembers]



TIME and Source

Communication

Radar Imagery

07:58:00

[sound similar to one long and two short fog signals]



TIME and Source

Communication

Radar Imagery

07:58:52

CREW *there is no meter over there.*

07:58:54

CREW *right.*

07:58:54

CREW *there is one here.*

07:59:00



07:59:15



TIME and
Source

Communication

Radar Imagery

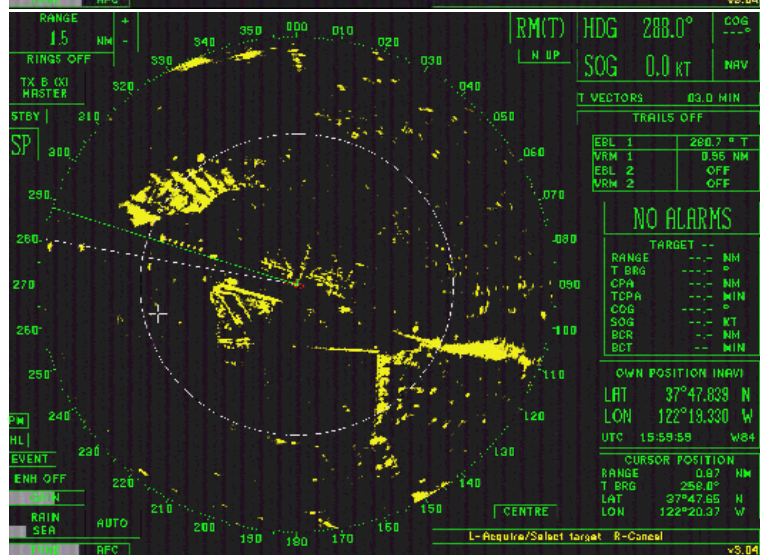
07:59:33
CREW ***.



07:59:45



08:00:00

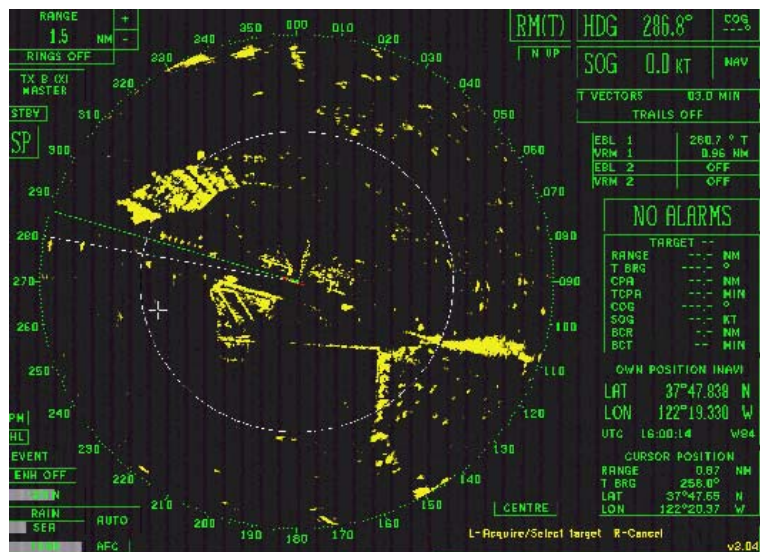


TIME and
Source

Communication

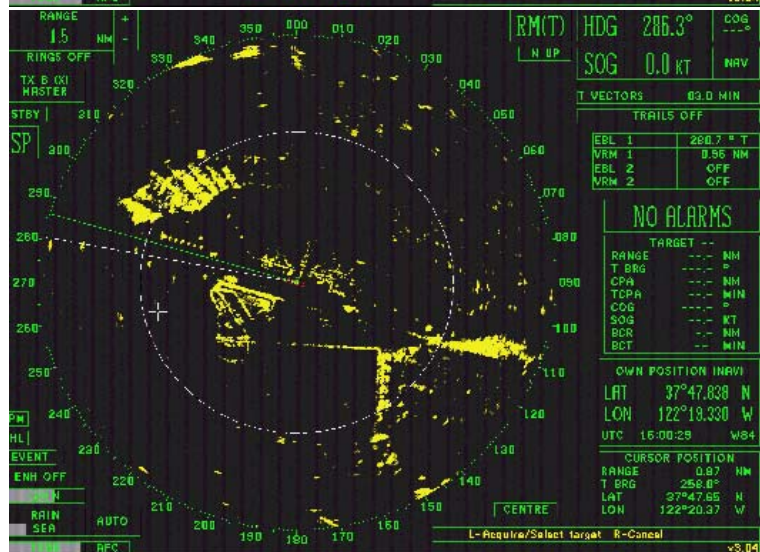
Radar Imagery

08:00:15



08:00:34

[ten seconds of unintelligible Chinese conversation]



08:00:45



TIME and Source

Communication

Radar Imagery

08:01:09

CREW **.

08:01:13

CREW *we'll still have to go under that bridge.*

08:01:15

CREW *yeah.*

08:01:16

CREW ***.

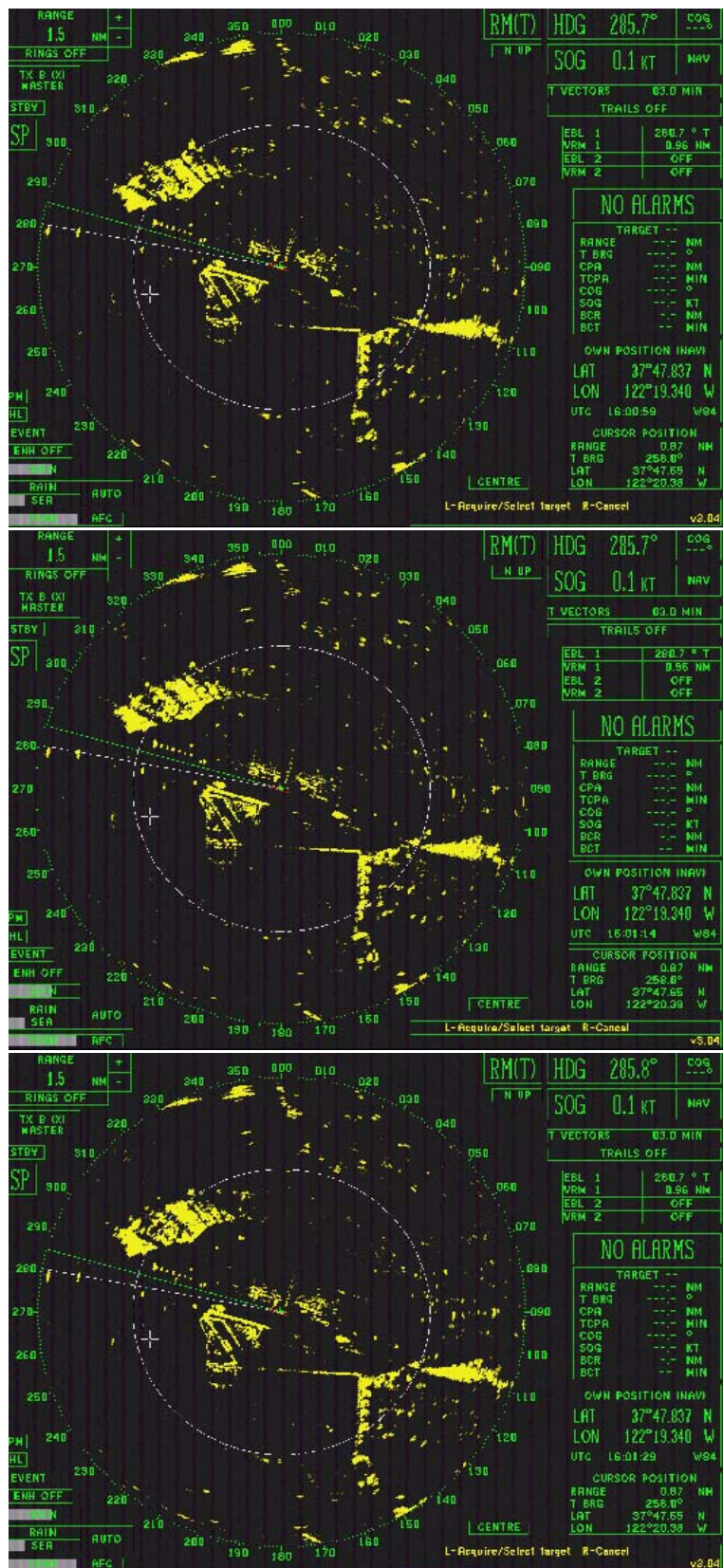
08:01:21

CREW ***.

08:01:24

CREW *Golden Gate big bridge. ***.*

08:01:30

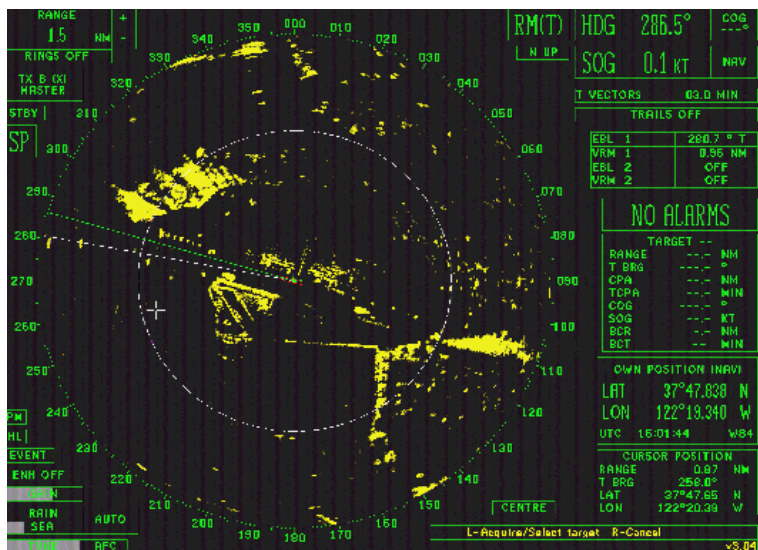


TIME and
Source

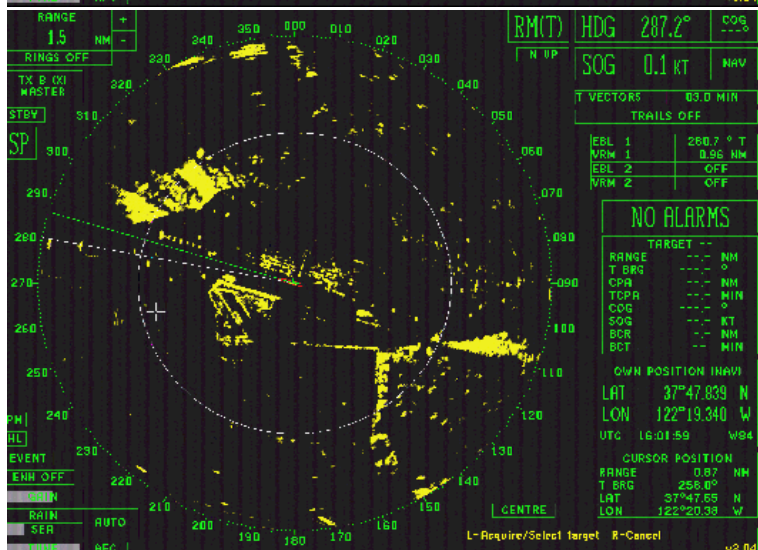
Communication

Radar Imagery

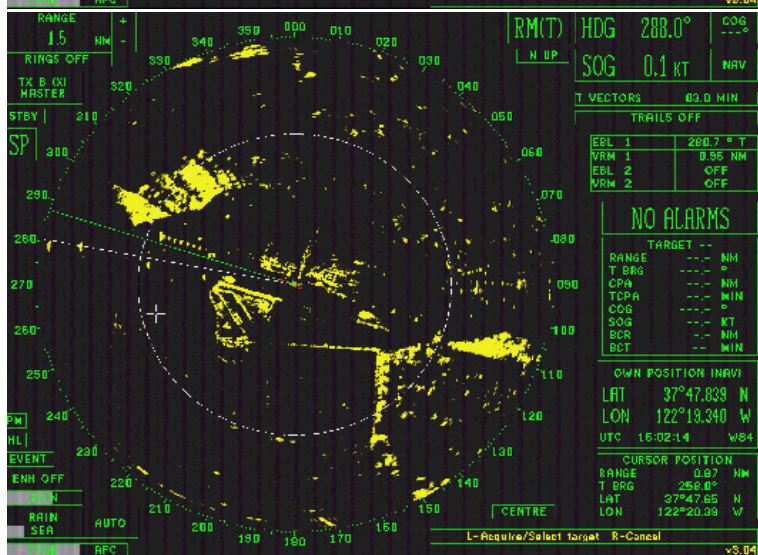
08:01:45



08:02:00



08:02:15

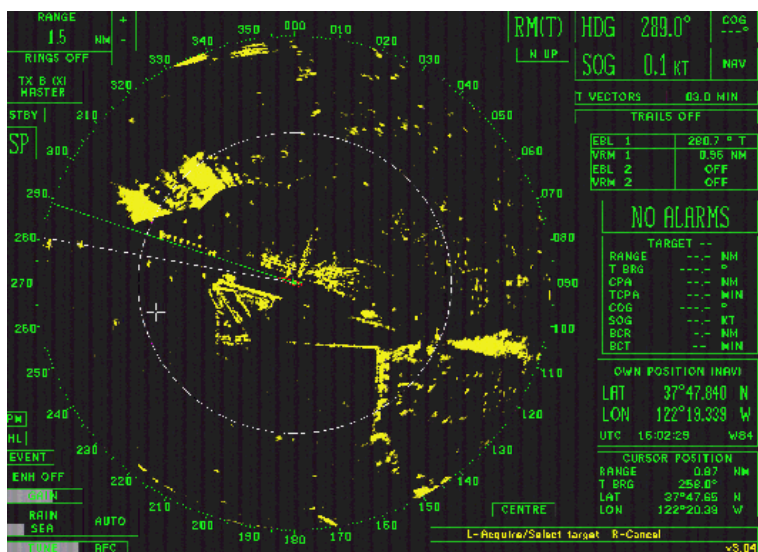


TIME and
Source

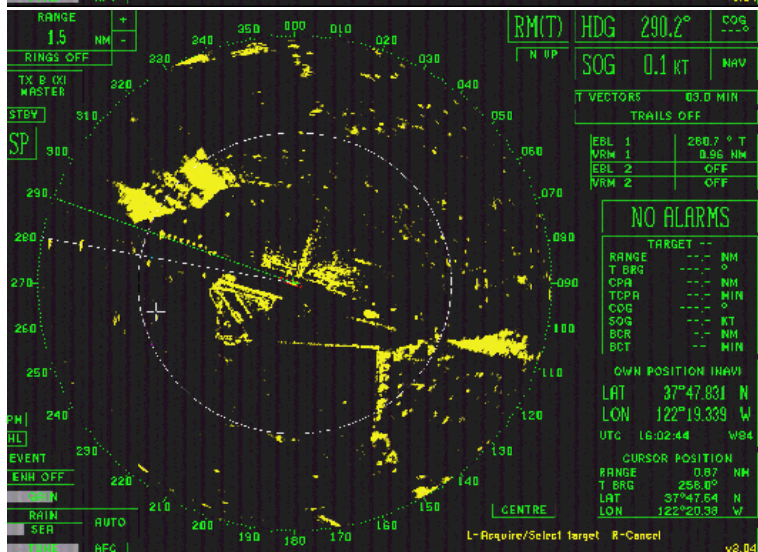
Communication

Radar Imagery

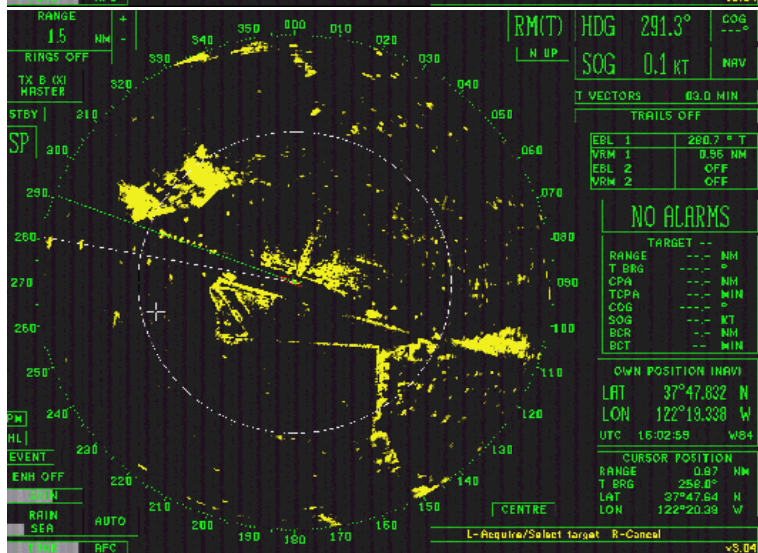
08:02:30



08:02:45



08:03:00



TIME and Source

Communication

Radar Imagery

08:03:15

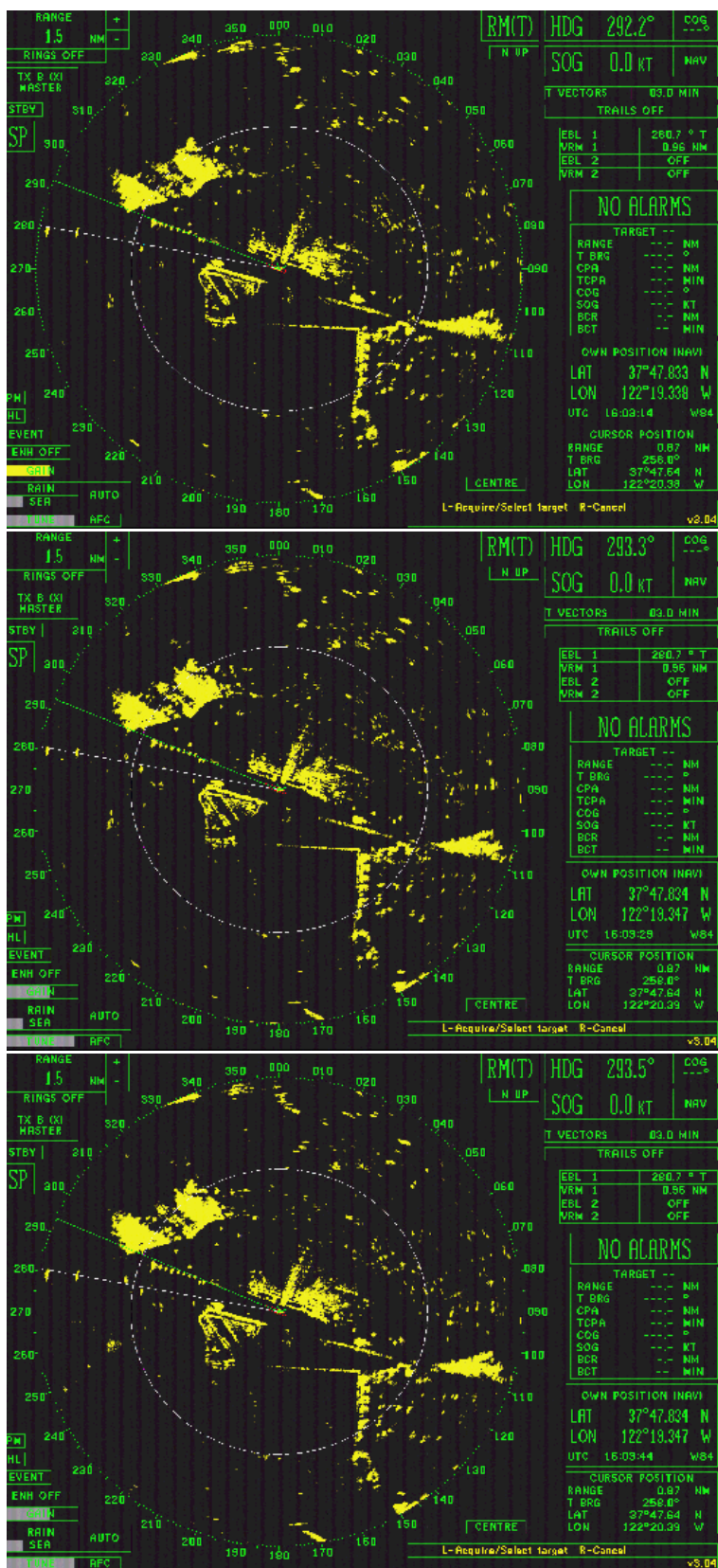
CHOFF-UHF second officer let go of the aft tug and move it to the center of the stern.

08:03:21

2ndOFF-UHF good good. let go of the aft tug and move it to the center of the stern.

08:03:30

08:03:45

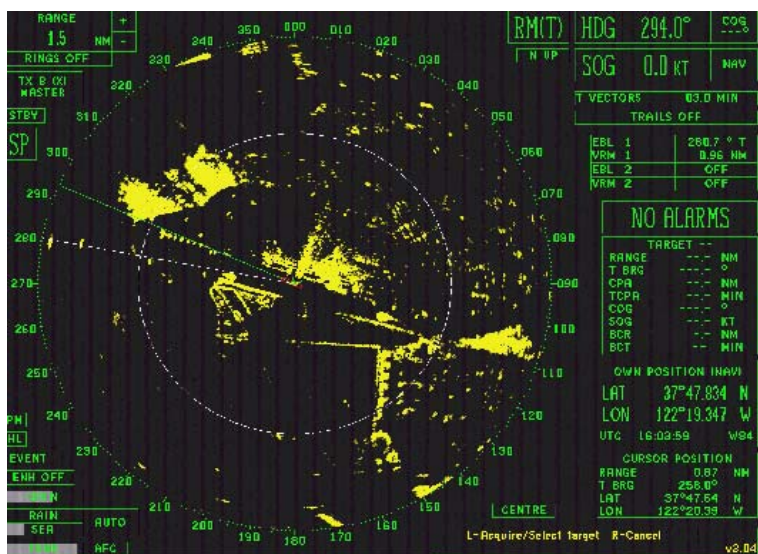


TIME and
Source

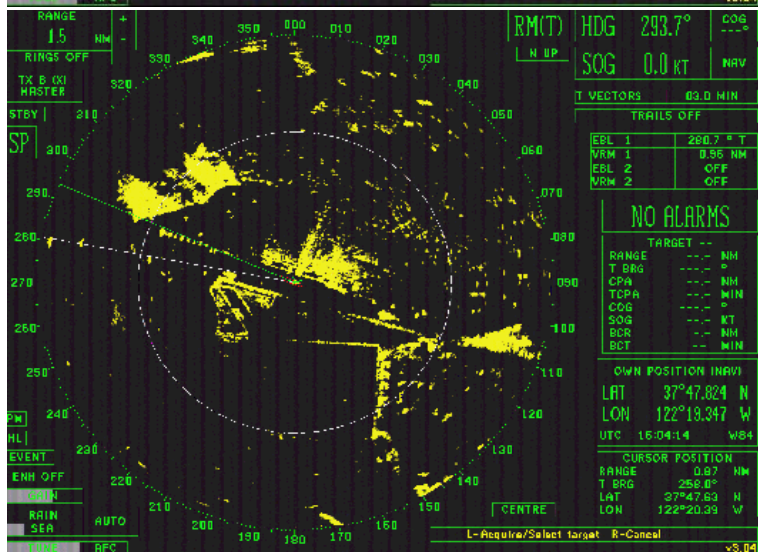
Communication

Radar Imagery

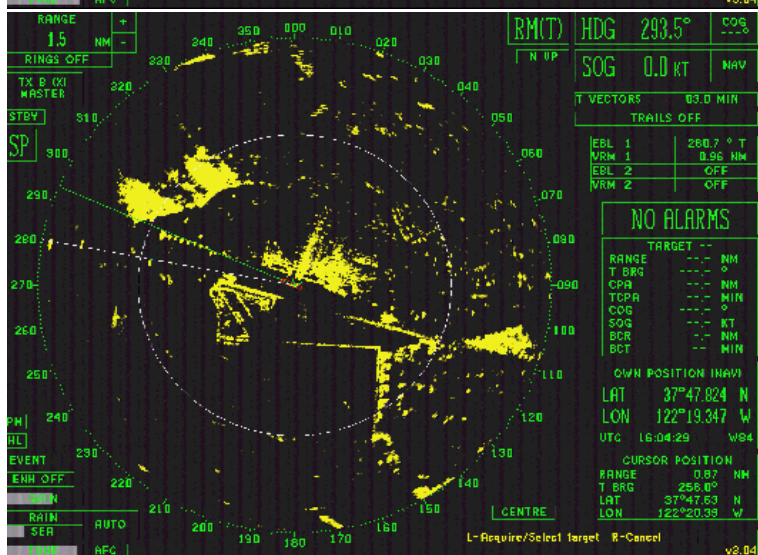
08:04:00



08:04:15



08:04:30



TIME and Source

Communication

Radar Imagery

08:04:53

CREW *for American ships under such conditions they would not be underway.*

08:04:55

CREW **.

08:04:59

CREW **.

08:05:06

CREW *in this stretch there is often fog?*

08:05:09

CREW *over here in this stretch?*

08:05:10

CREW *uh.*

08:05:11

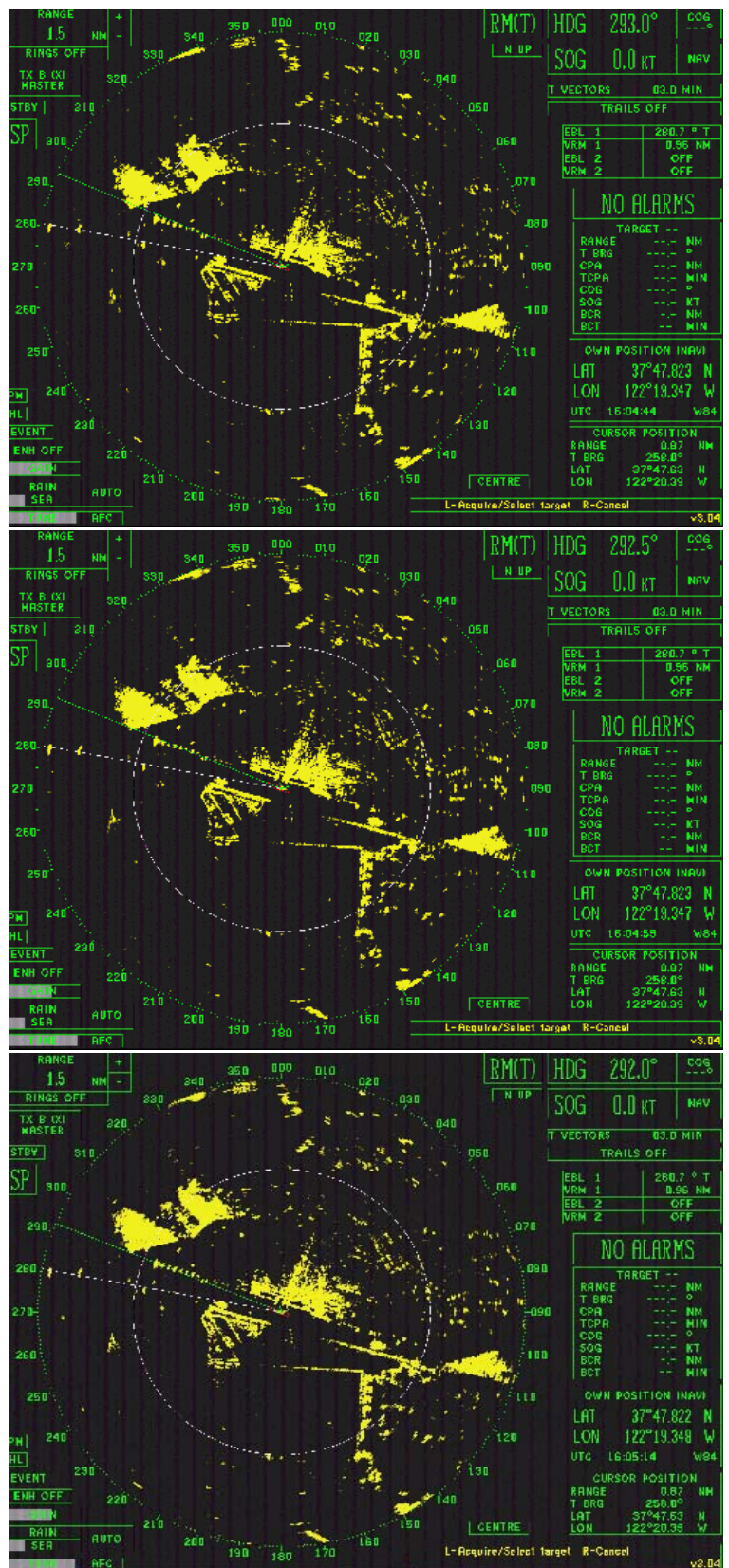
CREW **.

08:05:23

CREW ** *one hundred meters.*

08:05:27

CREW *not quite a hundred meters I feel.*



TIME and Source

Communication

Radar Imagery

08:05:30

CREW huh?

08:05:30

CREW not quite a hundred meters.

08:05:33

CREW containers are conspicuous. if you don't put things there put something white *.

08:05:53

CAPT reverse port side.

08:05:59

PILOT is the bow thruster in here?

08:06:03

CREW **.

08:06:06

PILOT bow thruster full to port.

08:06:07

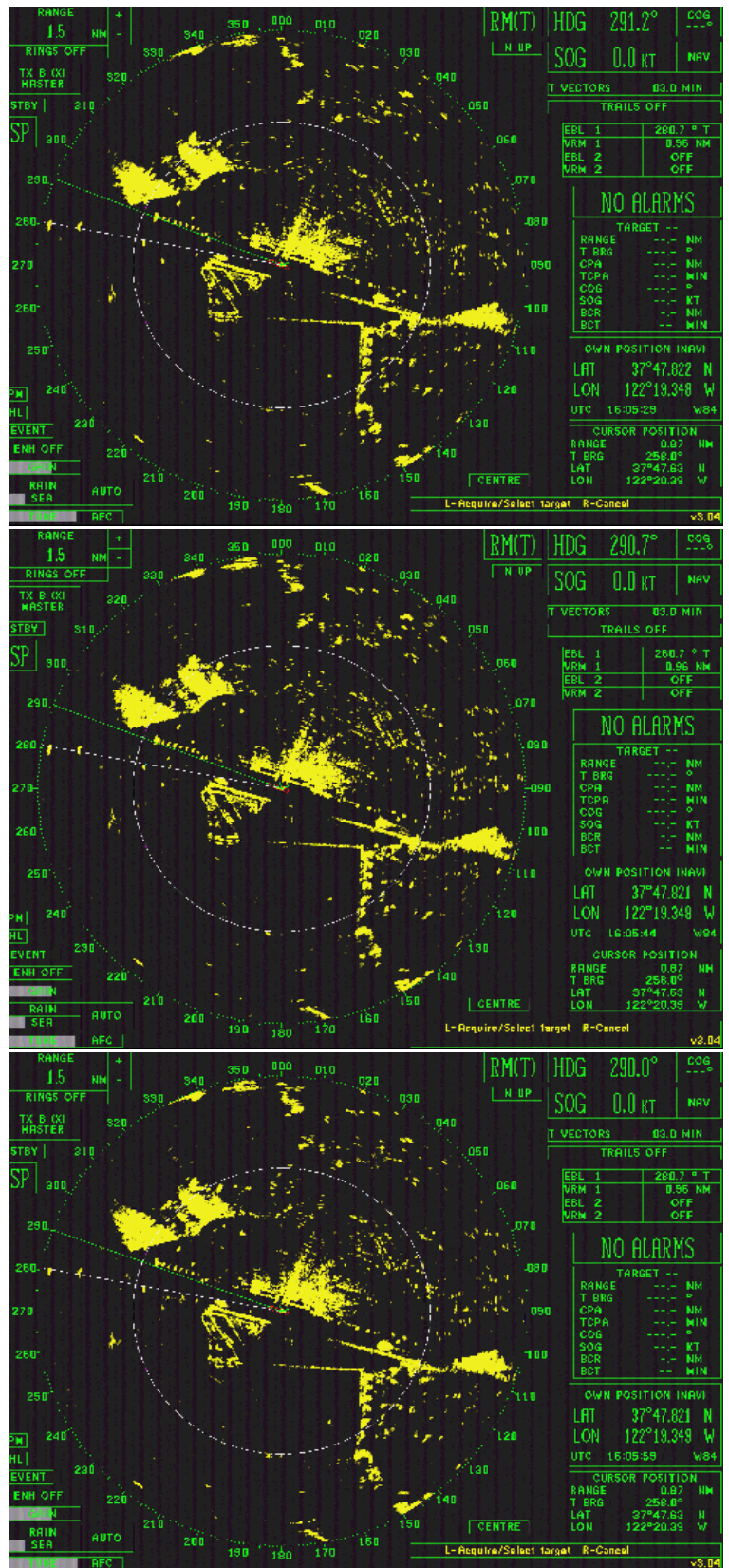
CREW **.

08:06:08

CREW full to port?

08:06:09

PILOT full to port.

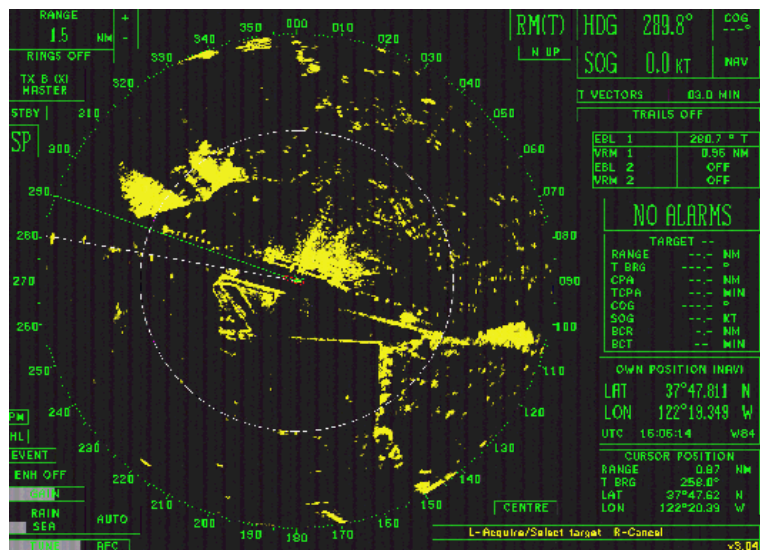


TIME and Source

Communication

Radar Imagery

08:06:20
CREW **.



08:06:33
PILOT- traffic romeo. we're underway.
VHF

08:06:34
2ndOFF bridge * tug is tied.

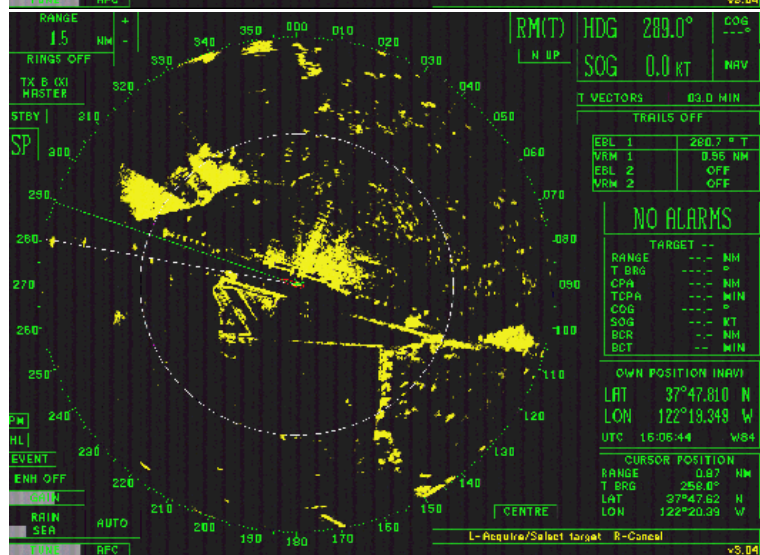
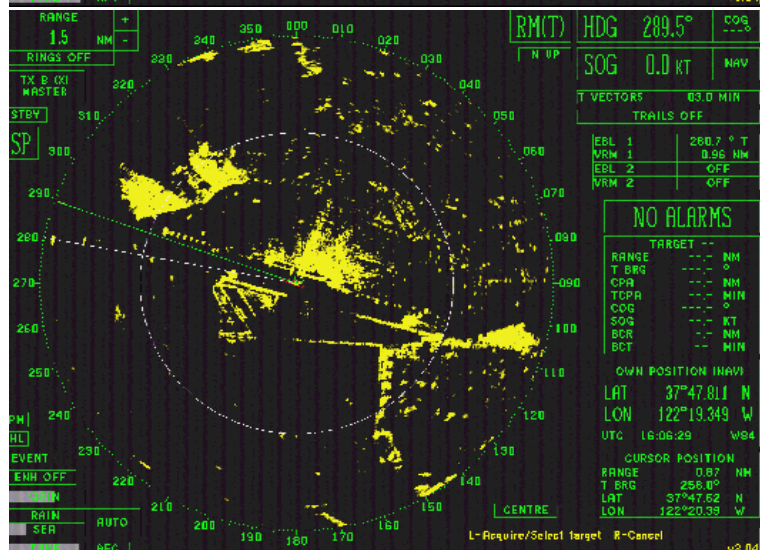
08:06:36
CAPT good. thank you.

08:06:37
PILOT we're all set you said?

08:06:39
REV we're all fast now captain.

08:06:40
PILOT- okay.
VHF

08:06:58
REV romeo Rev uh just trying to make us **.



TIME and Source

Communication

Radar Imagery

08:07:05

PILOT-VHF yeah hang on a minute *.

08:07:10

PILOT-VHF yeah there was somebody else talking. you're going to— you're going to anchorage nine?

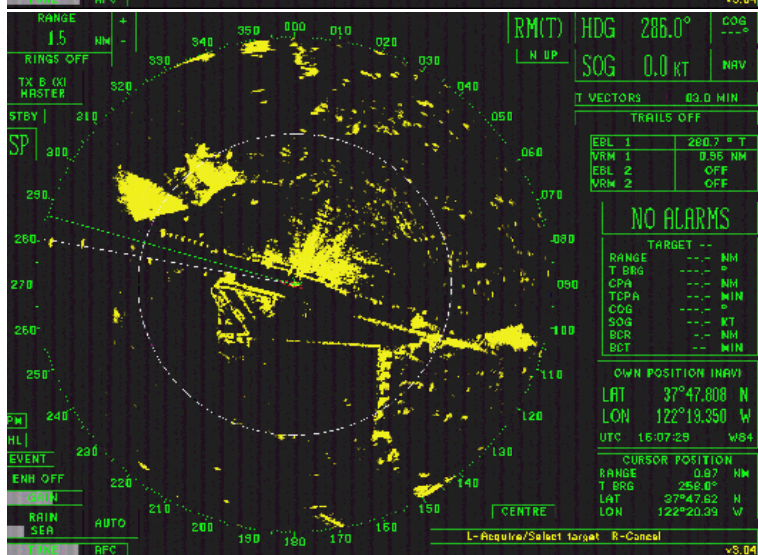
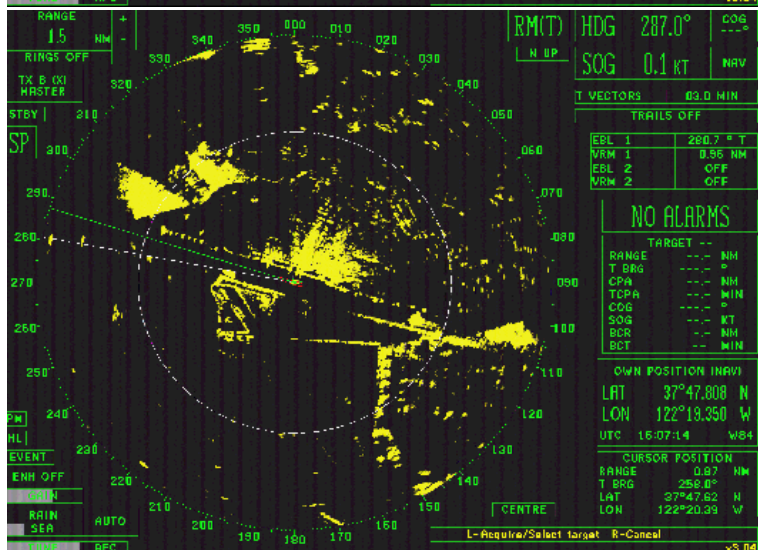
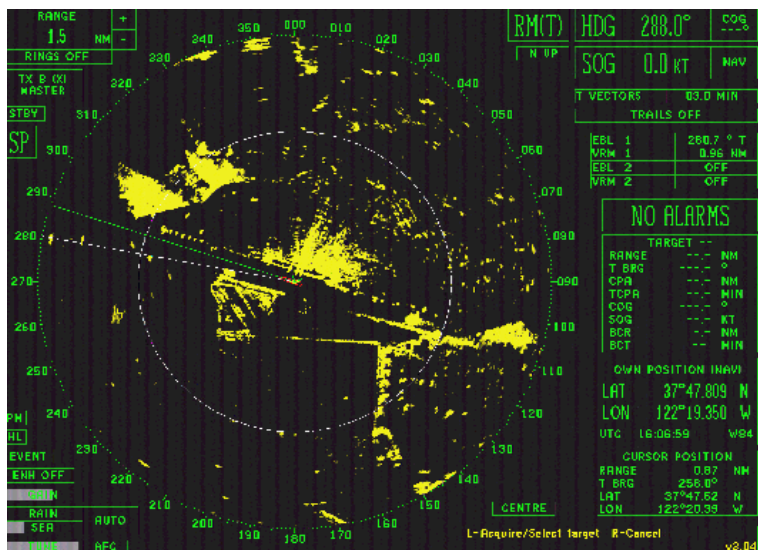
08:07:15

08:07:34

PILOT-VHF yeah what is that second boat?

08:07:39

VTS second boat is a recreational boat Elan. actually disregard he'll be across before you get there.



TIME and Source

Communication

Radar Imagery

08:07:49
PILOT-VHF okay thanks.

08:07:52
PILOT dead slow ahead.

08:07:54
CREW dead slow ahead.

08:07:55
PILOT you can stop the thruster.

08:07:56
[sound similar to engine order telegraph]

08:07:58
CAPT stop thruster.

08:07:58
PILOT stop thruster.

08:08:01
PILOT two eight five.

08:08:03
CREW two eight five.

08:08:07
CREW engines are dead slow ahead sir.

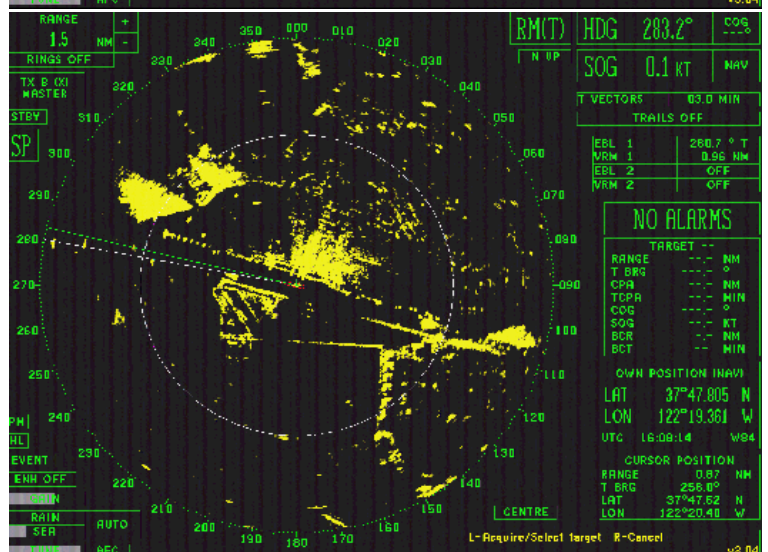
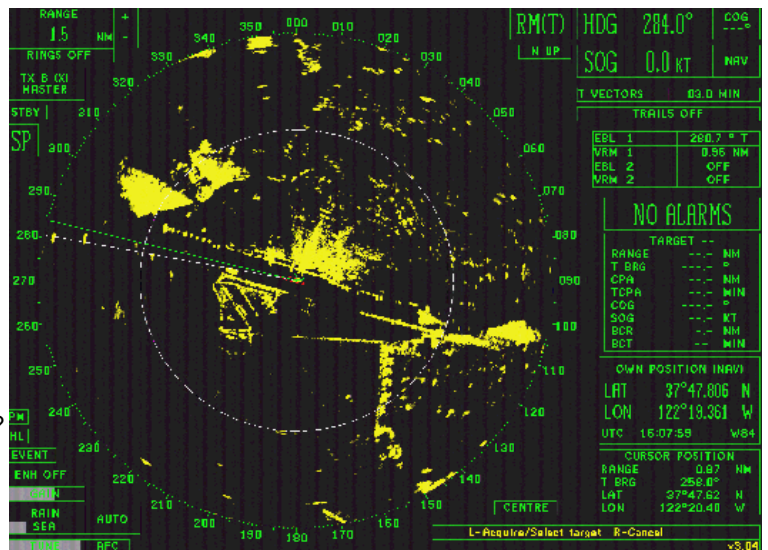
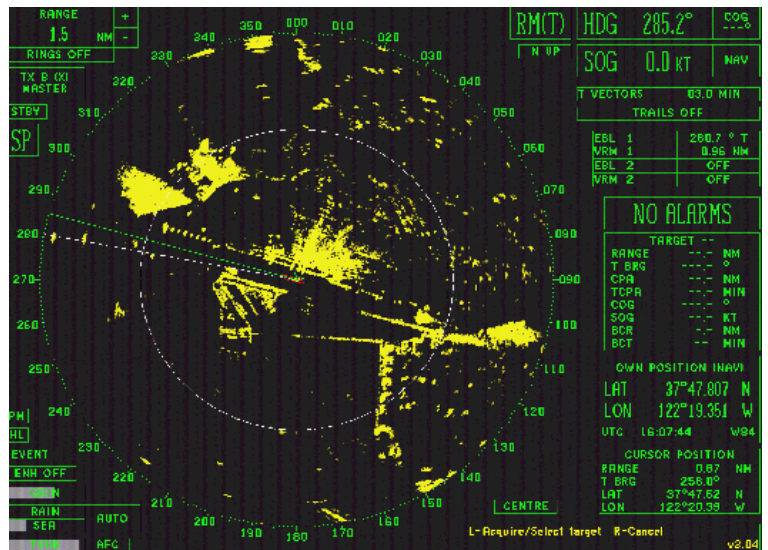
08:08:09
PILOT okay thank you.

08:08:10
PILOT-VHF yeah I'm just gonna keep you here until I get thru the bar channel. what time's your next job?

08:08:17
REV yeah eight thirty sailing * out of thirty seven.

08:08:22
PILOT-VHF ah you'll be heading in the right direction.

08:08:29
PILOT ah zero eight seven.



TIME and Source

Communication

Radar Imagery

08:08:32

CREW two eight seven two eight seven.

08:08:35

PILOT two eight seven.

08:08:36

PILOT-VHF unit calling romeo romeo.

08:08:38

UNIT 10 yeah John it's @ here I'm gonna take alpha bravo. **.

08:08:42

PILOT-VHF okay fine thanks.

08:08:44

PILOT slow ahead.

08:08:46

CREW slow ahead.

08:08:47

[sound similar to engine order telegraph]

08:09:02

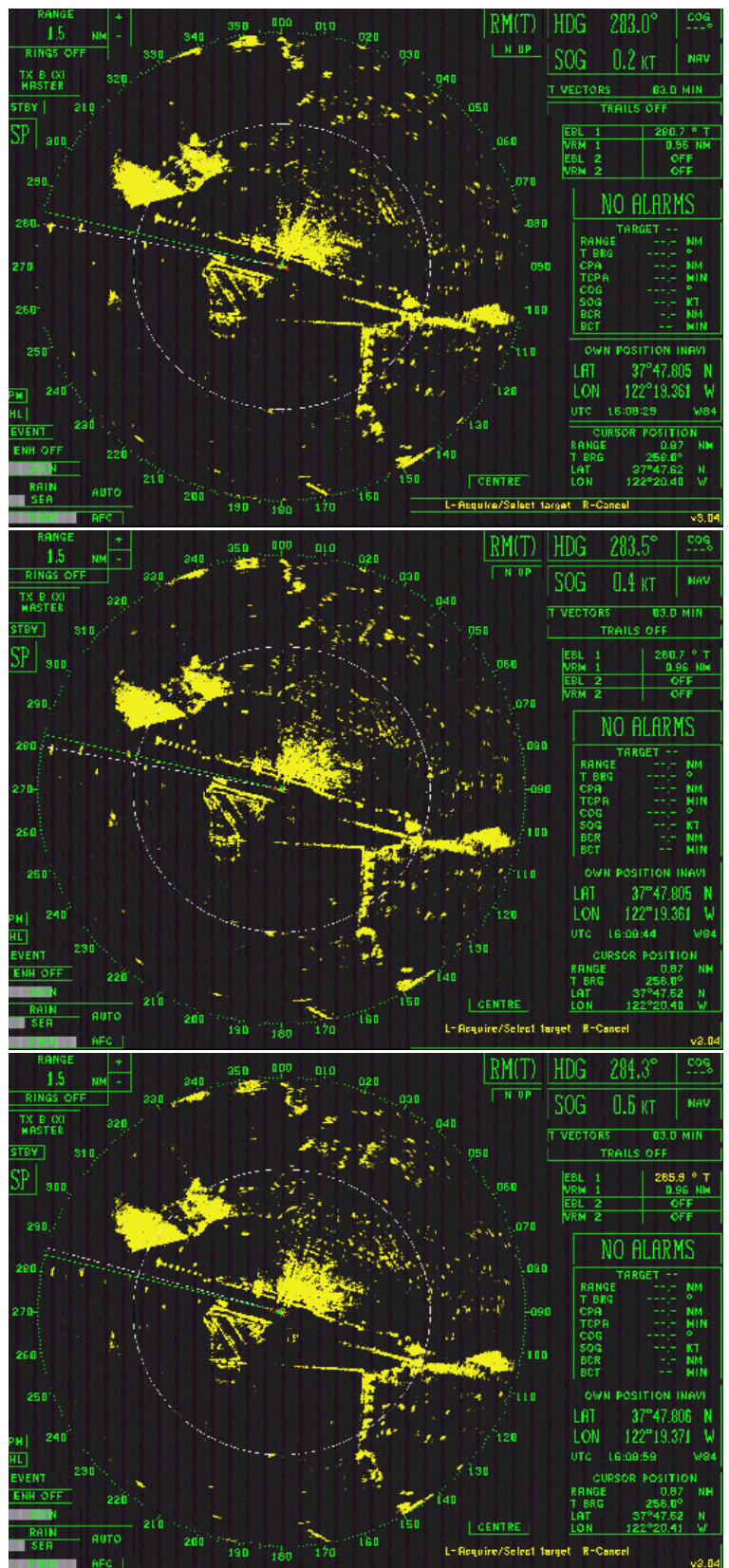
PILOT two eight eight.

08:09:04

CREW two eight eight.

08:09:05

PILOT and you can sound the fog signal.



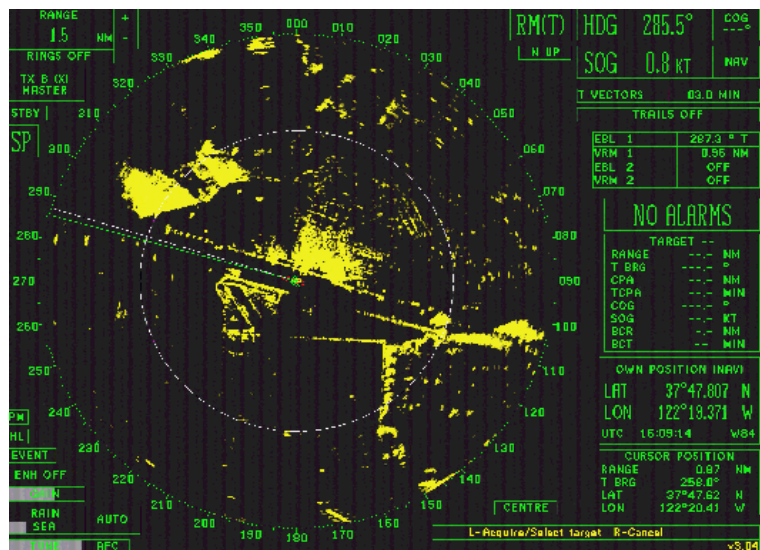
TIME and Source

Communication

Radar Imagery

08:09:27

CAPT two prolong signal?



08:09:30

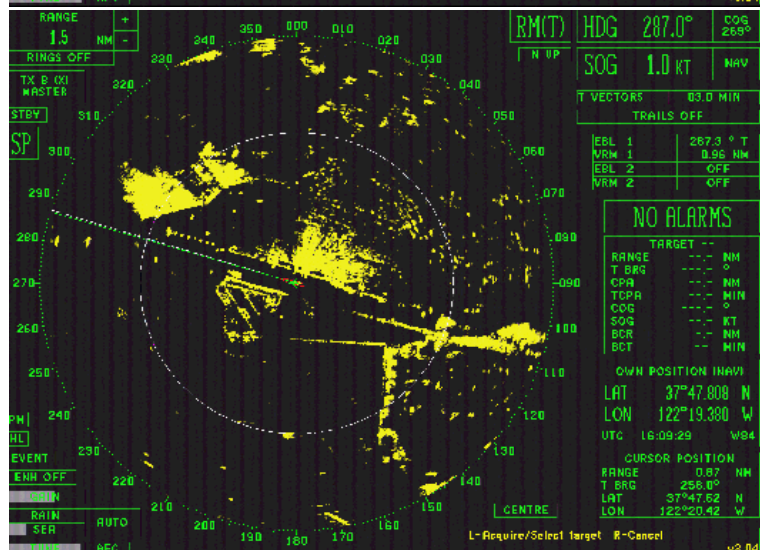
PILOT no just one.

08:09:34

[sound similar to fog signal]

08:09:44

CREW course two eight eight sir.

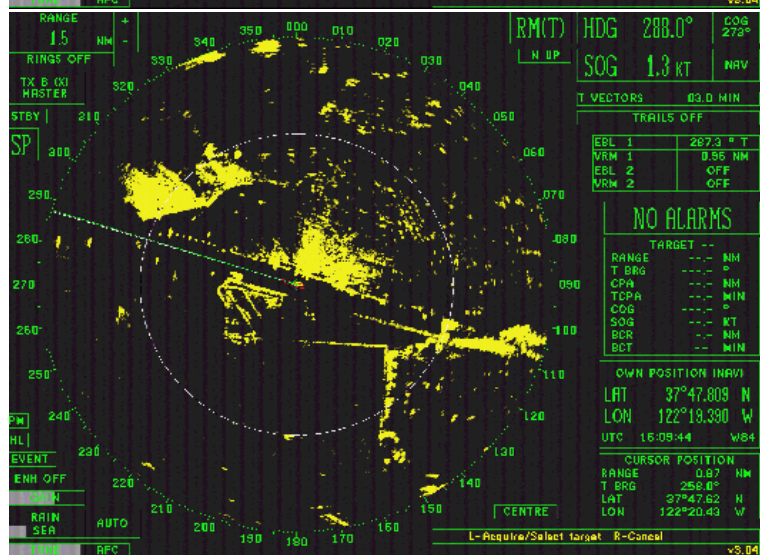


08:09:46

PILOT steady.

08:09:47

CREW steady.

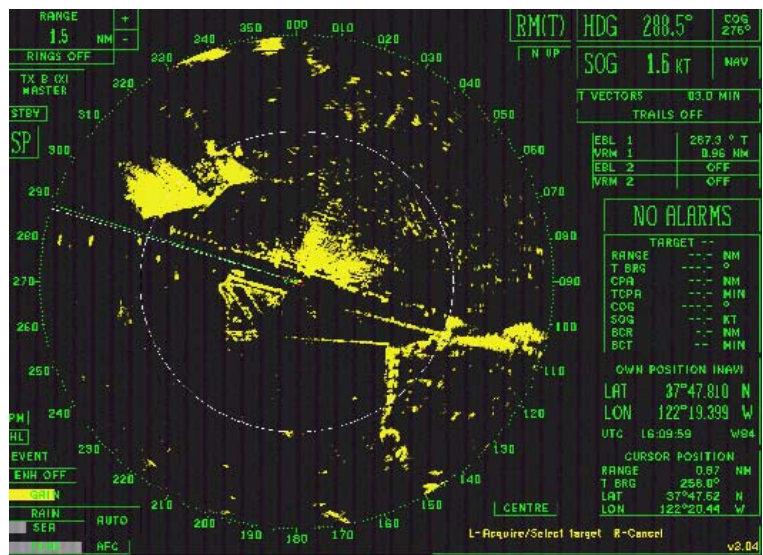


TIME and
Source

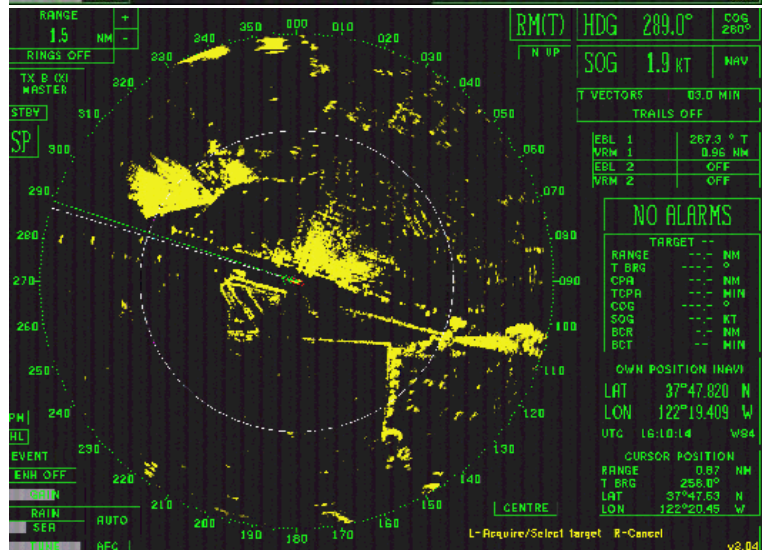
Communication

Radar Imagery

08:10:00

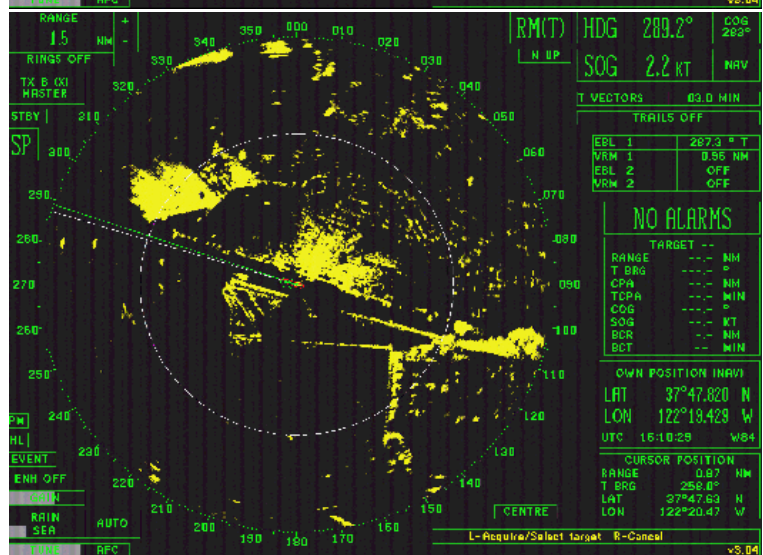


08:10:15



08:10:34

[sound similar to fog signal]



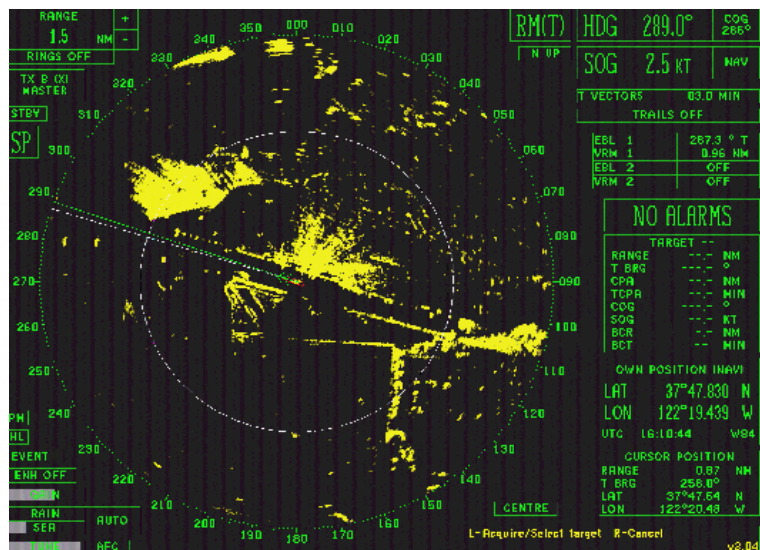
TIME and Source

Communication

Radar Imagery

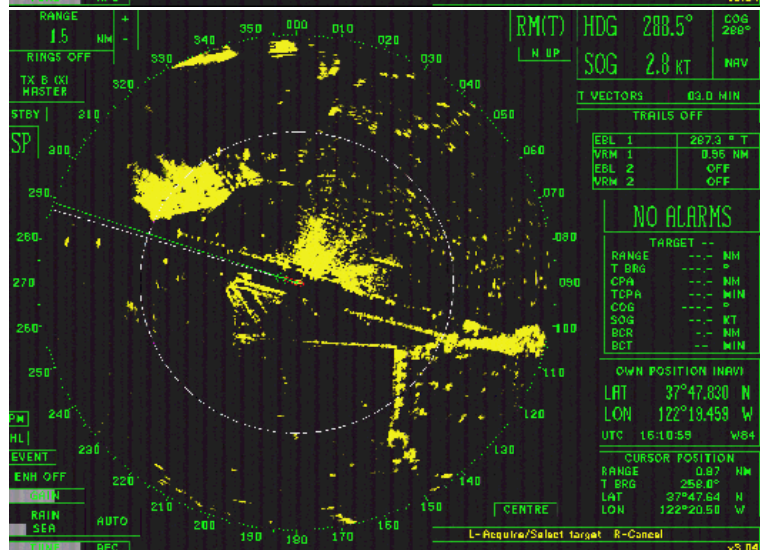
08:10:54

VTS roger and ah what's the visibility like in the estuary over?



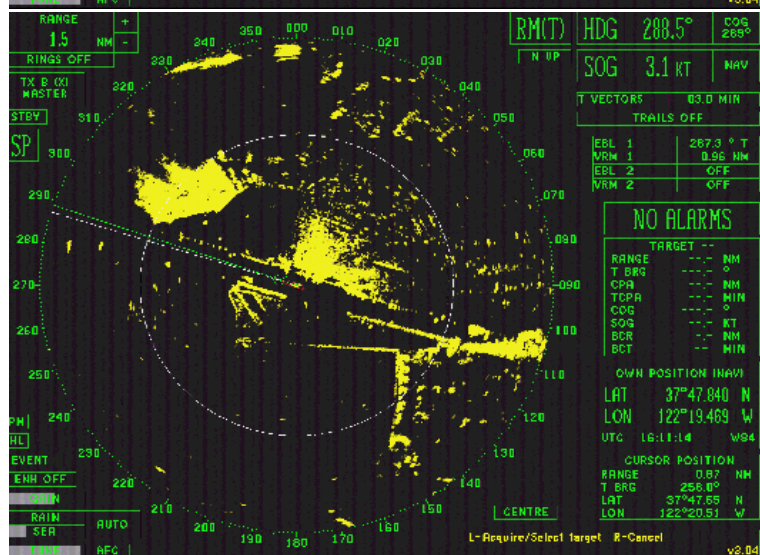
08:11:02

SOLNA and ah quarter mile or less.



08:11:06

VTS quarter mile less than you traffic out.



08:11:15

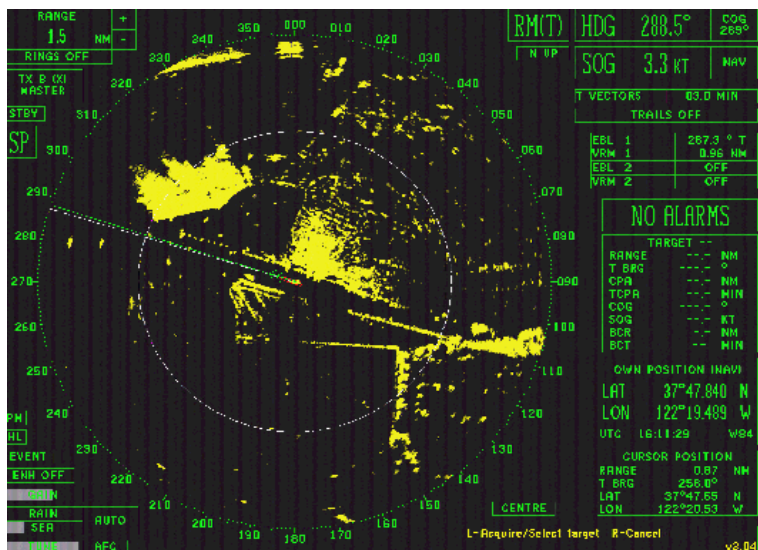
TIME and Source

Communication

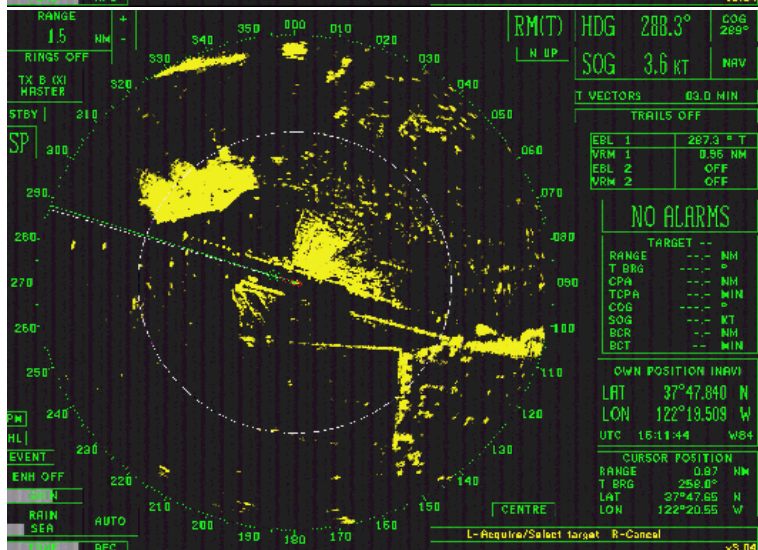
Radar Imagery

08:11:34

[sound similar to fog signal]



08:11:45

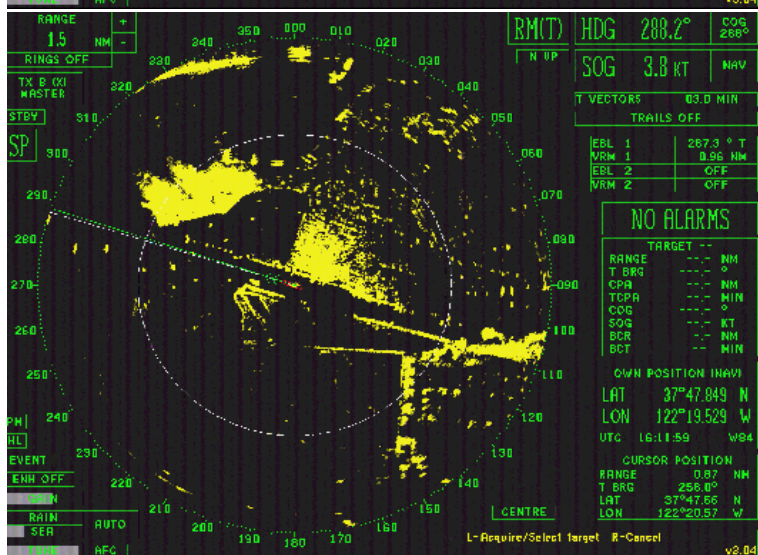


08:12:00

PILOT two eight nine.

08:12:01

CREW two eight nine.

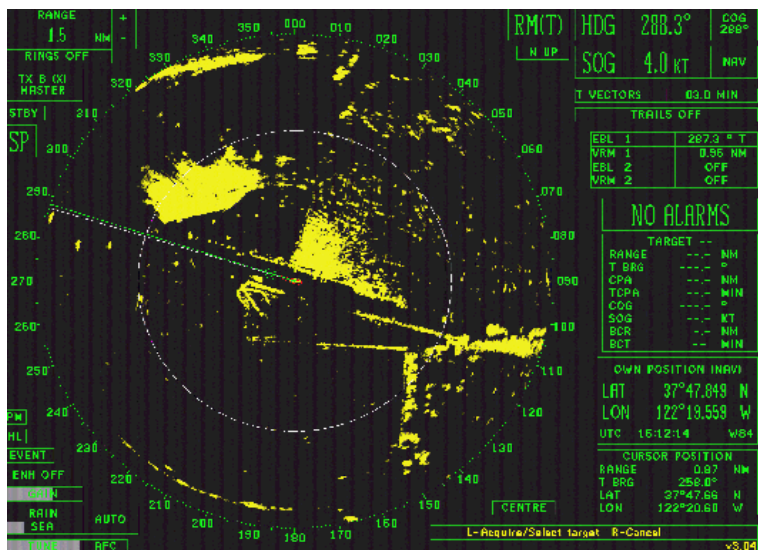


TIME and Source

Communication

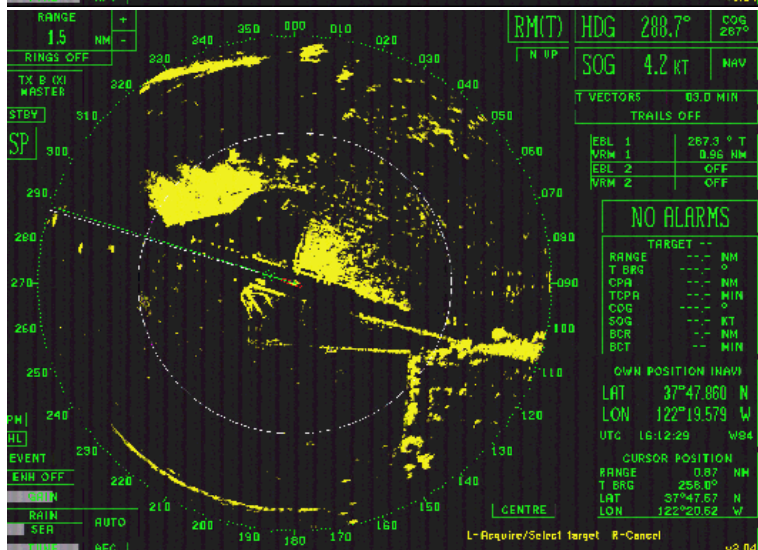
Radar Imagery

08:12:15



08:12:34

[sound similar to fog signal]



08:12:50

PILOT and we have somebody on the bow?

08:12:53

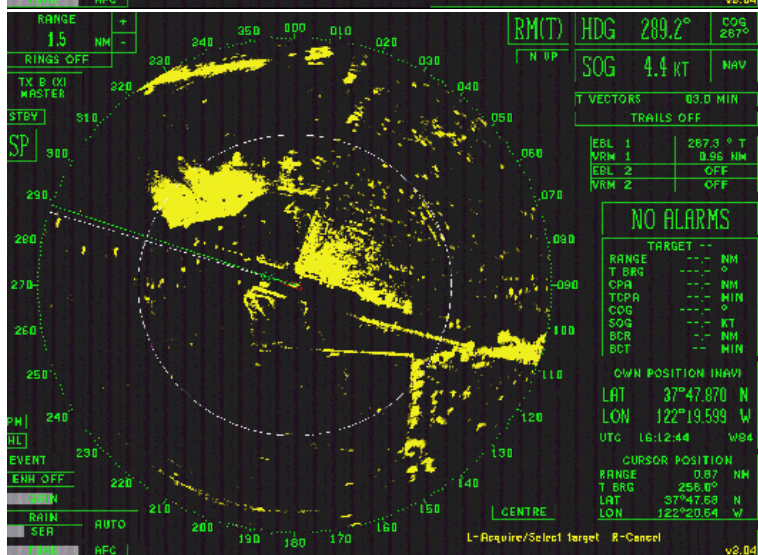
CAPT yes.

08:12:53

PILOT standing by.

08:12:58

PILOT steady.



TIME and Source

Communication

Radar Imagery

08:13:00

CREW steady.

08:13:06

CAPT-UHF chief officer ****?

08:13:09

CREW-UHF put the bow through to the station.

08:13:11

CREW-UHF I'm in the stern and they are ***.

08:13:14

PILOT the dredge you can see the light from the dredge.

08:13:17

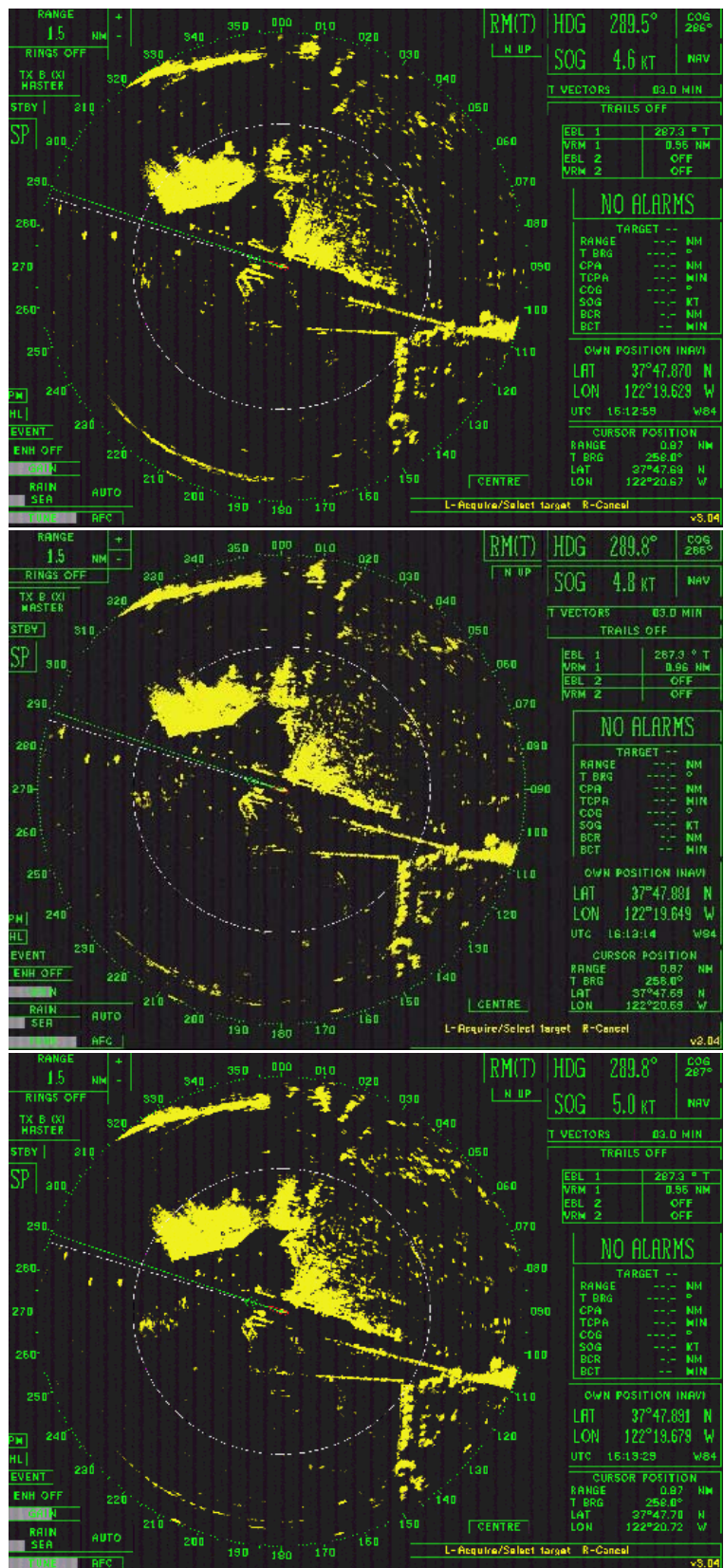
CAPT yeah.

08:13:29

CREW be prepared. there is a small boat.

08:13:34

[sound similar to fog signal]

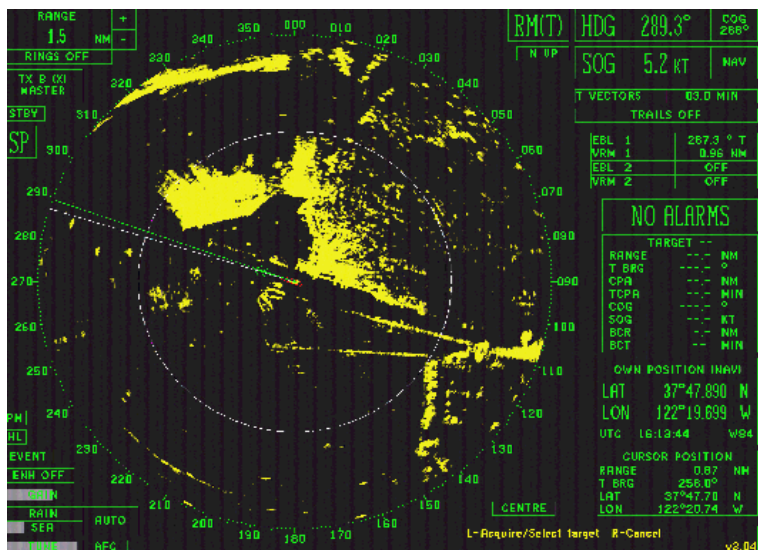


TIME and Source

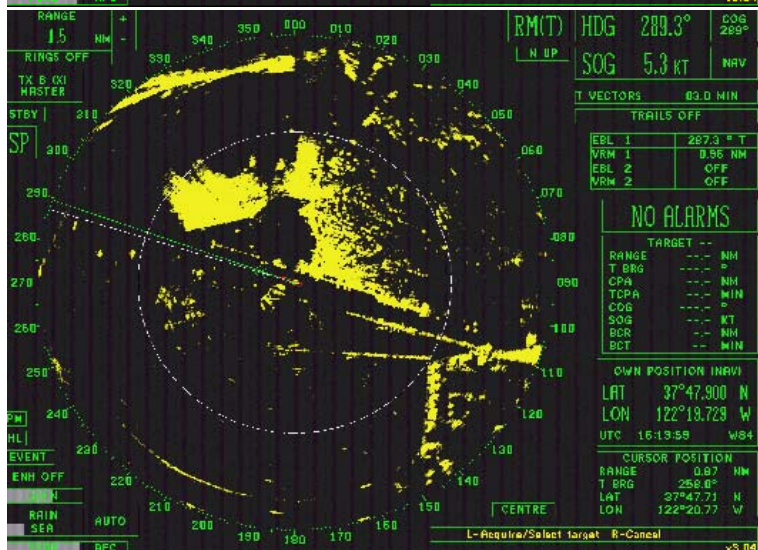
Communication

Radar Imagery

08:13:45



08:14:00

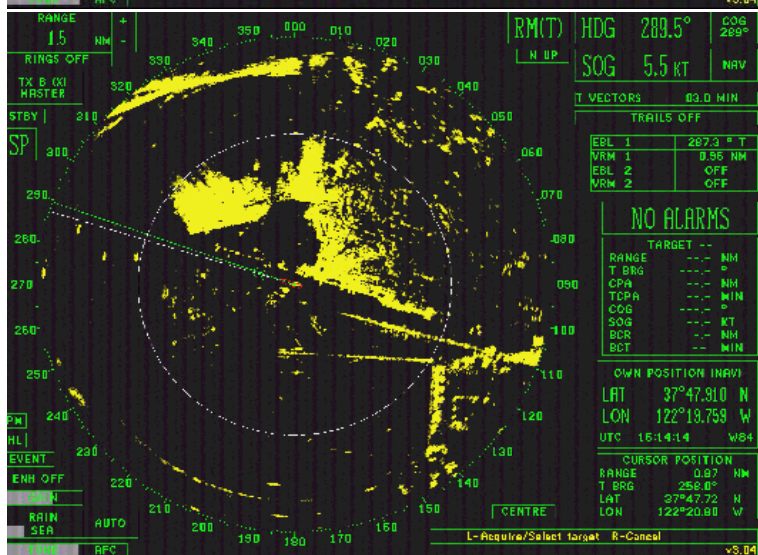


08:14:22

PILOT two eight eight.

08:14:23

CREW two eight eight.



TIME and Source

Communication

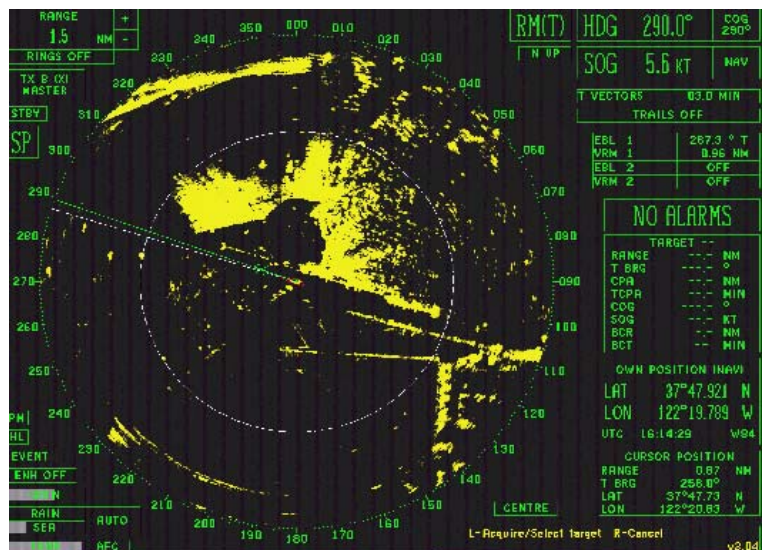
Radar Imagery

08:14:34

[sound similar to fog signal]

08:14:42

CREW ***



08:14:52

CREW the fog is even thicker now.

08:14:53

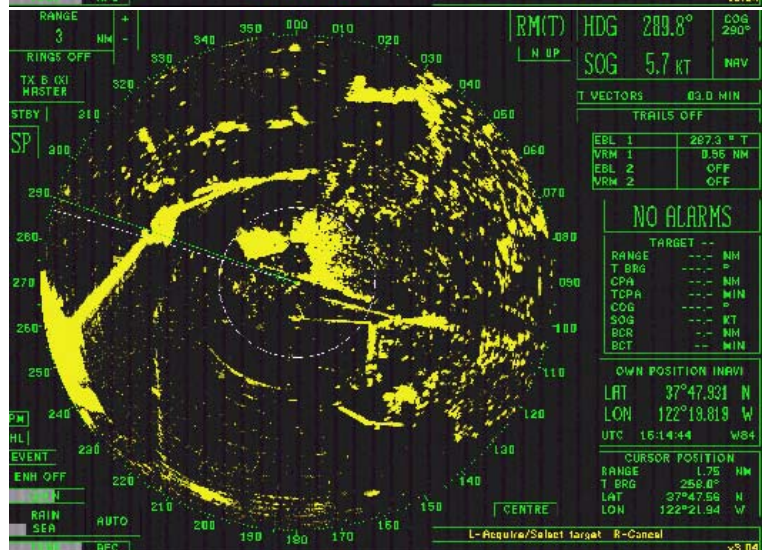
CREW hmm.

08:14:55

CREW just now at the bow.

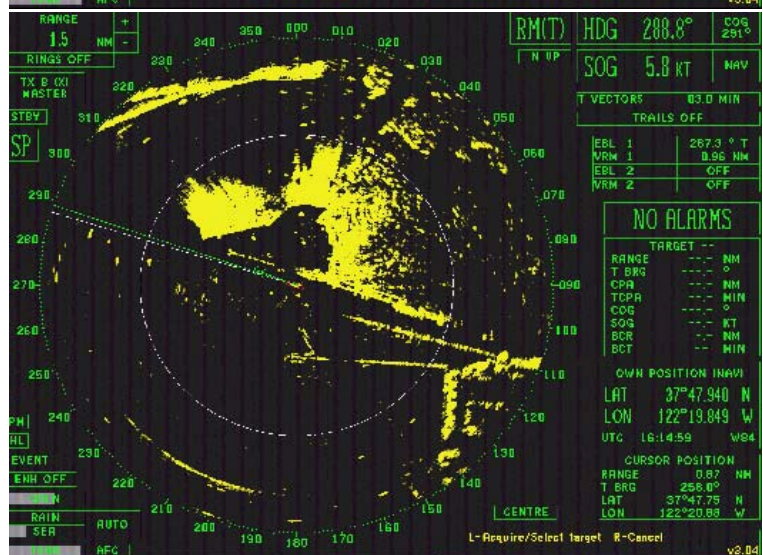
08:14:57

CREW eh at the bow we could still see. but now...



08:15:14

CREW course two eight eight.



TIME and Source

Communication

Radar Imagery

08:15:16
PILOT steady.

08:15:17
CREW steady.

08:15:34
 [sound similar to fog signal]

08:15:45



08:16:00

08:16:15

08:16:34
[sound similar to fog signal]

The figure consists of three sequential radar displays, each showing a target ship's movement. The displays are labeled 'SP' and 'RM(T)'. Each display includes a range scale (0-360 NM) and a heading scale (0-360 degrees). The target ship is visible as a bright yellow/white object moving from the top left towards the center. The data fields on the right of each display show:

- HDG:** 287.7°, 287.5°, 288.2°
- SOG:** 6.2 KT, 6.3 KT, 6.4 KT
- T VECTORS:** 03.0 MIN
- TRAILS OFF:** EBL 1, VRM 1, EBL 2, VRM 2
- NO ALARMS:** TARGET --, RANGE, T BRG, CPA, TCPA, COG, SOG, BCR, BCT
- OWN POSITION (INAVI):** LAT 37°47.968 N, LON 122°19.970 W
- CURSOR POSITION:** RANGE 0.87 NM, T BRG 258.8°, LAT 37°47.79 N, LON 122°21.01 W

The displays are labeled 'SP' and 'RM(T)'. The data fields show HDG, SOG, T VECTORS, TRAILS OFF, and NO ALARMS. The own position (INAVI) is also displayed.

TIME and Source

Communication

Radar Imagery

08:16:51
PILOT two eight five.

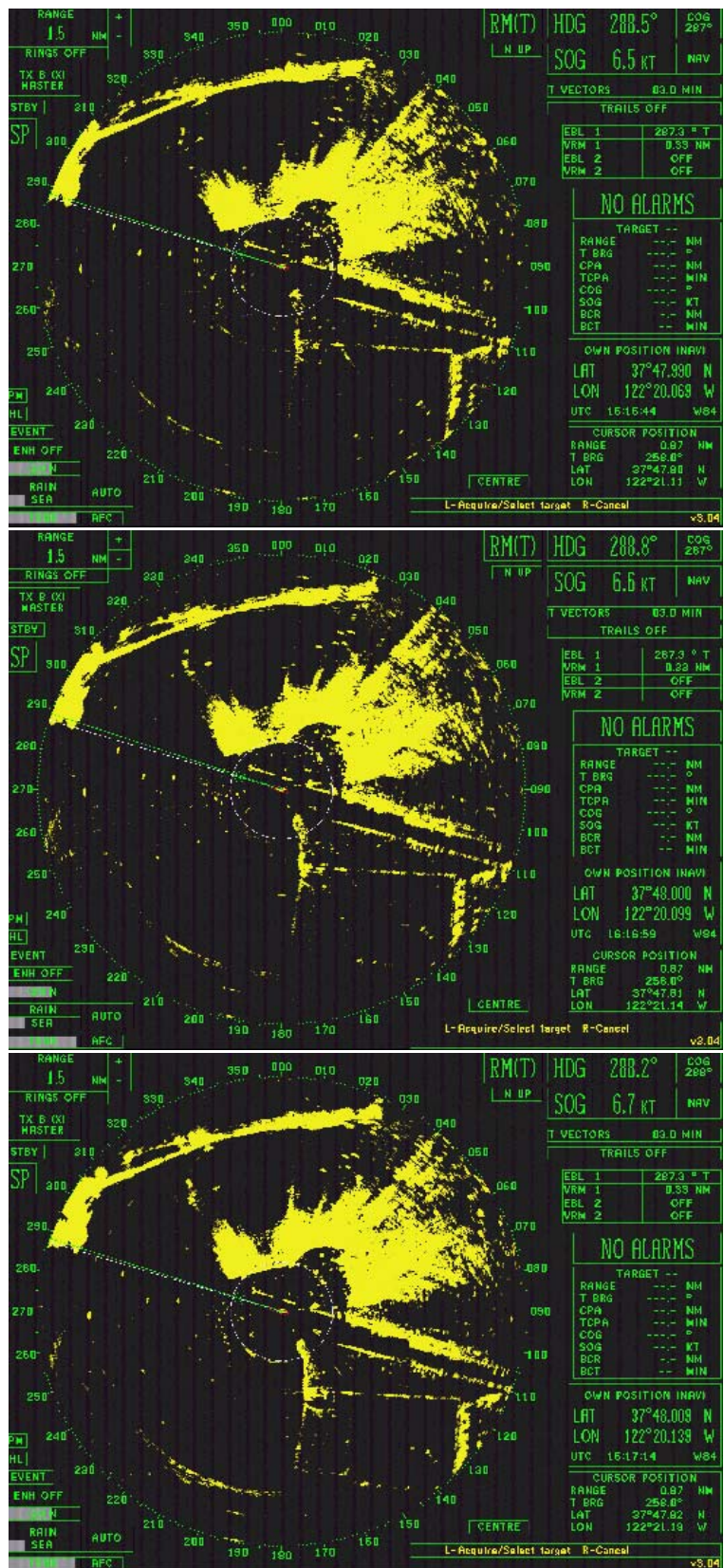
08:16:52
CREW two eight five.

08:17:07
CREW would you like something to eat?

08:17:10
PILOT um no do you have just some rice? some steamed rice just plain rice just a little oh small bowl.

08:17:12
CREW yeah yeah yeah.

08:17:15



TIME and Source

Communication

Radar Imagery

08:17:34

[sound similar to fog signal]

08:17:40

CREW *the pilot ***?*

08:17:51

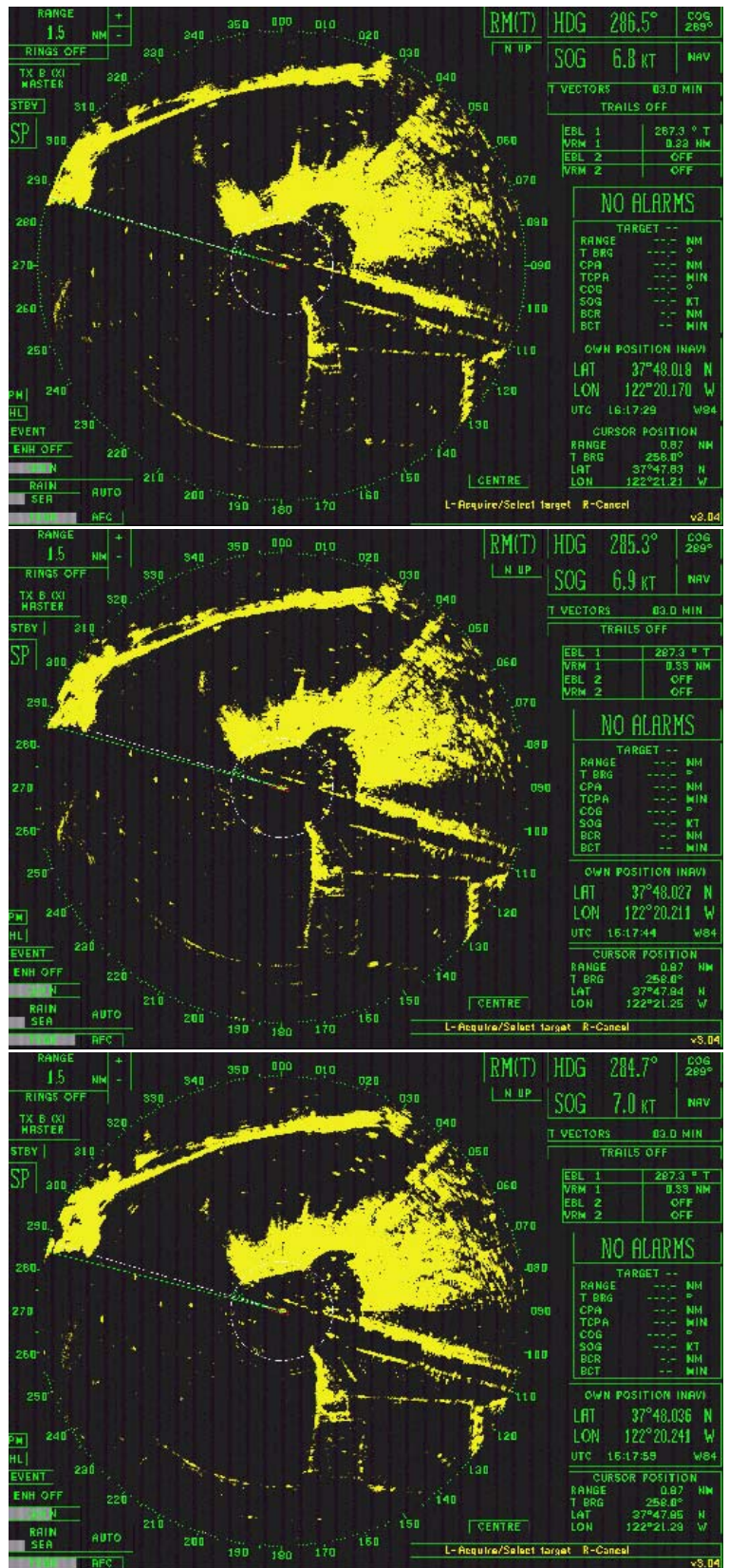
PILOT two eight three.

08:17:52

CREW two eight three.

08:18:09

CREW *I'm uptight.*



TIME and Source

Communication

Radar Imagery

08:18:24

CREW course two eight three sir.

08:18:26

PILOT steady.

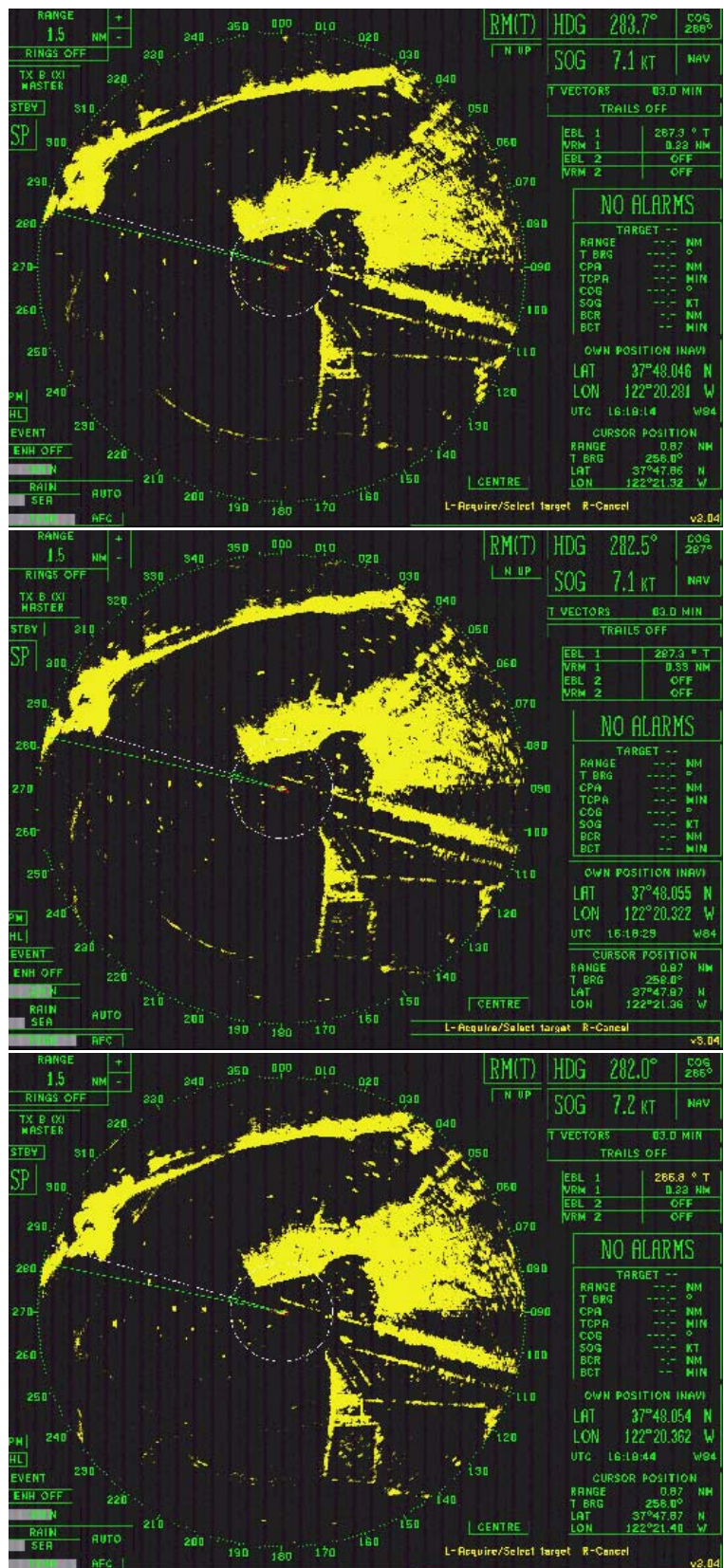
08:18:27

CREW steady.

08:18:33

[sound similar to fog signal]

08:18:45

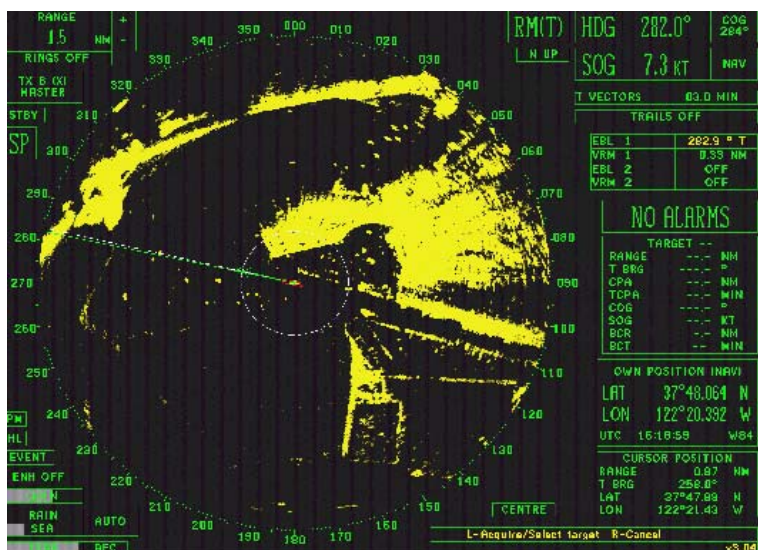


TIME and Source

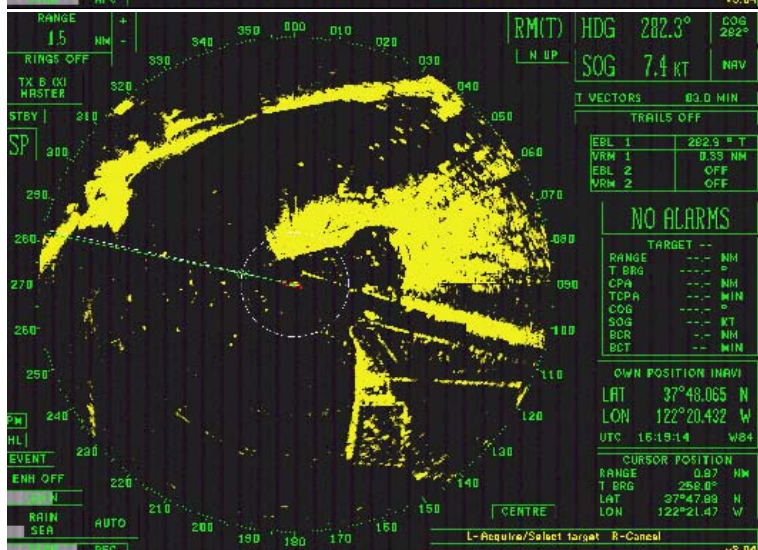
Communication

Radar Imagery

08:19:00



08:19:15



08:19:34

[sound similar to fog signal]



TIME and Source

Communication

Radar Imagery

08:19:45

PILOT yeah that's **.



08:20:00

PILOT half ahead.

08:20:02

CREW half ahead half ahead.

08:20:05

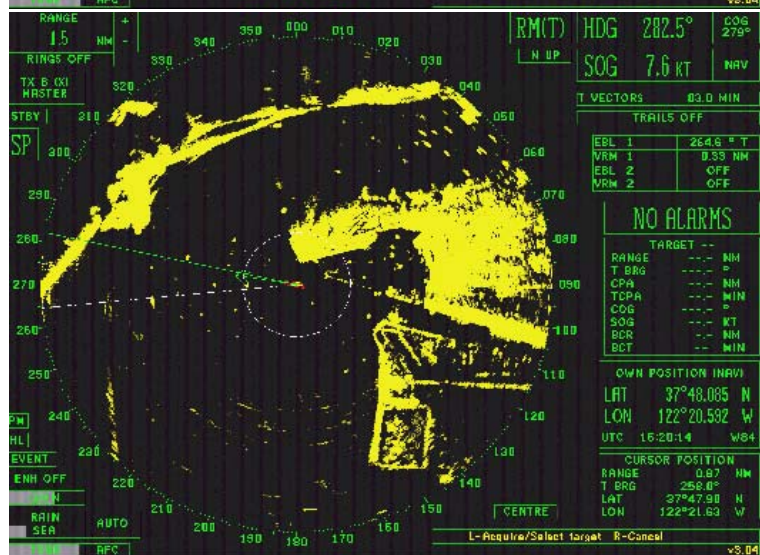
[sound similar to engine order telegraph]

08:20:09

CREW *** the bridge?



08:20:15



TIME and Source

Communication

Radar Imagery

08:20:33

[sound similar to fog signal]

08:20:42

[ten seconds of unintelligible Chinese conversation]

08:20:45

08:21:00



TIME and Source

Communication

Radar Imagery

08:21:15



08:21:33

[sound similar to fog signal]



08:21:56

PILOT what are these ah red *?



TIME and Source

Communication

Radar Imagery

08:22:00

CAPT this is on bridge.

08:22:03

CREW bridge is **.

08:22:05

PILOT oh oh I couldn't figure out what the red light red triangle was.

08:22:15

08:22:33

[sound similar to fog signal]



TIME and Source

Communication

Radar Imagery

08:22:45



08:23:00



08:23:21
PILOT port ten.

08:23:23
CREW port ten.

08:23:29
CREW * port ten sir.



TIME and Source

Communication

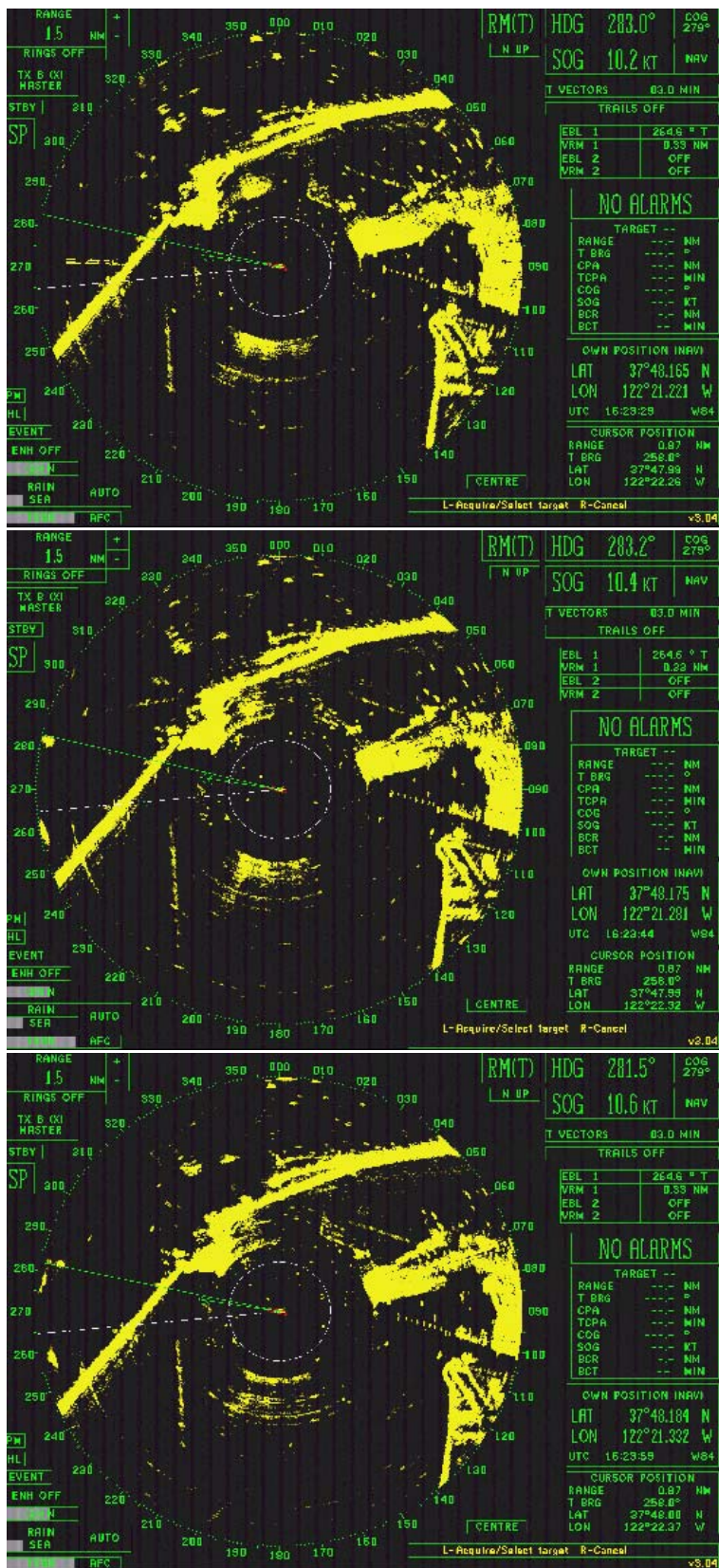
Radar Imagery

08:23:31
PILOT good.

08:23:33
[sound similar to fog signal]

08:23:45

08:24:00



TIME and Source

Communication

Radar Imagery

08:24:15



08:24:33

[sound similar to fog signal]



08:24:49

CREW rudder is port ten.

08:24:52

PILOT yeah port ten.

08:24:52

CREW yes sir.

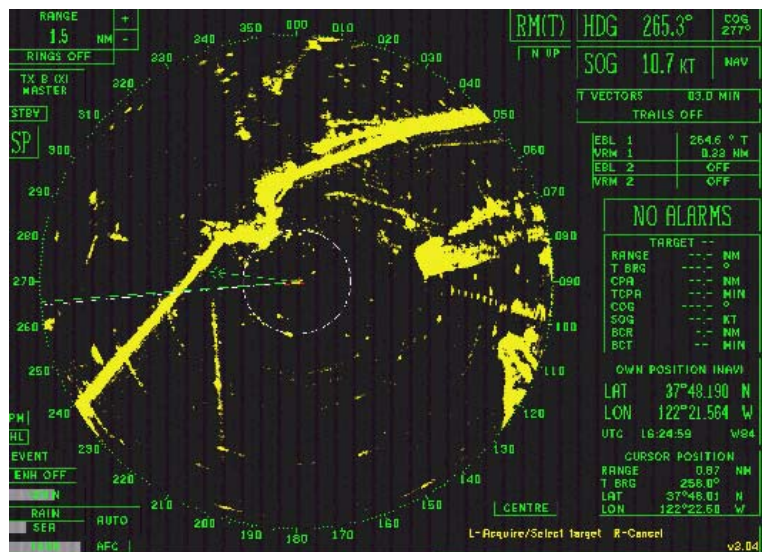


TIME and Source

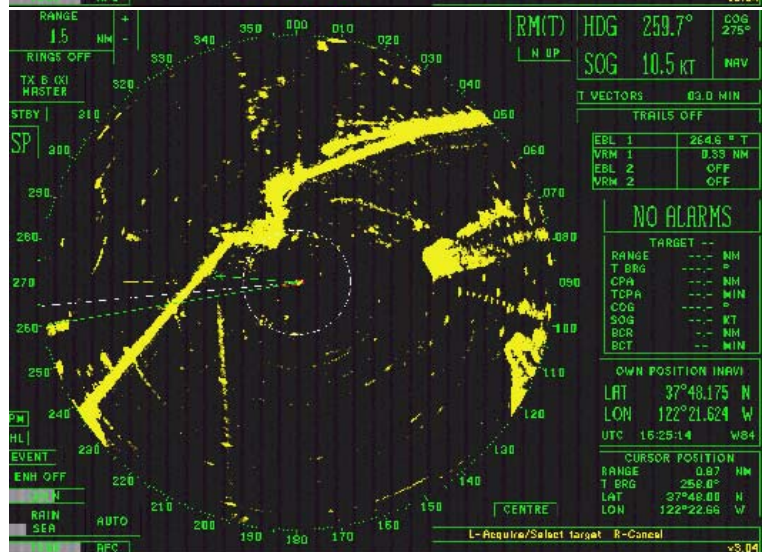
Communication

Radar Imagery

08:25:00



08:25:15



08:25:30
PILOT midships.

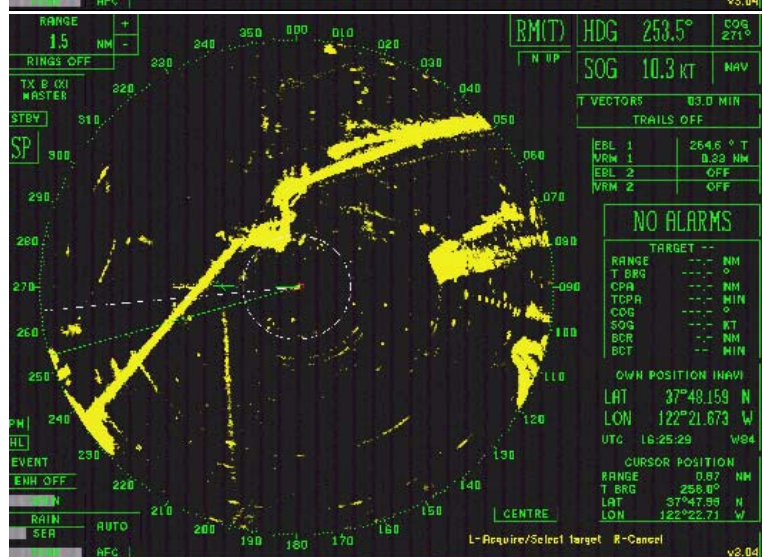
08:25:30
CREW midship.

08:25:33
[sound similar to fog signal]

08:25:40
CREW midships sir.

08:25:41
PILOT two five— two five zero.

08:25:44
CREW two five zero. two five zero.



TIME and Source

Communication

Radar Imagery

08:25:48

CREW now it's two four seven.

08:25:50

PILOT yeah make it two four five all right.

08:25:51

CREW two four five.

08:25:52

PILOT two four five.

08:25:54

CREW yes sir two four five.

08:26:00

08:26:23

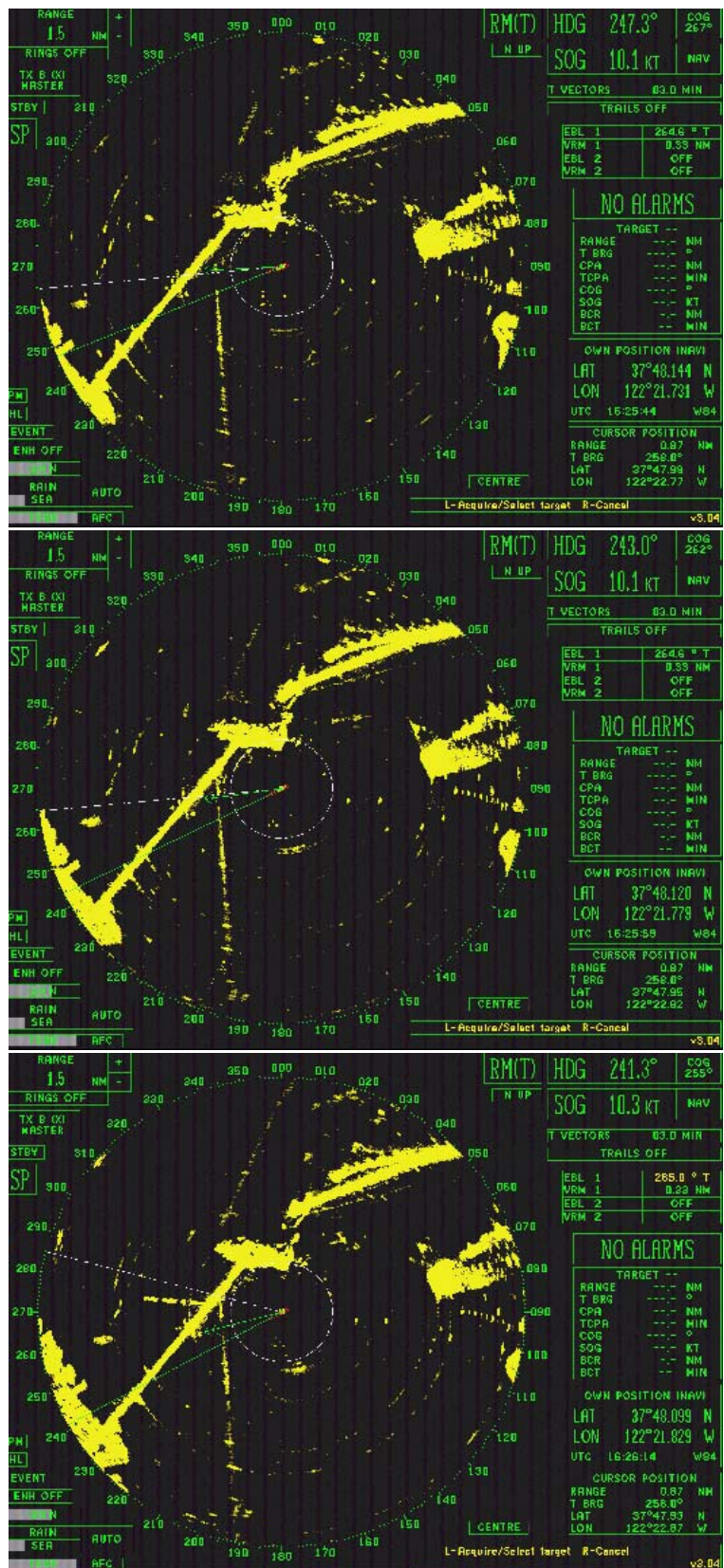
PILOT starboard ten.

08:26:25

CREW starboard ten.

08:26:29

CREW starboard ten sir.



TIME and Source

Communication

Radar Imagery

08:26:33
[sound similar to fog signal]

08:26:37
PILOT starboard twenty.

08:26:38
CREW starboard twenty.

08:26:41
CREW starboard twenty sir.

08:26:54
PILOT full ahead.

08:26:56
CREW full ahead full ahead.

08:26:58
[sound similar to engine order telegraph]

08:27:10
CREW starboard twenty.

08:27:12
PILOT thank you.



TIME and Source

Communication

Radar Imagery

08:27:24
VTS unit romeo traffic.

08:27:29
PILOT-VHF traffic romeo.

08:27:33
 [sound similar to fog signal]

08:27:37
PILOT ease to ten.

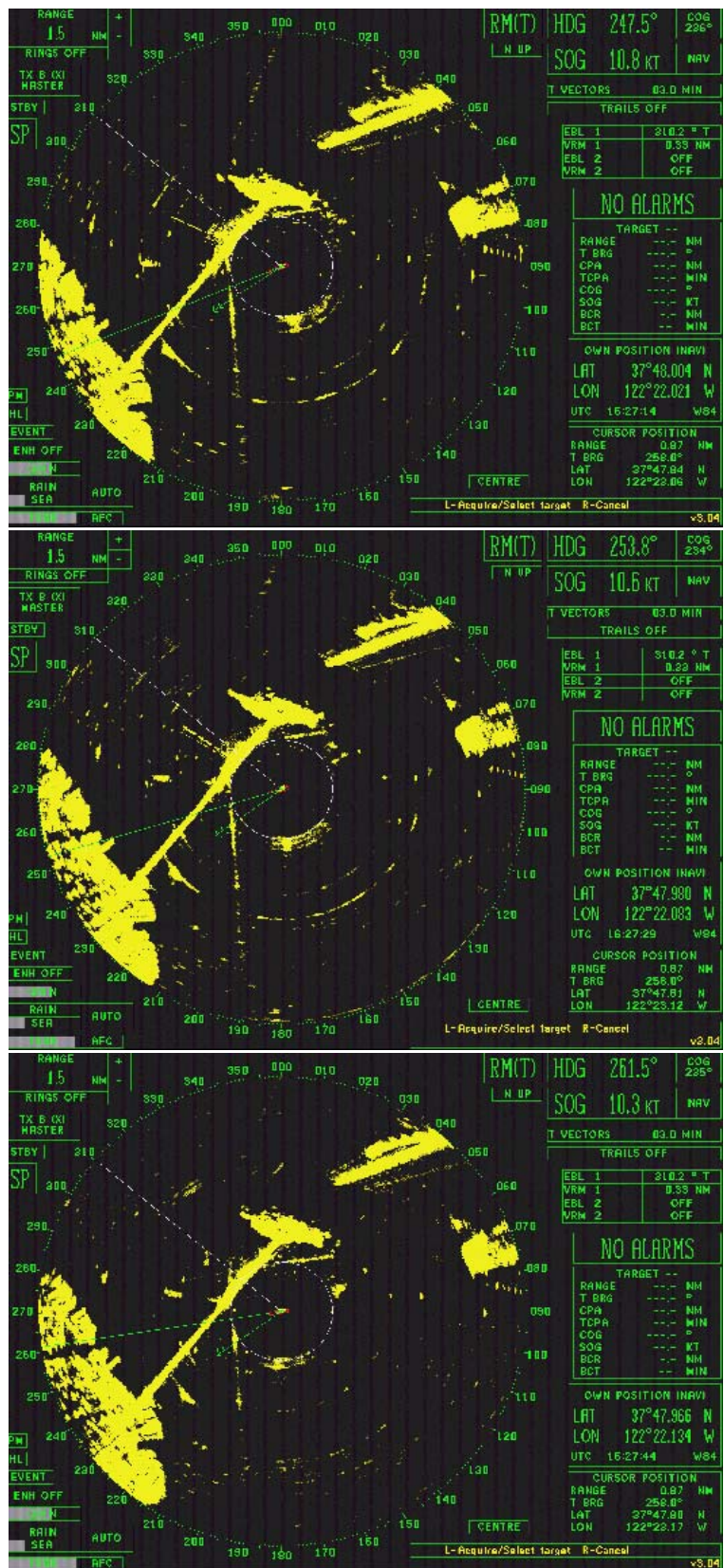
08:27:40
CREW ease to ten.

08:27:43
CREW rudder starboard ten.

08:27:45
PILOT-VHF traffic romeo did you call.

08:27:48
VTS unit romeo traffic uh AIS shows you on two three five heading what are your intentions over?

08:27:57
PILOT-VHF well I'm comin' around I'm steering two eighty right now.



TIME and Source

Communication

Radar Imagery

08:28:02

PILOT starboard twenty.

08:28:02

CREW starboard twenty.

08:28:04

VTS roger understand you still intend ** span?

08:28:06

CREW starboard twenty sir.

08:28:08

PILOT this is the center of the bridge right?

08:28:11

CREW yeah yeah.

08:28:12

PILOT yeah.

08:28:13

PILOT hard starboard.

08:28:14

CREW hard starboard.

08:28:15

PILOT-VHF yeah we're still delta echo.

08:28:22

CREW hard starboard sir.

08:28:33

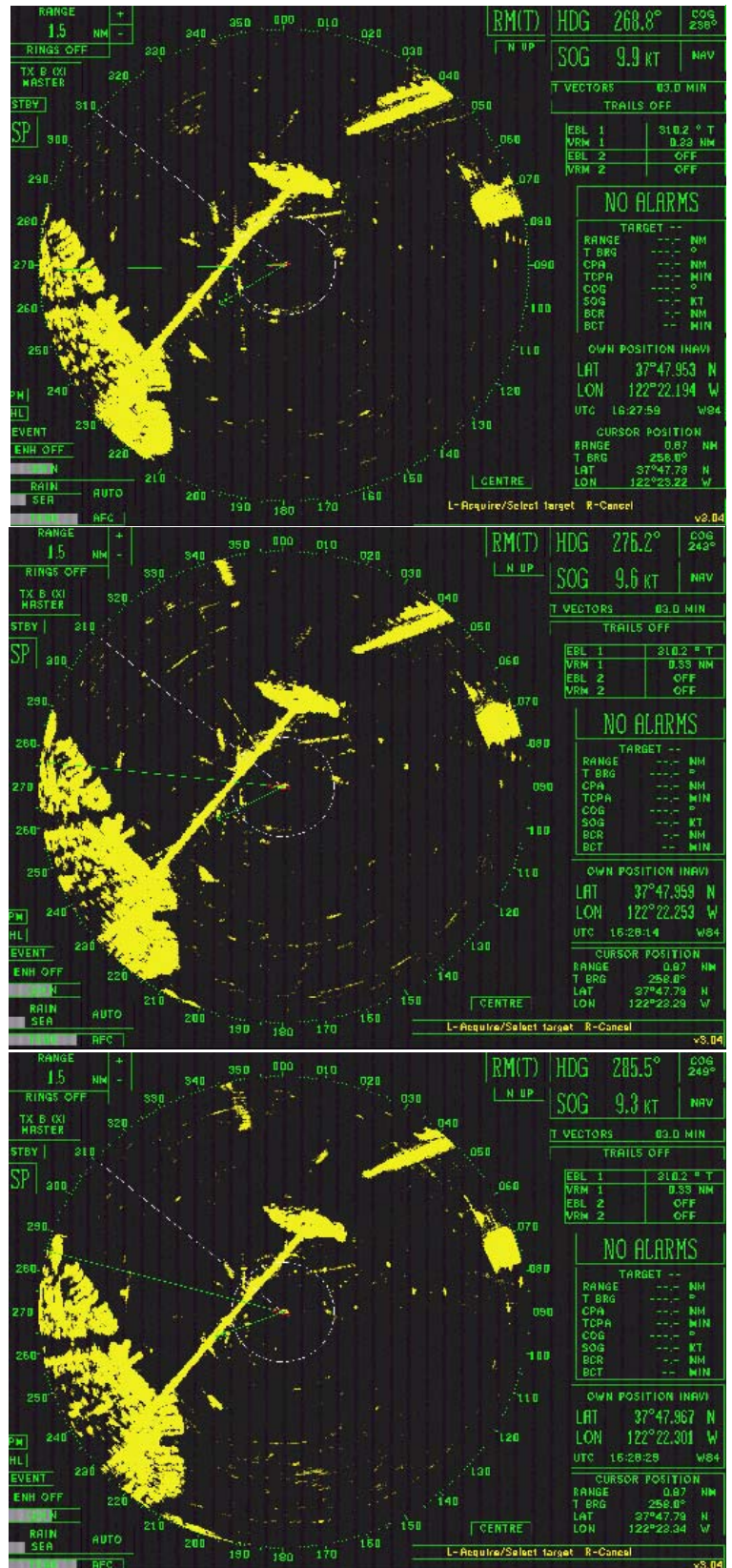
[sound similar to fog signal]

08:28:42

PILOT midships.

08:28:44

CREW midship.



TIME and Source

Communication

Radar Imagery

08:28:51
PILOT starboard twenty.

08:28:53
CREW starboard twenty.

08:29:01
PILOT hard starboard.

08:29:02
CREW hard starboard.

08:29:04
CHOFF-UHF **.

08:29:06
CAPT what did he say?

08:29:08
CREW hard starboard sir.

08:29:09
CHOFF-UHF the bridge column the bridge column.

08:29:11
CAPT-UHF oh I see it I see it.

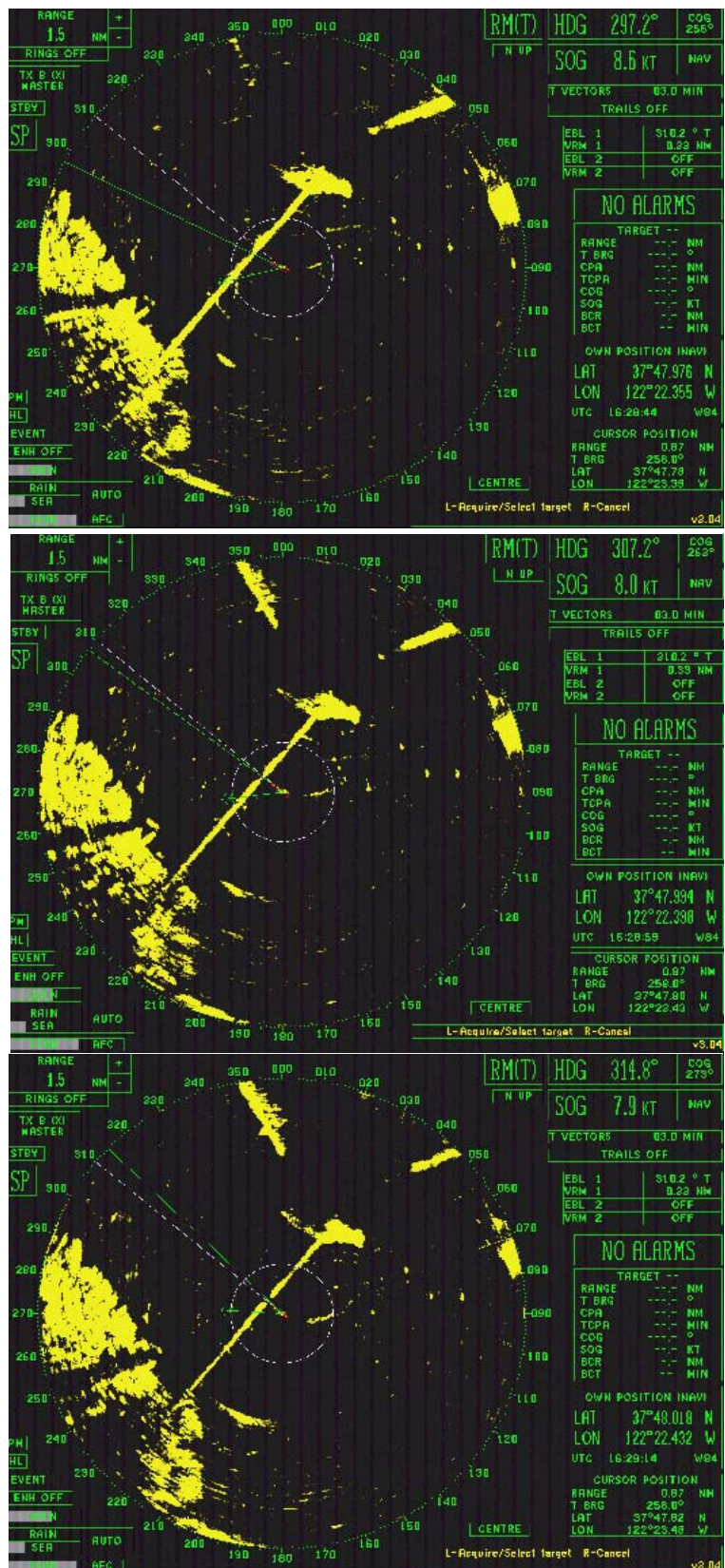
08:29:14
CREW *.

08:29:16
PILOT yeah I see it.

08:29:22
CREW rudder hard starboard sir.

08:29:26
PILOT midships.

08:29:27
CREW midship.



TIME and Source

Communication

Radar Imagery

08:29:31
PILOT hard port.

08:29:32
CREW hard port.

08:29:33
[sound similar to fog signal]

08:29:44
CREW hard port sir.

08:29:44
CREW rudder hard port sir.

08:29:55
CREW wheel hard port.

08:30:05
CREW wheel is hard port sir.

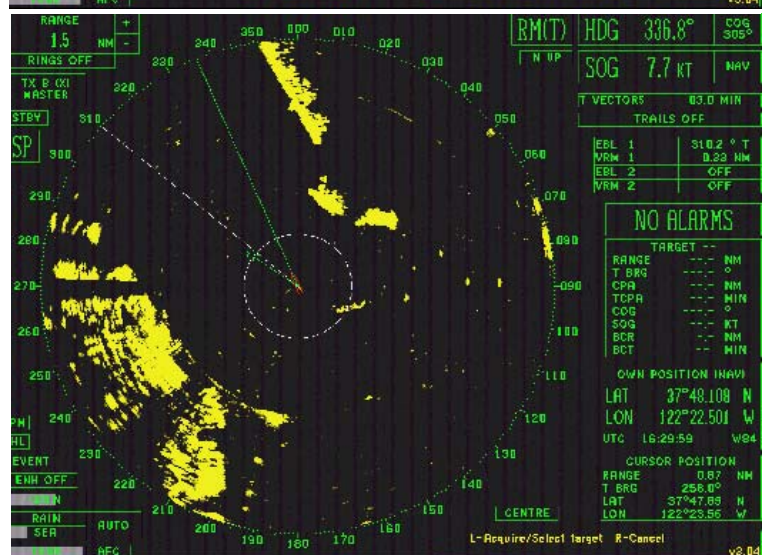
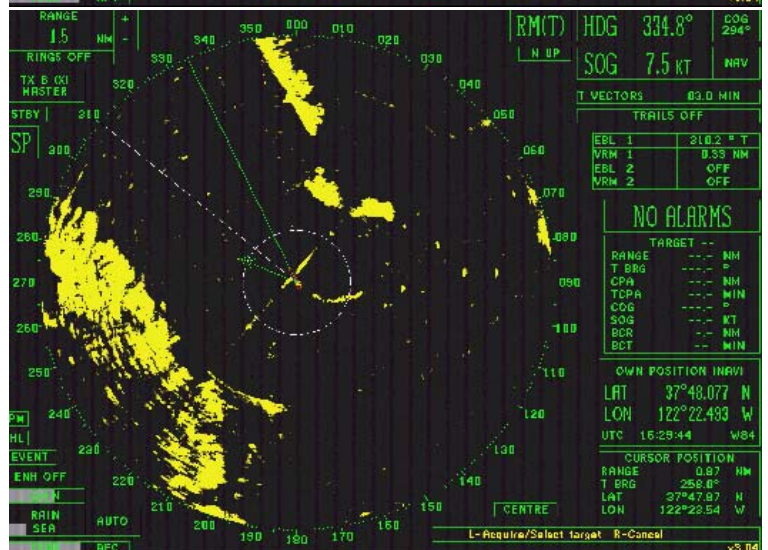
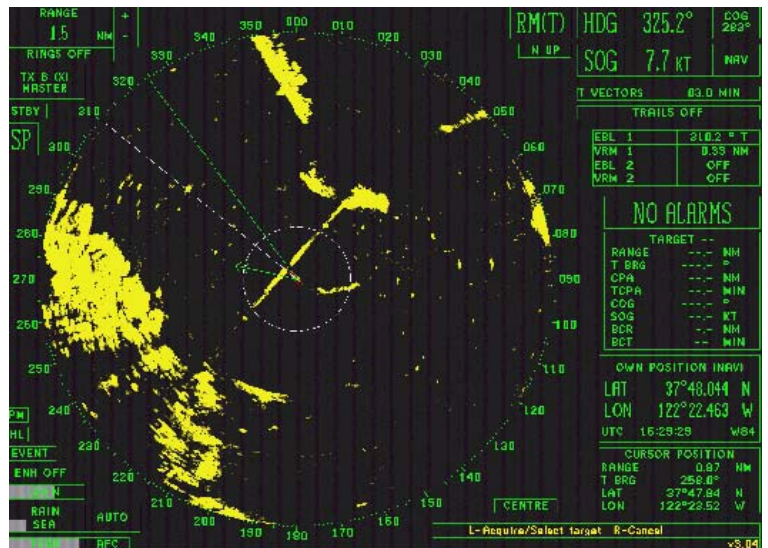
08:30:07
PILOT okay midships.

08:30:08
CREW midships.

08:30:10
PILOT dead slow ahead.

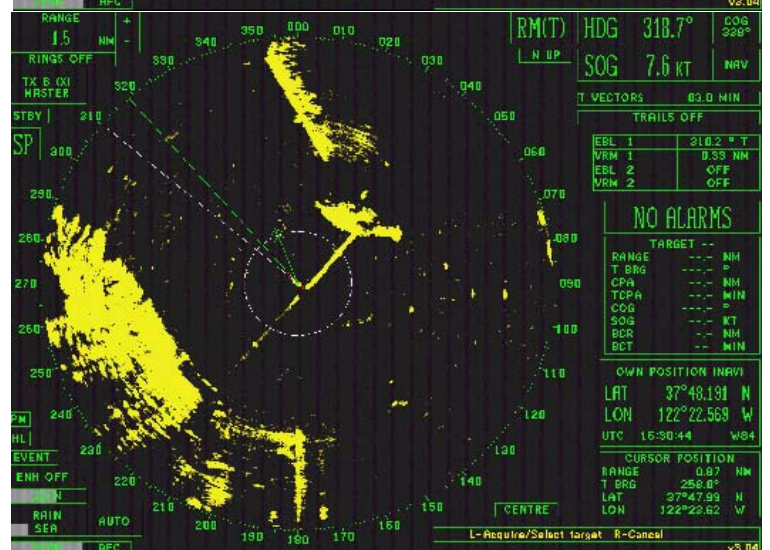
08:30:11
CREW dead slow ahead.

08:30:12
PILOT-VHF yeah traffic we just touched the delta span I'm gonna go to...I'm gonna try get her anchored anchorage nine— or anchorage seven.



Radar Imagery

08:30:51
CREW three two zero.



TIME and
Source

Communication

Radar Imagery

08:31:02

PILOT * you said this was the center of the bridge.

08:31:06

CAPT yes.

08:31:06

PILOT no this is the center. that's the tower. this is the tower that's why we hit it I thought that was the center.

08:31:14

CAPT it's a buoy. * the chart.

08:31:24

[sound similar to paper rustling]

08:31:29

PILOT yeah see no this is the tower. I asked you if that was **.

08:31:32

[sound similar to fog signal]

08:31:40

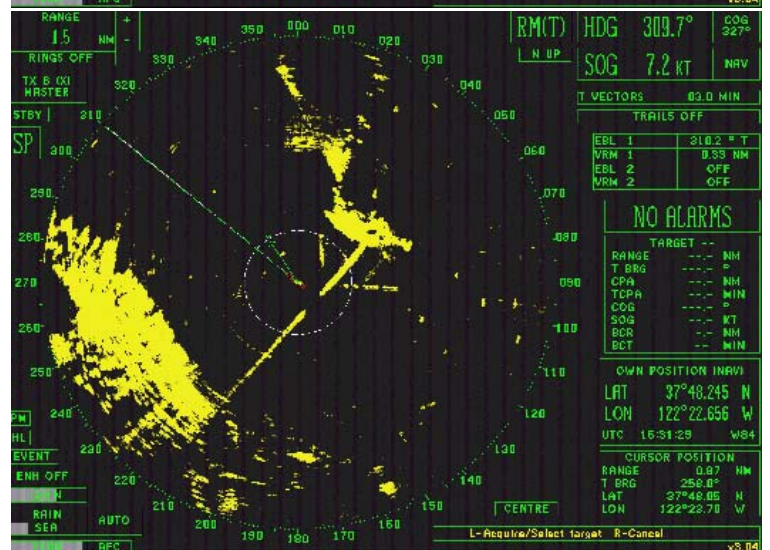
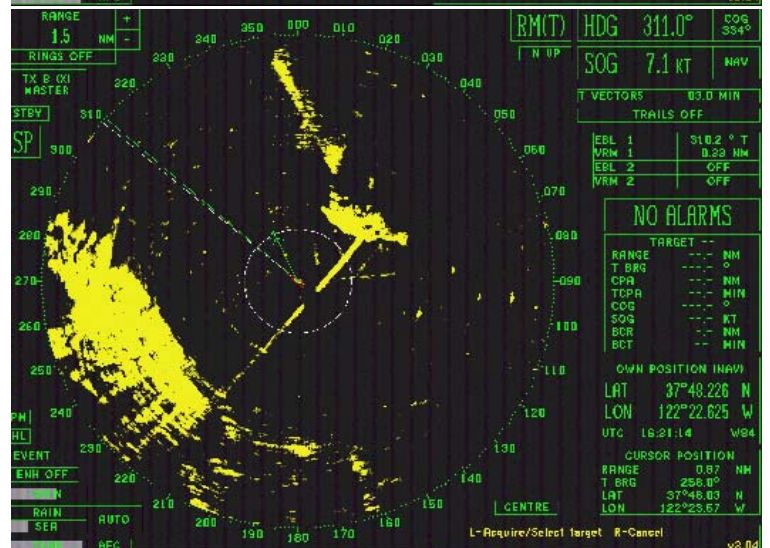
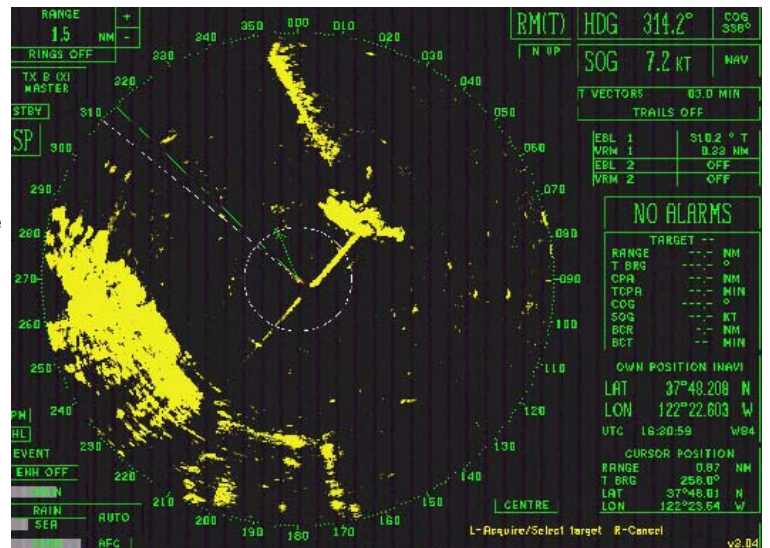
PILOT three two zero.

08:31:41

CREW three two. now is starboard. hard starboard sir.

08:31:43

PILOT yes three two zero.



TIME and Source

Communication

Radar Imagery

08:31:45

CREW three two zero.

08:31:45

CREW three two zero.

08:31:47

[sound similar to paper rustling]

08:31:50

PILOT #.

08:32:00

**.

08:32:06

PILOT why is the ship not uh moving? we're not changing course we've got hard starboard.

08:32:16

PILOT no right now right now it's hard starboard the ship's not changing.

08:32:17

CAPT stop engine.

08:32:19

? **.

08:32:19

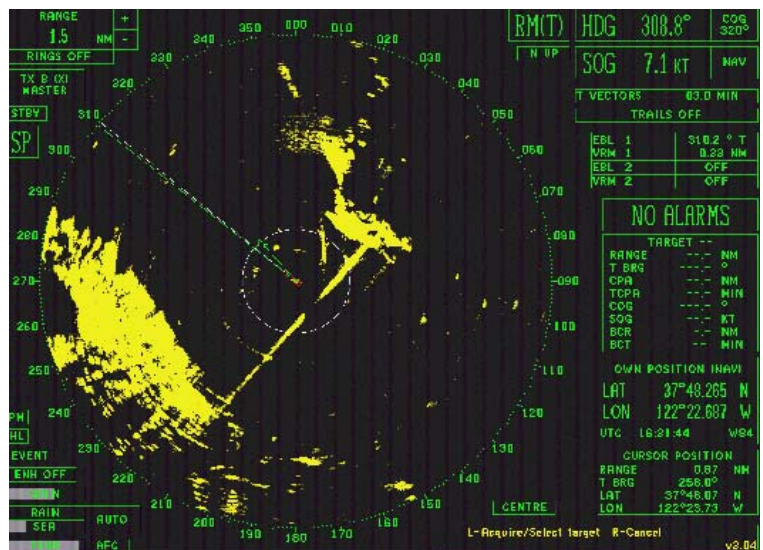
CAPT no no no no dead slow ahead now.

08:32:20

CREW dead slow ahead.

08:32:21

? **.



TIME and
Source

Communication

Radar Imagery

08:32:22

PILOT yeah but it's hard starboard.

08:32:23

CREW hard starboard.

08:32:24

CREW yeah yes.

08:32:26

PILOT #.

08:32:28

PILOT ahh captain you said that was the center.

08:32:30

CAPT cen— cen— cen— center.

08:32:32

[sound similar to fog signal]

08:32:32

[unintelligible conversation between pilot and master]

08:32:39

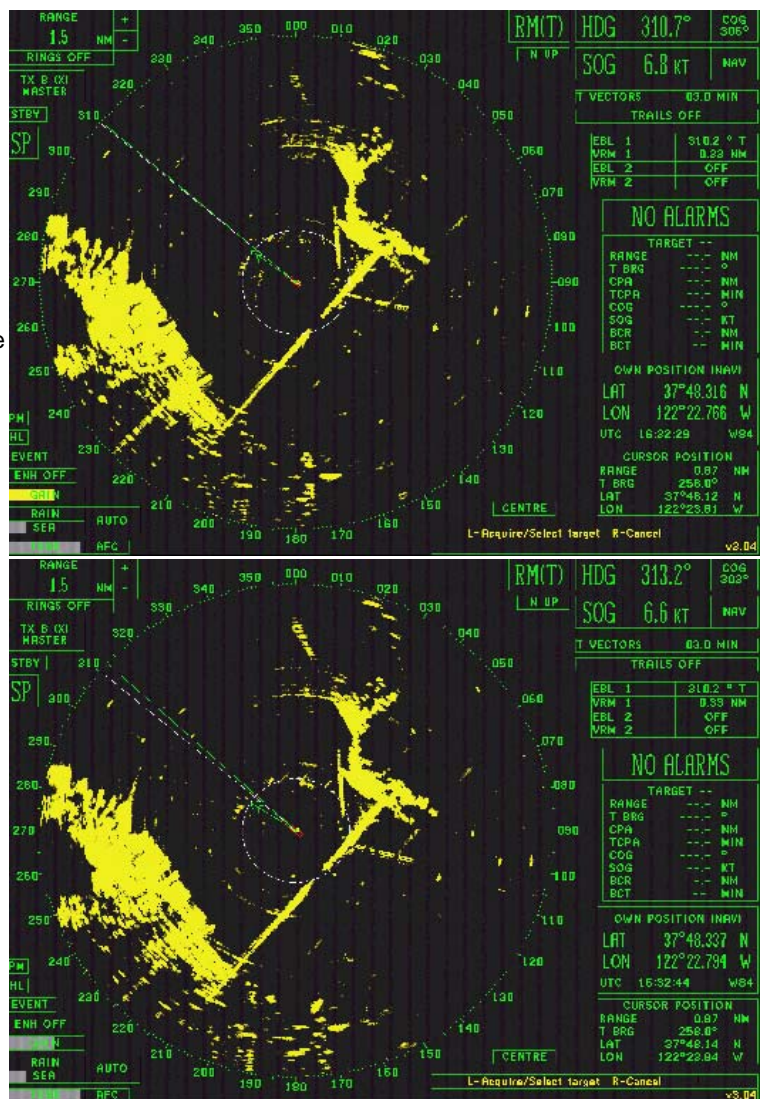
PILOT yeah that's the bridge pier # I thought it was the center...oh #.

08:32:53

PILOT is it steering still?

08:32:58

CREW uhhh not good.



TIME and Source

Communication

Radar Imagery

08:33:04
PILOT still no— no steering? hard to starboard.

08:33:09
CAPT hard starboard.

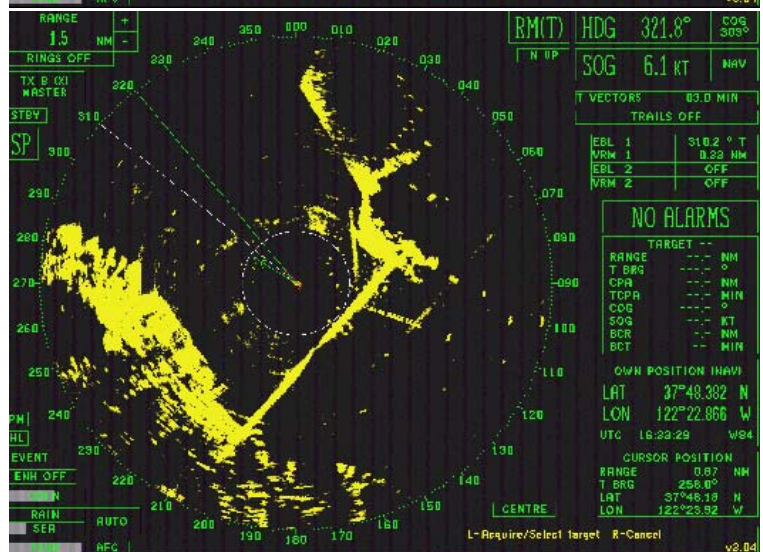
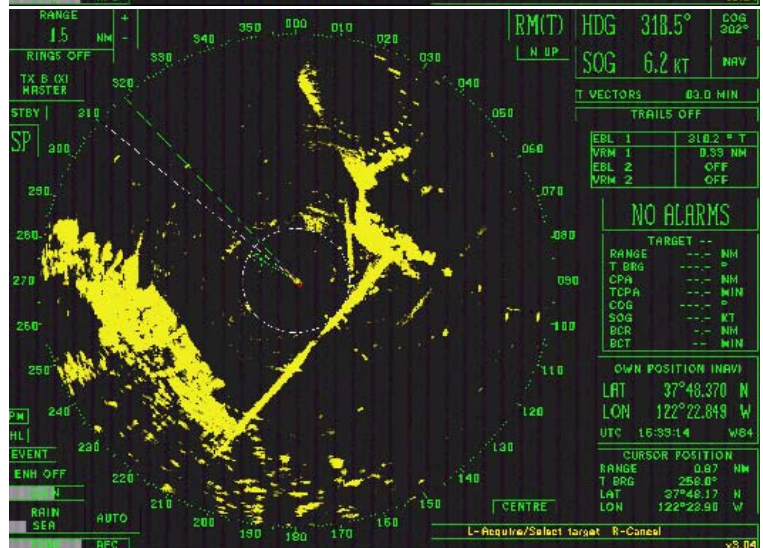
08:33:10
CREW hard starboard.

08:33:11
PILOT he said it's not steering.

08:33:18
CAPT *he should have known.*

08:33:22
CAPT *this is the center of the bridge not the center of the channel.*

08:33:32
 [sound similar to fog signal]



TIME and Source

Communication

Radar Imagery

08:33:45
[sound similar to cell phone dialing]

08:33:49
PILOT midships.

08:33:50
CREW midships.

08:33:54
[sound similar to cell phone dialing]

08:33:58
PILOT stop engines.

08:33:59
CREW stop engine.

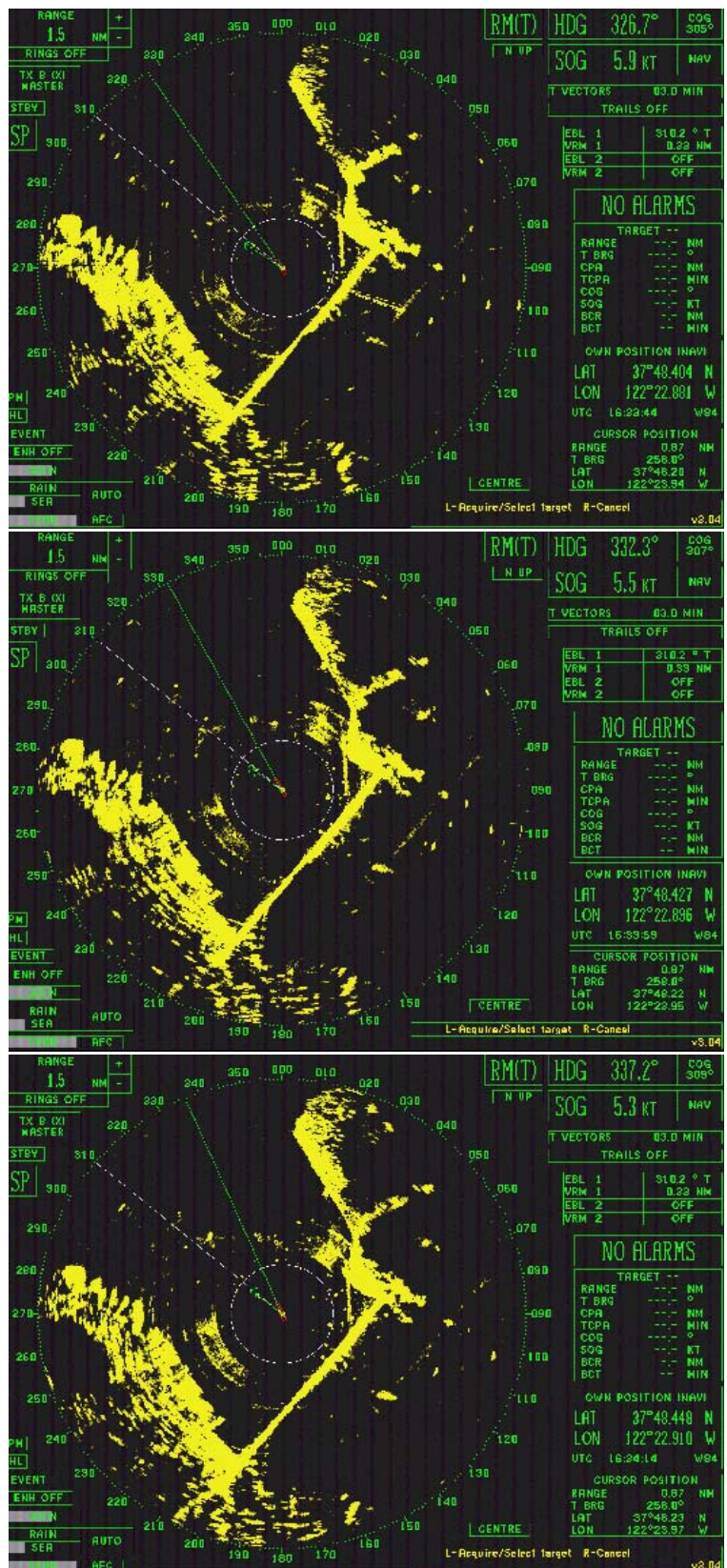
08:34:01
[sound similar to engine order telegraph]

08:34:03
[sound similar to cell phone dialing]

08:34:21
PILOT-CELL yeah @ is anybody in there? I just hit the bridge.

08:34:28
PILOT steady.

08:34:29
CREW steady.



TIME and Source

Communication

Radar Imagery

08:34:30

PILOT three four zero.

08:34:31

CREW three four zero.

08:34:32

[sound similar to fog signal]

08:34:57

PILOT-CELL yeah...I just hit the bridge.

08:35:04

PILOT-CELL well it was a— I'd like to call it a glancing blow but uh there's definitely damage. I got the delta echo tower there was uh confusion on between the electronic chart. what I thought they said was the center of the bridge was actually the tower so I thought I had it made and uh...we didn't so I'm gonna go to anchorage seven and uh I guess we'll see what uh.



TIME and Source

Communication

Radar Imagery

08:35:16
CREW ordered hard port.

08:35:18
CREW hey chief officer.

08:35:21
CREW ordered it right?

08:35:22
CREW no response.

08:35:24
CREW ah...no response

08:35:29
PILOT three four zero.

08:35:31
PILOT-CELL I don't know what uh we'll do from here *.

08:35:32
 [sound similar to fog signal]

08:35:39
CREW captain *.

08:35:40
CAPT-UHF chief officer chief officer.

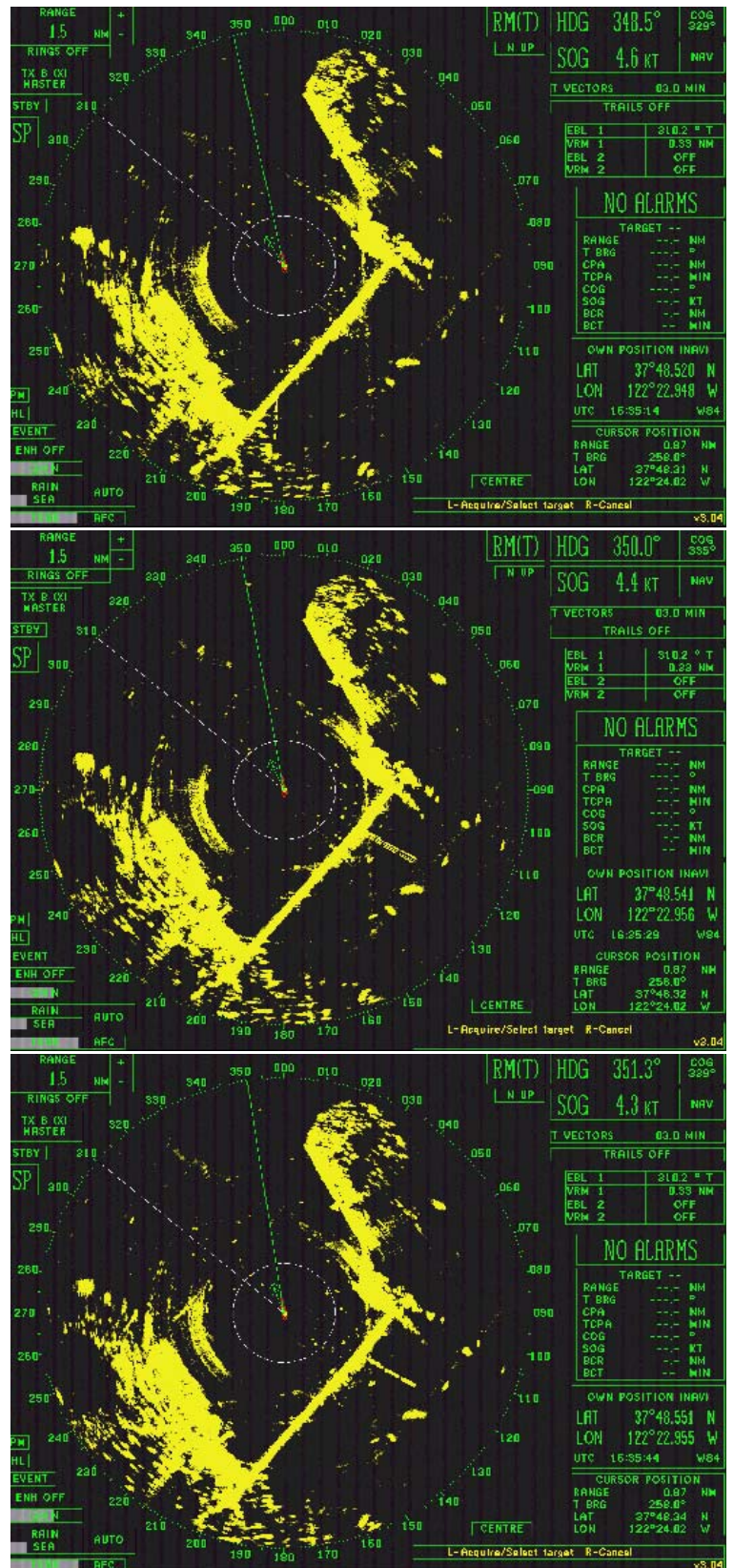
08:35:42
PILOT-CELL yeah yeah I'm just gonna anchor at anchorage seven.

08:35:46
CAPT-UHF did the chief officer hear that?

08:35:47
CREW-UHF * no answer no answer sir.

08:35:51
CREW * steady.

08:35:52
PILOT-CELL uhh I'm gonna— I thought I'd tell you I told them I hit the bridge on the radio but I— um I haven't given any *.



TIME and Source

Communication

Radar Imagery

08:36:00
CAPT-UHF *did the chief officer hear that?*

08:36:01
PILOT yeah three four zero.

08:36:02
CREW yeah yeah yeah no answer. no answer no answer.

08:36:04
PILOT slow ahead.

08:36:05
CREW slow ahead.

08:36:06
CREW slow ahead.

08:36:07
 [sound similar to engine order telegraph]

08:36:08
CREW **.

08:36:09
PILOT-CELL okay.

08:36:10
 [sound similar to engine order telegraph]

08:36:12
CAPT-UHF *did the chief officer hear that?*

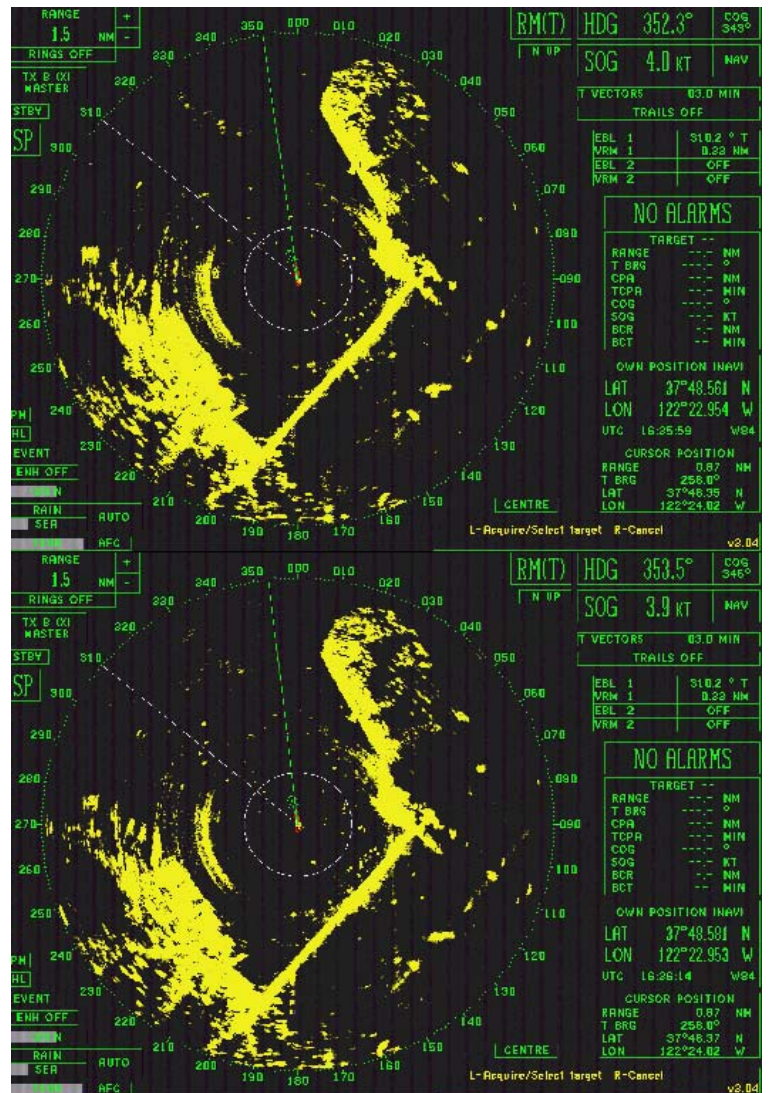
08:36:16
CAPT-UHF *did the chief officer hear that?*

08:36:18
CAPT *go to the bow and see if the chief officer is there.*

08:36:21
CREW-UHF *over in the front the chief officer is not at the bow.*

08:36:27
CREW engine slow ahead.

08:36:27
CAPT-UHF *chief officer do you hear this? have you seen the chief officer?*



TIME and
Source

Communication

Radar Imagery

08:36:31

[sound similar to fog signal]

08:36:36

PILOT-
CELL

* unit romeo on the Cosco Busan we just hit the delta echo span it was kind of a glancing blow but it definitely did damage. I'm gonna put the ship at anchor and then uh stand by to see what goes from here.

08:36:38

CAPT-
UHF

second officer did you hear that?

08:36:39

2ndOFF **
-UHF

08:36:40

CAPT-
UHF

did you see the chief officer?

08:36:41

2ndOFF
-UHF

no no. I'm now at the stern.

08:36:49

CAPT-
UHF

ask the chief officer to drop anchor.

08:36:52

CREW

engines slow ahead.

08:36:53

CHOFF- ***
UHF

08:36:55

CAPT-
UHF

drop anchor drop anchor. is the anchor ready?

08:36:56

CHOFF- ***
UHF

08:36:57

PILOT-
CELL

yeah.

08:37:00

CAPT-
UHF

get the anchor ready at the normal position. at the normal position.

08:37:02

CREW-
UHF

at the normal position. at the normal position.

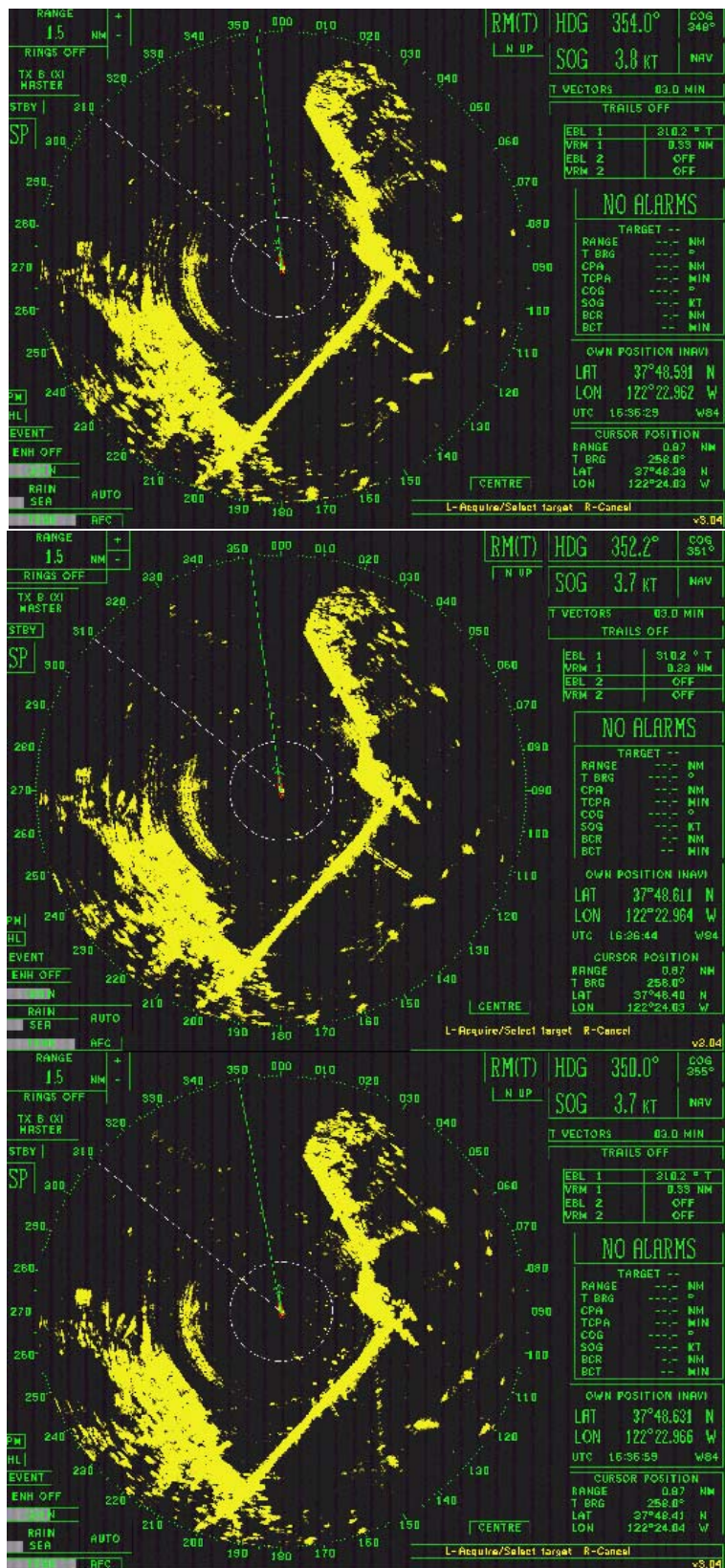
08:37:03

CREW

08:37:09

PILOT-
CELL

yeah I just— I'm the pilot on the Cosco Busan we just hit the delta echo pier.



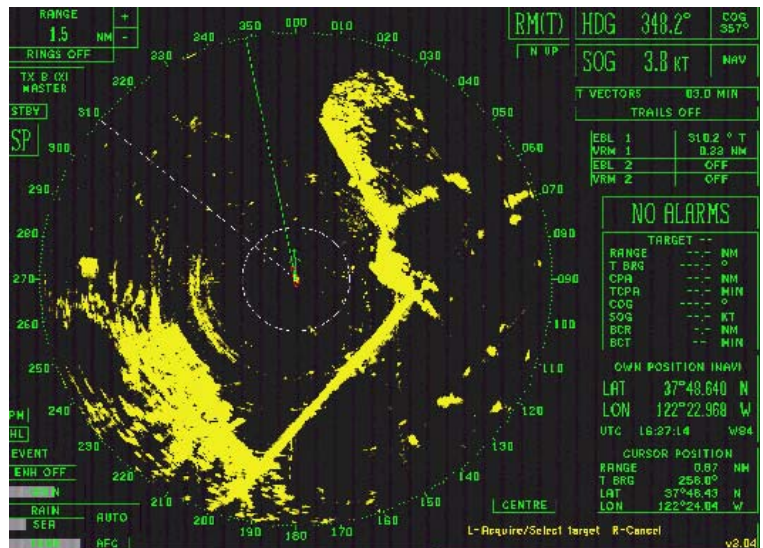
TIME and
Source

Communication

Radar Imagery

08:37:21

PILOT-CELL well I— we're just going to anchor now I don't uh they have to go check. I just wanted to let you guys know right away.



08:37:32

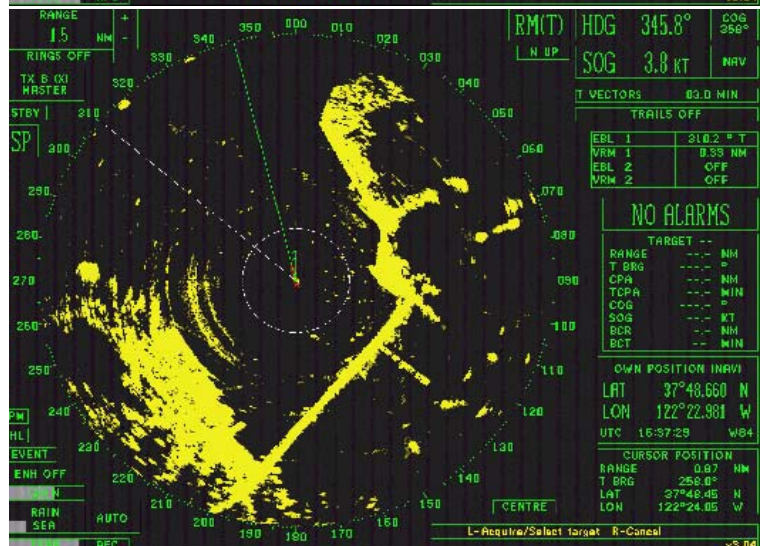
[sound similar to fog signal]

08:37:40

PILOT-CELL what's that?

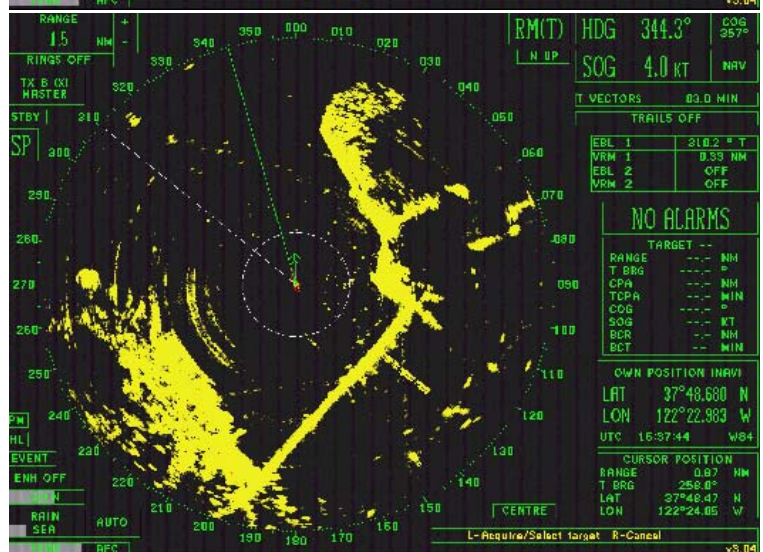
08:37:44

PILOT-CELL uhh * to the pier it kind of— we kind of glanced off the uh I guess it would be the south east corner of it. we didn't hit it straight— you know we went down the side of it kind of cut—.



08:37:58

CAPT-UHF chief officer do you hear that? ***.



TIME and Source

Communication

Radar Imagery

08:38:01

PILOT-CELL oh yeah the bridge is fine we just got some fender I mean you know we knocked some timbers off we didn't hit the concrete or anything.

08:38:06

CAPT-UHF chief officer when you hear the broadcast switch on the talk-back system. chief officer when you hear the broadcast switch on the talk-back system.

08:38:15

PILOT-CELL pardon?

08:38:19

PILOT-CELL yeah uhh @ [phone number].

08:38:23

CAPT-UHF chief officer second officer.

08:38:25

CHOFF-UHF please go ahead please go ahead this is the chief officer.

08:38:28

CAPT-UHF chief officer you go to the bow.

08:38:29

CHOFF-UHF oh okay okay.

08:38:30

PILOT-CELL okay we'll anchor it and we'll stand by to stand by. okay.

08:38:31

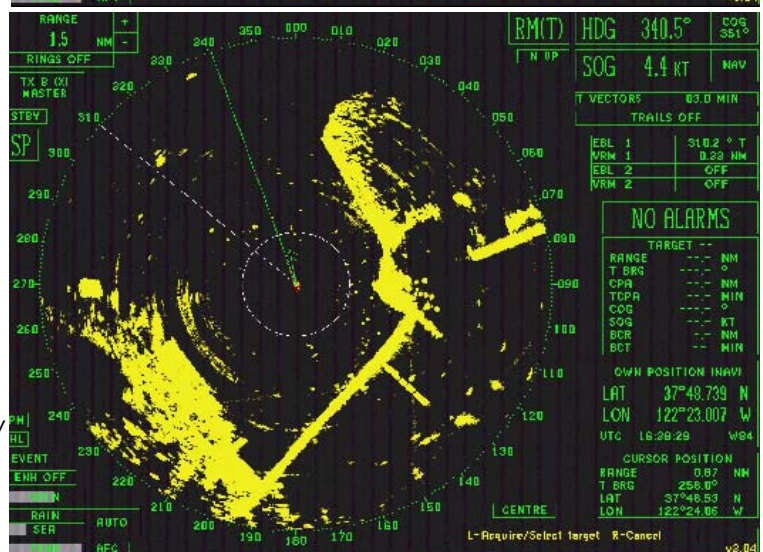
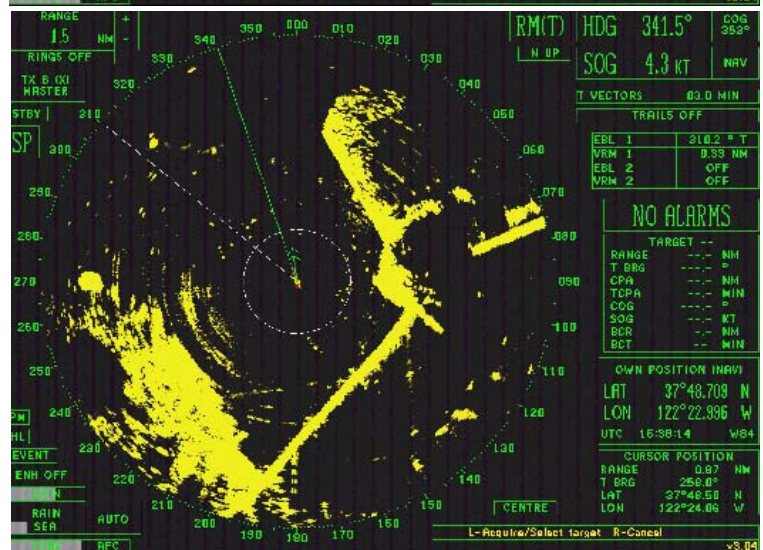
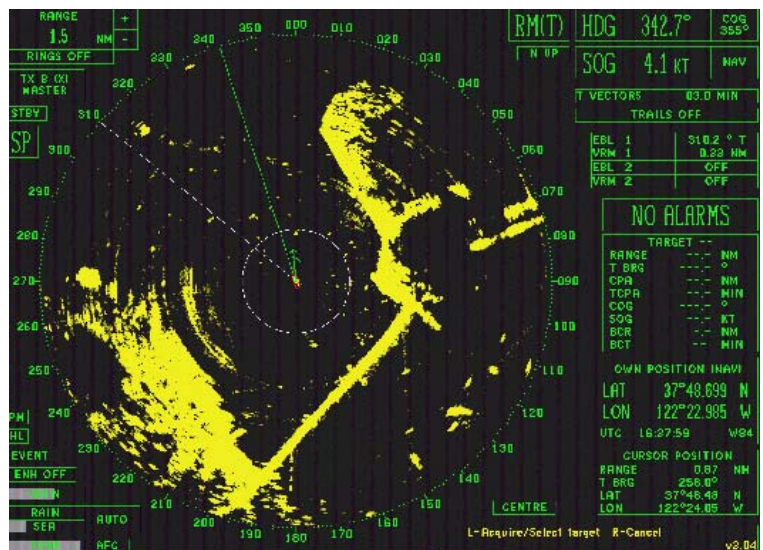
[sound similar to fog signal]

08:38:38

PILOT can you check the ship for damage? they wanted you to sound the tanks make sure there's no holes or anything the Coast Guard so we'll just anchor and then life is gonna get *.

08:38:44

CAPT-UHF yeah yeah. second officer please go to the bow and do a normal anchor preparation. right away.



TIME and Source

Communication

Radar Imagery

08:38:48

2ndOFF *do a normal anchor preparation.*
-UHF

08:38:49

CREW three four zero sir.

08:38:50

CAPT-UHF *prepare the anchor normally. prepare the anchor normally.*

08:38:51

PILOT steady.

08:38:51

CREW steady.

08:38:52

CHOFF-UHF *okay.*

08:38:54

CREW-UHF *we have it now.*

08:39:06

CREW-UHF *** anchor position **. okay.*

08:39:14

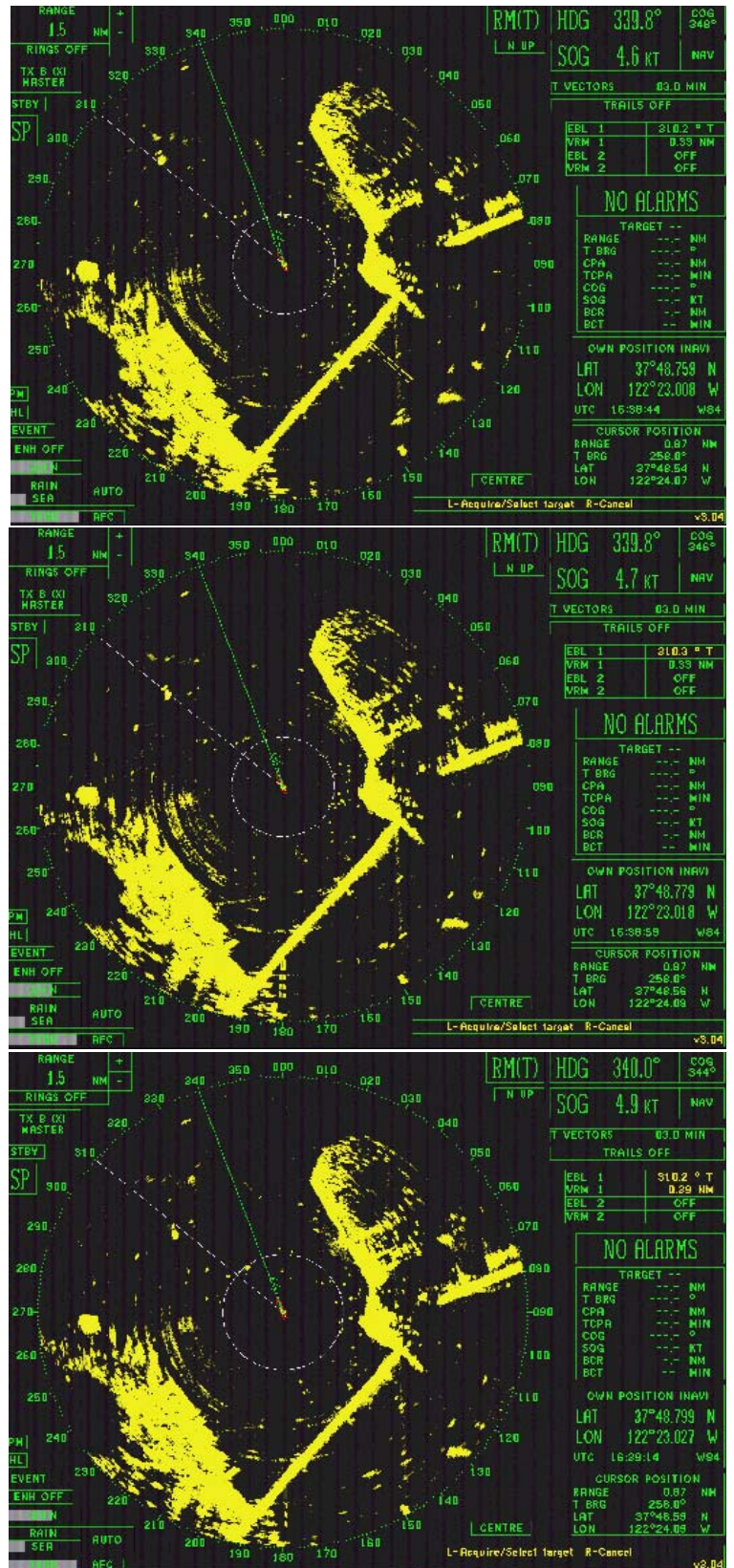
CREW-UHF *the right anchor is ready.*

08:39:17

CAPT-UHF *the port anchor is ready okay. prepare the anchor normally.*

08:39:20

CREW *yeah.*



08:39:31
[sound similar to fog signal] [End of pertinent radar data]

08:40:30
PILOT so captain can you stand by the anchor?

08:40:31
[sound similar to fog signal]

08:40:34
CAPT stand by.

08:40:35
PILOT yeah.

08:40:37
CAPT-SAT we just hit the bridge and uhh...and uh ** yeah * damage we're leaking oil. ***.

08:41:13
PILOT we'll put uh five in the water captain. five shackles. we're just gonna anchor up here.

08:41:17
CAPT um-hum. all right five shackles.

08:41:21
PILOT yeah.

08:41:22
CAPT starboard or port?

08:41:23
PILOT either either one. yeah yeah.

08:41:25
CAPT now both both anchors *.

08:41:27
PILOT okay.

08:41:31
[sound similar to fog signal]

08:41:45
PILOT I'm gonna use the toilet okay?

08:41:57
CAPT *what time is it? how much time?*

08:41:58
[sound similar to door closing]

08:41:58
CREW *zero eight three zero.*

08:42:31
[sound similar to fog signal]

08:43:31
[sound similar to fog signal]

08:43:38
CREW ***.

08:44:19
[sound similar to door closing]

08:44:31
[sound similar to fog signal]

08:44:45
CREW now engine slow ahead.

08:44:47
PILOT okay thank you.

08:44:55
PILOT dead slow ahead.

08:44:56
CREW dead slow ahead.

08:44:59
[sound similar to engine order telegraph]

08:45:04
CREW engine dead slow.

08:45:06
PILOT thank you.

08:45:28
PILOT stop engines.

08:45:29
CREW stop engines.

08:45:30
[sound similar to engine order telegraph]

08:45:31
[sound similar to fog signal]

08:45:52
PILOT three three five.

08:45:53
CREW three three five.

08:45:55
CREW three three five.

08:45:56
PILOT yes.

08:45:57

CAPT ** notice to the Coast Guard.

08:46:00

PILOT I— I've called them already. yeah I've noti— notified them * I'm sure they'll all come out and—. no I've notified them we're gonna be at anchor so. sorry captain I misunderstood the chart. I thought that was the center.

08:46:17

CAPT the bridge **.

08:46:20

PILOT yeah but yeah it was not the center of the bridge it was the pier. I thought it was the— I thought it was the middle of the— the span that's why I stopped turning. but have you checked * any tanks **.

08:46:31

[sound similar to fog signal]

08:46:39

CAPT *.

08:46:40

CREW- UHF *uhh at the bow * has been pierced.*

08:46:43

CREW- UHF *.

08:46:45

CAPT- UHF *at which position? at which position?*

08:47:06

CHOFF- UHF *position twenty seven. position twenty seven. position twenty nine.*

08:47:09

PILOT dead slow astern.

08:47:10

CREW dead slow astern.

08:47:11

CREW dead slow astern.

08:47:13

[sound similar to engine order telegraph]

08:47:18

CREW * midship?

08:47:19

PILOT yes * midships.

08:47:29

PILOT slow astern.

08:47:29

CREW slow astern.

08:47:30

CREW slow astern.

08:47:31
[sound similar to fog signal]

08:47:54
PILOT half astern.

08:47:55
CREW half astern.

08:47:56
[sound similiar to engine order telegraph]

08:48:31
[sound similar to fog signal]

08:49:06
PILOT full astern.

08:49:07
CREW full astern.

08:49:08
[sound similar to engine order telegraph]

08:49:31
[sound similar to fog signal]

08:50:31
[sound similar to fog signal]

08:50:35
PILOT dead slow astern.

08:50:36
CREW dead slow astern.

08:50:37
PILOT dead slow astern.

08:50:38
CREW dead slow astern.

08:50:39
PILOT and you can drop the anchor captain.

08:50:40
[sound similar to engine order telegraph]

08:50:41
CAPT okay drop anchor now.

08:50:42
PILOT yeah put five in the water.

08:50:44
CAPT uh okay.

08:50:45

CAPT *chief officer drop the starboard anchor.*

08:50:46

**PILOT-
VHF** traffic romeo.

08:50:49

**CHOFF-
UHF** *okay drop the starboard anchor five shackles in the water.*

08:50:54

VTS unit romeo traffic.

08:50:56

**PILOT-
VHF** yeah we're gonna drop the anchor here at anchorage seven and uh we're gonna put five in the water I'll give you a call when we're stretched out.

08:51:00

CREW engine dead slow astern.

08:51:03

VTS roger thanks.

08:51:04

CREW engine dead slow astern.

08:51:06

PILOT okay thank you.

08:51:07

CAPT *did you jot down the time of dropping anchor?*

08:51:09

PILOT stop engine.

08:51:10

CREW stop engine.

08:51:12

[sound similar to engine order telegraph]

08:51:17

PILOT and just five in the water should be good captain. five.

08:51:21

CAPT five.

08:51:21

PILOT five shackles in the water.

08:51:22

**CAPT-
UHF** *chief officer starboard anchor. five shackles in the water. five in the water.*

08:51:23

CAPT okay.

08:51:26

**CHOFF-
UHF** *two shackles on deck and hold on.*

08:51:29

CAPT okay okay.

08:51:31

[sound similar to fog signal]

08:51:44

CAPT- *five shackles in the water?*
UHF

08:51:45

CHOFF- *five shackles in the water.*
UHF

08:51:50

CAPT- *two shackles at the moment?*
UHF

08:51:52

CHOFF- *three shackles in the water.*
UHF

08:51:55

CAPT- *okay okay three shackles in the water.*
UHF

08:51:59

CHOFF- *four shackles in the water.*
UHF

08:52:01

PILOT how much chain?

08:52:02

CAPT uh four shackles.

08:52:03

PILOT okay much strain? dead slow ahead.

08:52:06

CHOFF- *okay okay four and a half shackles on deck.*
UHF

08:52:06

CAPT dead slow ahead.

08:52:08

[sound similar to engine order telegraph]

08:52:08

CAPT- *understood.*
UHF

08:52:12

[sound of tones]

08:52:28

[sound similar to fog signal]

08:52:31

[sound similar to fog signal]

08:52:47

CAPT- *how many shackles now?*
UHF

08:52:50

CHOFF- UHF *bridge five shackles in the water now.*

08:52:53

CAPT- UHF *okay okay five shacles in the water. we'll try to put the brakes on.*

08:52:56

CHOFF- UHF *good good the brakes are on.*

08:52:58

CAPT- UHF *good good.*

08:53:01

? ****.*

08:53:17

PILOT- CELL *I'm at anchorage seven right now. everyone's going to start descending on me quickly so. yeah it's foggy I shouldn't have gone. it's still uh— I'm not gonna do well on this one. so uh—. ***.*

08:53:29

? ***.*

08:53:31

[sound similar to fog signal]

08:53:39

CREW *now engine dead slow ahead.*

08:53:42

CAPT *stop engine?*

08:53:43

CREW *no engine dead slow ahead sir.*

08:53:45

PILOT *stop engine.*

08:53:46

CREW *stop engine.*

08:53:46

[sound similar to engine order telegraph]

08:53:47

PILOT- CELL *what's that @?*

08:53:55

PILOT- CELL *yeah yeah alright.*

08:54:07

PILOT ** you let the tug go.*

08:54:09

CAPT *okay second officer let go the tug aft.*

08:54:13

2ndOFF *let go the tug aft.*

TIME and
Source

Communication

Radar Imagery

08:54:16

PILOT- Revolution romeo.
VHF

08:54:19

CREW *he's not coming up. if he was we would be in trouble. **.*

08:54:20

PILOT ***.

08:54:30

PILOT- okay—. **CELL**

08:54:31

[sound similar to fog signal]

08:54:38

PILOT- what's that? **. yeah yeah yeah.
CELL

08:55:07

CREW **.

08:55:17

PILOT captain oil. oil on the side of the ship. did you find any tanks holed? did you find any tanks with holes?

08:55:30

CAPT yeah yeah yeah—.

08:55:31

[sound similar to fog signal]

08:55:35

PILOT ** see about the oil.

08:55:51

CREW **.

08:55:55

CREW *what time is it?*

08:55:56

CREW *about two.*

08:56:05

2ndOFF **.

-UHF

08:56:07

CREW- okay.

UHF

08:56:21

CAPT- chief officer can you check which tank is it?

UHF

08:56:24

CHOFF- okay I will check which tank.

UHF

08:56:25

CAPT- can you check which tank is it?

UHF

08:57:15

PILOT-CELL oh okay well I'll just stand by until I give you my phone number.

08:57:23

PILOT sorry.

08:57:26

PILOT yeah captain can they find out is it a fuel tank er?

08:57:29

CAPT yeah yeah yeah I'm just checking.

08:57:30

PILOT can they— see if they can transfer it cause—.

08:57:32

CAPT yeah yeah yeah okay.

08:57:33

CAPT-UHF *chief officer when you find out inform me immediately. I will tell the chief engineer to transfer the fuel oil.*

08:57:46

PILOT anchor all right captain?

08:57:48

CAPT yeah yeah anchor all ready.

08:57:49

PILOT everything is all set five shackles in the water.

08:57:50

CAPT okay five shackles.

08:57:51

CAPT-PHONE *chief engineer the fuel tank is leaking at position number twenty seven. can you find out and transfer the oil to other tanks immediately? full stop...port forward...yes yes position number twenty seven. act immediately. quickly act quickly. ** came up already.*

08:58:22

CAPT *let's think about the whole process. evidence...we are all...Coast Guard definitely will have questions.*

08:58:29

CREW *the question is with heavy load at full helm and at high engine speed it would not have spilled over right?*

08:58:32

CREW *right right right.*

08:58:34

CAPT *what I said to him was not incorrect. this is the center of the bridge not of the channel. as the pilot you should know full well.*

08:58:36

CREW *yeah yeah yeah.*

08:58:41

CAPT *somebody is coming up.*

08:58:41

[sound similar to door closing]

08:58:47

PILOT-2 good morning captain. I will be uh pilot on board...um we need to rig ladder other side so uh the boat will be out of the *. so if you could have them rig the starboard side accommodation ladder and um you are now attempting to transfer *.

08:59:14

CAPT yeah yeah yeah.

08:59:15

PILOT-2 okay. so uh let me— where's the pilot?

08:59:18

CAPT **.

08:59:20

CAPT toilet toilet.

08:59:23

PILOT-2 okay um...

08:59:23

2ndOFF *** is already on board.*

-UHF

08:59:25

CAPT- *no no. rig the pilot ladder on the starboard side cargo hold position.*

UHF

08:59:29

2ndOFF *on the starboard side cargo hold position.*

-UHF

08:59:31

CAPT- *right right right.*

UHF

08:59:32

2ndOFF *okay okay on the starboard side cargo hold position.*

-UHF

08:59:32

PILOT-2 there will be oil cleanup vessels will be coming and Coast Guard and we will probably when we have visibility probably shift into south bay so but I am now pilot so I will try and get *. so ask to rig starboard side ladder.

09:00:02

CAPT yeah yeah uh uh.

09:00:04

PILOT-2 yeah okay.

09:00:09

PILOT- *traffic three seven.*

2-VHF

09:00:12

VTS ** traffic three seven go ahead.*

09:00:15

PILOT- *yeah I'm on the Cosco Busan here at anchorage seven. I'll be uh I'll be aboard for uh the duration.*

2-VHF

09:00:18

CAPT- *chief officer go and check which tank and do * right away.*

UHF

09:00:22

CHOFF-UHF *okay yes.*

09:00:23

VTS understand unit romeo and unit three seven aboard the Cosco Busan. is that correct over?

09:00:28

PILOT-2-VHF that's a roger.

09:00:31

VTS you traffic out.

09:00:34

CAPT-UHF *hey chief engineer...okay okay.*

09:01:04

CREW *to drop the anchor was right.*

09:02:07

[sound similar to knock on door]

09:02:08

PILOT-2-VHF John...@

09:02:08

PILOT yeah.

09:02:11

PILOT be out in a few minutes.

09:02:12

PILOT-2 okay.

09:02:18

PILOT-2 so oil boom people coming. uh boat is saying uh flow of oil now slowing down not so much so that's a good thing. so uh damage pretty severe.

09:02:38

PILOT yeah.

09:02:39

[sound similar to door closing]

09:02:39

PILOT @.

09:02:43

PILOT-2 you've joined my club.

09:02:44

PILOT yeah I'm gonna say I just uh hit the port side then * starboard side. yeah. I don't think I'm gonna beat this one.

09:02:53

PILOT-2 so the ah oil people are comin' they are going to boom it.

09:02:57

PILOT yeah * is there a hole?

09:03:03

PILOT-2 and when I came up the stuff was comin' out like a cow peeing on a flat rock so—.

09:03:12

PILOT yeah I just noticed that when we anchored * when I called them there's oil comin' out.

09:03:16

PILOT-2 so I checked in with traffic and probably uh we'll stay here and when we have visibility we'll probably shift into the south bay and then at some point and this is only my speculation I believe that this damage will have to be repaired here.

09:03:40

PILOT yeah.

09:03:41

PILOT-2 so maybe the ship will go to the back to the dock.

09:03:44

PILOT yeah uh I don't know so well just waitin' for people to start showin' up.

09:03:48

PILOT-2 yeah yeah.

09:03:49

PILOT thanks for coming in are you finishing or starting?

09:03:54

PILOT-2 well you know this is a curious thing because this morning I had the choice.

09:03:58

PILOT oh that's right oh yeah that's right are you back in already?

09:04:00

PILOT-2 **.

09:04:02

PILOT oh well I shouldn't have gone either. I'll show just just well you can't see it on here well if they could back this up. can you back this up captain? when I was—. you know getting all * set up.

09:04:16

PILOT-2 yeah.

09:04:17

PILOT I'm going here and I—. a little bit more a little more and...I checked with him before we left the dock on what was the center of the bridge and what was the pier and I mis—. it was a miscommunication and what I thought was the center was the pier.

09:04:41

PILOT-2 oh so there it was right in front of you.

09:04:43

PILOT well not quite I mean we glanced the southern end of it.

09:04:47

PILOT-2 yeah yeah we looked at it.

09:04:49

PILOT did it did it get into the concrete?

09:04:51

PILOT-2 umm no.

09:04:51

PILOT it just looked like wood. yeah see I thought that was the center. I came out and said oh here's the center I'm going # everything's fine and all a sudden I look up and there's this # tower there.

09:04:57

PILOT-2 ohh...yeah.

09:05:03

PILOT and that's the center there I was coming up playing for the flood had to hard over full ahead.

09:05:05

PILOT-2 uh-huh yeah.

09:05:09

PILOT just # up.

09:05:12

PILOT-2 so now now we'll just uh do what we need to do.

09:05:16

PILOT you're just supposed to chaperone?

09:05:19

PILOT-2 well I think it's—.

09:05:20

PILOT should we do this stupid *?

09:05:22

PILOT-2 do you have it?

09:05:23

PILOT yeah I have it. I always carry it. you can be my— my witness. but I don't know exactly how these work.

09:05:30

PILOT-2 well @ is on his way up.

09:05:32

PILOT I thought I saw @ down there...I'm afraid to look over there with all the oil.

09:05:44

? yeah.

09:05:49

[sound similar to door closing]

09:05:51

PILOT-3 good morning.

09:05:57

CAPT- *chief officer did he find it the black man?*

UHF

09:05:59

CHOFF- *found it found it. ** already disengaged.*

UHF

09:06:02

**CAPT-
UHF** *okay okay.*

09:06:07

PILOT ***.*

09:06:20

PILOT-2 *see if I can find out from the Coast Guard * Safety Office * plan.*

09:06:30

PILOT *I gotta do this stupid thing. have you ever done one of these? I know we have to do this. yeah I got a couple of them so.*

09:06:57

PILOT-2 ** give me the number for the MSO so I can find out what they have planned.*

09:07:08

? ****.*

09:07:24

PILOT-3 *ok so that that's the reactive strip right there.*

09:07:26

PILOT *now what do I do with that?*

09:07:28

PILOT-3 *** saliva *.*

09:07:31

PILOT ***.*

09:07:37

CREW ** probably will be another day.*

09:07:39

CREW *it will take that long?*

09:07:41

CREW *at least *.*

09:07:42

**PILOT-
2-CELL** *okay I'll give em a call and find out what their plan is. thank you...thank you.*

09:08:00

**2ndOFF
-UHF** *hello captain the ladder on the starboard side has been rigged.*

09:08:02

**CAPT-
UHF** *okay.*

09:08:04

**CAPT-
UHF** ***.*

09:08:09

**2ndOFF
-UHF** *okay.*

09:08:09

**PILOT-
2-CELL** *yeah this is the pilot on the Cosco Busan. I assume **.*

09:08:10

CAPT- **. **UHF**

09:08:13

2ndOFF **. **-UHF**

09:08:16

PILOT-3 * if they could rig a ladder on the other side for boats to come alongside.

09:08:20

CAPT yeah we are now ready. accommodation ladder is ready.

09:08:24

PILOT-3 thank you very much.

09:08:31

PILOT ** time?

09:08:35

PILOT-3 * it's ten after.

09:08:45

PILOT- yeah this is the pilot on the container ship Cosco Busan that allided with the Bay Bridge a while ago...no this is @ I'm
2-CELL the relief pilot and I'd like to know if you're sending a squad out or what your plan is and we've got oil cleanup people coming and I just want to—.

09:09:07

PILOT- hey uh we got a ladder rigged up on the starboard side. I didn't know where you guys were so uh.
3-CELL

09:09:10

PILOT- came out of a bunker tank on the port side forward and when we came alongside it was leaking in to the water. but
2-CELL the—. pretty good flow and though they have stemmed the flow by pumping it in to other tanks.

09:09:16

PILOT- ** alcohol test strip ** @.
3-CELL

09:09:39

PILOT- well they pumped enough of it so it's no longer coming through the hull.
2-CELL

09:09:49

PILOT- ummm well I you know I really couldn't say I uh but for you know an approximation you know **.
2-CELL

09:10:03

PILOT-3 it's time John.

09:10:07

CAPT *who got on board at what time? and who got on board at what time? write it down.*

09:10:11

PILOT-3 so I put this back in the—.

09:10:13

PILOT- I could ask the **.
2-CELL

09:10:14

PILOT this is just the alcohol test I had to take for Coast Guard policy. so I just *.

09:10:20

[seven seconds of unintelligible overlapping conversation]

09:10:27

PILOT oh I know. we can— you can attest that I **... put it back in here.

09:10:39

PILOT-3 yeah no you're doing everything right. ** of all people I don't need to tell you this.

09:10:44

PILOT oh yeah I already thought of it.

09:10:47

PILOT-3 do not talk about **.

09:10:49

PILOT- well the ship is going to be in need of major repairs. **.

2-CELL

09:10:53

PILOT sure it's a * hole.

09:10:59

CREW ** captain.

09:11:02

PILOT- uh well the damage to the bridge * didn't actually they they wiped the fendering off the cement but they didn't hit to the
2-CELL cement.

09:11:03

PILOT oh yeah * it's too late now.

09:11:26

PILOT- @. uh @ [phone number]...correct. my thought is that when the the visibility improves that probably move in to the
2-CELL south bay but my gut feeling is that the ship may need to might need to go back to the dock to discharge cargo. **. but
we saw something like this happen to a Maersk ship years ago **.

09:12:17

[twenty seconds of unintelligible Chinese conversation]

09:13:01

PILOT- okay. all right. I'm gonna call the uh spill response people right now to see when they're gonna get here. thank you.
2-CELL

09:13:28

PILOT-2 captain do you have any estimate of how much bunker went in the water?

09:13:33

CAPT yeah I will check.

09:13:35

PILOT-2 yeah.

09:13:47

CAPT- chief engineer do you know how much oil originally there...ah...okay okay okay...ah good good good good. time...what
PHONE time did we tell the chief engineer?

09:14:05

CAPT tell the chief engineer to transfer the oil?

09:14:07

[sound similar to satellite telephone ringing]

09:14:10

CREW *.

09:14:14

CAPT-SAT hello. hello. yeah this is Cosco Busan master yeah. yeah I will send messages yeah.

09:14:25

PILOT uh yeah I called traffic first and then I called @ and then I called *.

09:14:33

CAPT-SAT no we just dropped anchor here **. ***, * oil spill I dropped anchor in anchorage near the bridge. ** investigation.

09:14:36

PILOT but * oh no no no ** it was here and I had it hard over. and then he said oh no these are the lights for the center of the bridge. these red things. I know I mean I should know this **. so what'd they say ** who are you talking to at the MSO. ***.

09:15:22

? **.

09:15:27

CAPT-SAT yes sir the damage to the ship is forward but how much oil spilled I cannot cannot give you the feedback. position anchorage is.

09:15:40

PILOT *.

09:15:42

CAPT-SAT yeah yeah it is uh port side port port tank. yeah yeah yeah...now now now no fog. no fog. many many so I already check * transfer oil to another tank...yeah yeah yeah now already...yeah yeah now...uh I don't cannot exactly. **. the bridge is thirty seven point two longitude thirty seven ** one two two degrees twenty two minutes west...yeah yeah ***. * nothing generator fuel oil only the *. * yeah yeah...uh yes uh local time is nine fifteen. nine seventeen in the morning...yeah at the moment local time eight thirty eight thirty it happened.

09:16:16

PILOT-2-CELL yes I need to talk to oil cleanup people...@. I'm with the San Francisco Bar Pilots...correct...yeah...@ [phone number]...uh correct...I have a spill and need to talk to spill response people...anchorage seven *...okay

09:17:50

CAPT-SAT ***, no no yeah. uh I think * notified Coast Guard already.

09:18:14

CAPT-SAT no no nothing...yeah yeah yeah.

09:18:38

PILOT-3 I was talking with @. he was watching on AIS. no he's on a ship in Oakland. he says where we're anchored we'll be around *.

09:18:52

PILOT-2-CELL hello. that's correct...okay. I'm on the container ship Cosco Busan...and this vessel about one hour ago allided with the tower on the Bay Bridge...the hull is open and bunker oil in the water...could be ten barrels...I'm not I don't know but the flow has been stopped by transfer.

09:19:02

PILOT-3 he's just concerned about it.

TIME and
Source

Communication

Radar Imagery

09:19:04

PILOT yeah. yeah.

09:19:06

PILOT-3 maybe we'll have to move to the west a little bit more.

09:19:15

PILOT it shows a fifty two feet we're between a fif— we're right yeah on the chart we're between a fifty two and a forty eight and...oh if it swings.

09:19:31

PILOT-3 on the ebb I think * swing.

09:19:45

? I wonder if **.

09:19:46

PILOT you got a fathometer? fathometer? yup depth meter.

09:19:49

CAPT uh yes.

09:19:52

PILOT is that meters?

09:19:54

CREW it's meters.

09:19:57

PILOT we got fourteen meters below us right now.

09:19:59

PILOT-3 do have the values? do you have overlay of soundings on this electronic chart? is there— do you have overlay of the soundings on this? is there another page where you can get the soundings?

09:20:11

PILOT-2-CELL I believe my office has contacted the spill response center.

09:20:14

CAPT this is another kind *. * depth chart. okay. this is a repeater.

09:20:21

PILOT-3 okay because another pilot that has an AIS that I was just speaking to he is a little bit concerned about the ebb tide and that thirty seven foot spot.

09:20:29

CAPT uh huh.

09:20:33

PILOT-3 um. so in this position if we turn you know could go aground. you know I think that the ship should be more out this way is what he's saying and it would appear by looking at this chart that it would be safer if we came over *.

09:20:34

PILOT-2-CELL okay yeah I'll uh yes get in touch with * information.

09:20:56

CAPT yeah yeah okay. here it will be safer.

09:20:57

PILOT-3 I think so captain you know because. I think that you should but uh this is the pilot of record so I'll just make him aware of that and he would direct.

09:21:00

CAPT shifting? should I shift *. uh okay anchor engine are ready.

09:21:10

PILOT-2-CELL no it's a container ship.

09:21:14

CAPT-UHF chief officer is at the bow waiting for further instructions.

09:21:18

CHOFF-UHF we will still get underway?

09:21:20

CAPT-UHF pending further instructions.

09:21:22

PILOT-2-CELL COS China Ocean Shipping. ***.

09:21:22

CAPT-UHF where are you chief officer? where are you now?

09:21:28

CHOFF-UHF didn't you ask me to find the position?

09:21:32

CAPT-UHF okay okay. the chief engineer is finishing transferring the oil.

09:21:35

CHOFF-UHF yes I can see the oil is not leaking as much.

09:21:39

CAPT-UHF okay okay can you see if it's above or underwater?

09:21:45

CHOFF-UHF ah it is above the water.

09:21:46

CAPT-UHF above the water by approximately how much?

09:21:48

CHOFF-UHF approximately ***.

09:21:54

PILOT-2-CELL yes @ on the Cosco Busan. can you take a look and see if that spill response vessel has departed?

09:22:03

CAPT-UHF correct. putting ** down?

09:22:05

PILOT-3 just now @. just now.

09:22:14

PILOT-2-CELL no it's been stopped. no we evidently just heard that that thing has checked in. we may need to shift the ship due to its draft and uh falling tide. I'll let you know...okay well thank you.

09:22:44

PILOT-2 so we're uh.

09:22:45

PILOT-3 so @ uh I was speaking to @ watched the whole thing on his uh ECDIS setup and he goes I'm concerned *. * on their electronic chart they don't have the overlay of the soundings. this is what **. so I think we'd be a lot better off just dragging it south and to the west if you could do it if you know what I mean. because if she swings you could hang her up.

09:23:23

PILOT-2 well slack water is about eleven * ten thirty slack here so we've got another hour. let's uh wait a bit and see if *.

09:23:33

PILOT-3 I just telling the captain I'm just trying to pump information. I'll do whatever you want.

09:23:36

PILOT-2 sure yeah I think we can uh we've got some time and as we uh.

09:23:44

PILOT-3 did you talk to the boat chief on the handheld radio?

09:23:47

PILOT-2 no.

09:23:48

PILOT-3 you want that stuff to come out?

09:23:51

PILOT-2 it's sitting on the seat of my truck. what's our heading now?

09:24:00

CREW three zero one.

09:24:03

PILOT-2 yeah three zero one so we're pointing at uh Angel Island so we still have flood current and when when uh the ship starts to swing. when the ebb current starts uh we may be in a little too shallow water but we have about one hour or more.

09:24:17

CAPT um huh um huh okay. oh yeah. uh okay heave anchor now? heaving anchor shift?

09:24:35

PILOT-2 not yet not yet. I would uh prefer to wait a while. when we start to change heading that will mean current is starting to change and how much chain have we got out now?

09:24:48

CAPT five.

09:24:49

PILOT-2 five. we'll maybe if we start backing. the oil should all be in the south bay.

09:24:54

[sound similar to sat phone]

09:24:58

CAPT- hello? hello? yeah this is captain Busan...yeah yeah yeah. ** no no no I have no time talking ** I have Coast Guard
SAT and uh AIS and pilot on board now...yeah yeah yeah Coast Guard on board. yes. uh *. okay okay. I have *. okay okay.

09:26:01

PILOT-2 so you heard that spill responder check in?

09:26:04

PILOT-3 what I heard was them telling the Henry Brusco **. they're on thirteen.

09:26:19

**CAPT-
UHF** okay how big is the hole?

09:26:21

PILOT-2 I don't know what they'll do. if they're gonna boom it or?

09:26:25

**CAPT-
UHF** how big is the hole?

09:26:27

PILOT-3 next to the beach that's number one.

09:26:28

**CHOFF-
UHF** ***.

09:26:42

[sound similar to fog signal]

09:27:02

**CHOFF-
UHF** captain from position seventeen to position thirty one there is a— there is a huge hole.

09:27:08

**CAPT-
UHF** okay position seventeen to position thirty one right?

09:27:10

**PILOT-
2-VHF** spill response vessel from Richmond three seven calling on thirteen.

09:27:24

PILOT-2 I called ** have him check in. *.

09:27:30

PILOT yeah they told me they were sending him right away. when I called and told them *.

09:27:37

? *.

09:27:38

PILOT yeah. ** anchorage nine *.

09:27:43

PILOT-2 we were sitting uh kind of looking at uh Angel Island *. * back the ship up.

09:27:59

[thirty seconds unintelligible conversation]

09:28:29

PILOT-2 is that the anchorage off of—.

09:28:31

PILOT Oleum.

09:28:33

[sixteen seconds of unintelligible conversation]

09:28:52

PILOT oh yeah yeah yeah. maybe I should call *. * stay here or shift.

09:29:02

CAPT **.

09:29:05

PILOT *. * or traffic.

09:29:07

PILOT-3 you don't want to be here.

09:29:10

PILOT yeah yeah but I just wondered if they want to eventually *.

09:29:14

CAPT **.

09:29:21

[ten seconds of unintelligible conversation]

09:29:33

[sound similar to satellite phone ringing]

09:29:41

CAPT-SAT hello? we are being connected to *. I...watch officer. I **.

09:30:10

[sixty seconds of unintelligible overlapping conversations]

17:30:51

[sound of high pitched tone lasting for twenty nine seconds]

09:31:04

PILOT well I know you got Sequoia.

09:31:07

[twenty seconds of unintelligible conversation]

09:31:32

PILOT no. yeah. * when I went by. no that's bad I'll take him on the starboard side. I remember when I was working red stack. *** bringing the * barge into Redwood City * lumber barge I mean there was so much wood on the top of that barge you wouldn't even know it was a cement barge.

09:32:15

CAPT * Coast Guard **.

09:32:20

PILOT-3 I don't see **.

09:32:28

[fifteen seconds of unintelligible conversation]

09:32:32

PILOT-3 yeah they don't bother to say anything **.

09:32:36

CREW sir can you call Coast Guard **. QI.

09:32:41

PILOT-3 uh Captain *?

09:32:42

PILOT @.

09:32:47

PILOT Coast Guard *. since you've been handling the Coast Guard's part.

09:32:50

CAPT **.

09:32:52

PILOT-2-CELL yeah three seven go ahead...with with the who?...yeah I'm here I can hear you...okay I see you— okay I see your name there...oh okay the ship was outbound from Oakland bound for sea and uh fog conditions got severe and the ship approached the delta echo span of the bridge. the port bow *.

09:33:24

[sound similar to cell phone ringing]

09:33:40

PILOT-2-CELL hello? yeah...we think so yeah...well we're— I'm trying to contact everybody I've got someone on the other phone here that I'm talking to right now from the O'Brien group or something so...good good that's my belief yes. they they transferred uh— it's a bunker tank that was pierced and they transferred uh the fuel out of it. so the leaking stopped...well it happened— the allision occurred with the delta tower of the Bay Bridge...correct...and then the vessel proceeded north into anchorage seven about half a mile away and anchored and we are currently in anchorage seven...that is correct. thirteen and fourteen...okay and uh it may be necessary to uh slightly move the ship into a little deeper water as the tide turns. so I'd like your boom boats to be in touch with me before they actually start putting stuff in the water.

09:35:18

PILOT-3 at some point I think you have to shift the ship out of this anchorage but not until the— not with the fog. They'll probably direct us down into the uh— because this is a temporary anchorage. Anchorage number seven is a twelve hour * stay here but I think you'll end up down here and then make the visit to the shipyard here probably.

09:35:21

CAPT now shifting? okay.

09:36:07

PILOT-2-CELL correct...no...what is an MSDS?...oh I could probably find out.

09:36:24

CAPT are you a pilot *?

09:36:26

PILOT-3 yeah I'm a pilot captain. But I just had finished my work. I was in the office when this happened. So the best thing is to come and help other pilots help the ship.

09:36:28

CAPT uh-huh uh-huh.

09:36:36

PILOT-2-CELL okay you say.

09:36:38

CAPT you've notified the Coast Guard already.

09:36:40

PILOT-3 our pilot right away our port agent our head man called the head man from the Coast Guard.

09:36:42

PILOT-2-CELL well you should talk to the agent...correct...did you say air assessment.

09:36:44

CAPT does this mean * notified the Coast Guard already.

09:36:45

PILOT I called them too.

09:36:48

PILOT-3 well @ called @ right you know.

09:36:50

PILOT I don't know yeah but they told me @ had already. I called I called **.

09:36:55

PILOT-3 the captain is concerned * compliance with make all these calls but he's talked to his agent. You know I think everybody who needs to be notified has been notified.

09:37:07

CAPT I notified Coast Guard but the agent told me *.

09:37:10

PILOT oh yeah we notified the Coast Guard. I notified them right away. they were the first people right after it happened before we— even before we anchored I called them. yeah right after we— I called them on the radio and told them.

09:37:20

PILOT-2-CELL maybe quarter mile. I mean I'm you know a half a mile from Treasure Island and I can't see it.

09:37:26

PILOT better than a cell phone call.

09:37:29

PILOT-3 * it's better than not making the call.

09:37:35

PILOT-2 okay thank you. no uh have you still got this guy on the phone?

09:37:40

PILOT-2-CELL okay now what can I tell you?...well the hole is above the water and it's at the turn of the hull on the port side and the hull has indented about ten feet above the water * ten feet and it extends down the side of the ship maybe a hundred feet. that's where it was. yes...say that again. no I'm with the San Francisco Bar pilots...that is correct...that is correct. the delta tower.

09:38:10

[sound similar to cell phone ringing]

09:38:15

PILOT-3-CELL yeah should he come down or should he wait? well I guess the Coast Guard gonna send some people out. uh I guess I don't know. would you recommend that he get off? he did one of those little strip test things that we have but you got the guy coming from—. say that again? okay well the Coast Guard can come and interview him at *. yeah no it's easier to apologize than ask permission. alright we'll head down there. you down there? okay ** it's not as much. we'll see you shortly.

09:39:11

PILOT-3 he says it's *. it's easier to apologize than ask permission. he's got the tester coming *.

09:39:26

PILOT-3 comin up on the starboard *.

09:39:32

[eight seconds of unintelligible conversation]

09:39:40

PILOT-2-CELL okay well I'll be here...first name @ last name @...no. after. we'll be here if you need us. call us back.

09:40:14

CREW **.

09:40:17

PILOT-3 so @ called. the boat's right here. he recommended that we just—. yeah.

09:40:23

PILOT *.

09:40:56

[fourteen second unintelligible conversation]

09:41:57

PILOT @ is still here.

09:42:00

PILOT-3 okay.

09:42:03

PILOT **.

09:42:07

[sound similar to cell phone ringing]

09:42:11

PILOT-3-CELL @ we're uh just collecting our stuff...okay. all right. * see ya.

09:42:32

PILOT-3 we gotta go up there on the other side.

09:42:35

PILOT where's the captain?

09:42:39

PILOT-3 captain? **.

09:42:44

PILOT yeah captain I have to go get tested. *.

09:42:51

PILOT-3 @ I could be back out in ten minutes if you want me.

09:42:54

PILOT-2 okay. if anybody is out at the dock and is coming back here could they grab my coat and my radio.

09:43:03

PILOT you want a radio. I got plenty of them.

09:43:05

PILOT-2 no.

09:43:06

PILOT-3 give him a handheld.

09:43:07

PILOT yeah I got three of them *. you can just stick it in the mailbox.

09:43:09

PILOT-2 okay.

09:43:13

PILOT-3 you want your float coat?

09:43:15

PILOT-2 naw not really.

09:43:18

PILOT-2 so captain uh spill response people boom boat people at this point we should as visibility is increasing I will check with Coast Guard and when we can see the Bay Bridge my recommendation is that we move in to south bay because this isn't a good place to be anchored and Coast Guard people will be coming out to look at the bridge look at the hull and I don't know what else. so we'll just deal with this as it comes.

09:43:19

[sound similar to door closing]

09:44:10

CAPT *where is the Chief Engineer? how is the oil situation?*

09:44:23

CAPT okay.

09:44:26

[thirteen seconds of unintelligible Chinese conversation]

09:44:34

? turn the ** off.

09:44:37

PILOT-2 *** didn't really check it out.

09:44:41

CAPT **.

09:45:12

VTS unit tango on board this ship at anchor nine preparing to get under way for Redwood City. also there's report debris and oil in the water from YBI San Francisco pier forty transit the area with caution over.

09:46:10

[sound similar to bridge phone]

09:46:11

**CAPT-
PHONE** *hello hello? ***...okay okay okay... ** okay okay okay.*

09:46:45

CAPT *have we reached *?*

09:46:49

**CAPT-
UHF** *take a look and see if the side tank is still leaking?.*

09:46:51

**CHENG -
UHF** *the side tank as well as auxiliary tank are still leaking.*

09:46:54

CREW *okay okay.*

09:46:59

CREW ****.*

09:47:01

CREW *the front tank is not leaking. the fourth tank is.*

09:47:12

CAPT *the fourth tank is right?*

09:47:28

[sound similar to door closing]

09:47:32

CREW **** was written down.*

09:47:37

[fifteen seconds of unintelligible Chinese conversation]

09:47:47

**CREW-
UHF** ***.*

09:48:58

[sound similar to satellite phone ringing]

09:49:04

**CAPT-
SAT** *hello hello yeah **. ** pilot to the Coast Guard...I did already...yes...** from number four...*** okay okay...not yet only Coast Guard *** another two pilot is coming...*** transfer the oil from the tank to another...yeah yeah ** yeah. we try to transfer it *...yes yes above the water about two and a half meter about...**.*

09:51:58

VTS *unit three seven traffic.*

09:52:00

**PILOT-2-
VHF** *three seven go ahead.*

09:52:01

**CREW-
UHF** *captain.*

09:52:02

**CAPT-
UHF** *what?*

09:52:04

**CREW-
UHF** *the Coast Guard cutter * approaching.*

09:52:06

**PILOT-2-
VHF** *three seven *.*

09:52:07

**CAPT-
UHF** *that is often seen.*

09:52:09

**CREW-
UHF** *I know I know we'll bring it over in a minute.*

09:52:11

**PILOT-2-
VHF** traffic three seven.

09:52:13

**CAPT-
UHF** *okay.*

09:52:14

VTS roger three seven just wanted to inform you the Coast Guard boarding team will be boarding * over.

09:52:19

**PILOT-2-
VHF** okay thank you.

09:52:20

CREW *number five number five.*

09:52:29

CAPT **.

09:52:37

[sound similar to satellite phone ringing]

09:52:42

**CAPT-
SAT** hello hello? hello hello? yeah yeah the Coast Guard *...uh-huh...uh-huh...yeah now is uh **...yeah I cannot I cannot ** try to transfer the oil from the tank to another after ** something **...yeah yeah the transfer. trying to transfer... **...we just dropped the anchor **.

09:54:37

CAPT ***.

09:54:41

PILOT-2 so captain uh Coast Guard goes down the gateway maybe lower gangway. maybe they can **.

09:54:43

CAPT okay okay.

09:54:48

**CAPT-
UHF** *second engineer take a look and see if the calculation is correct.*

09:54:50

**PILOT-2-
CELL** three seven go ahead...yeah.

09:54:52

**CREW-
UHF** **.

09:55:00

[sound similar to cell phone ringing]

09:55:05

**PILOT-2-
CELL** I'd say a little bit. hang on a second here. I got the Coast Guard ***.

09:55:11

**PILOT-2-
CELL** hello? no I haven't heard anything and I'm still waiting for the Coast Guard to tell me that it's gonna be okay to shift and all of a sudden I'm losing the city here...no I'm not at all.

09:55:40

CREW **.

09:55:45

PILOT-2-CELL okay I'll let you know when I hear from the Coast Guard...here I am go ahead... well you know it's on the tide and the tide was flooding so the oil that came out is now down in the south bay. there is a sheen around the vessel and we are uh almost at slack water so the machine is sitting here and the oil response people told me that they're going to send boom boats but I need to move this ship out of this anchorage down into the south bay so we shouldn't boom it until uh and to what value the booming is going to be I don't know.

09:56:06

CREW-UHF *hey chief engineer chief engineer. Coast Guard **.*

09:56:37

[sound similar to cell phone ringing]

09:56:40

PILOT-2-CELL um the oil spill response people hang on.

09:56:44

PILOT-2-CELL hello...yeah...so there's nothing in the northwest corner now? hang on...okay...and what vessel is that?...okay...yeah right yeah. okay well I'm kinda losing the city again here so uh I might wait a little bit uh for the uh well. and at this point to there's no requirement that I have an escort here?

09:57:46

CREW *has not.*

09:58:03

PILOT-2-CELL okay. well I think they're on their way up now...thank you. bye.

09:58:16

CREW *where do things stand in the transfer of oil?*

09:58:18

CREW *take a look at the bow **.*

09:58:19

PILOT-2-CELL yeah here I am again. that was the Coast Guard. the Coast Guard has given me permission to move...you know the oil recovery people? I really don't know...to the northwest corner by anchorage nine buoy...

09:58:56

PILOT-2 let's standby to heave anchor, captain.

09:58:58

CAPT *okay chief engineer **.*

09:58:59

PILOT-2-CELL say that again.

09:59:03

CAPT-UHF *chief engineer get ready to heave anchor. tell them at least ** heave anchor. I know I know. tell him we ** ready to heave anchor.*

09:59:05

PILOT-2-CELL ...yeah my cell phone's @ [phone number]. okay buh-bye.

09:59:22

CAPT-UHF *uh chief engineer chief engineer. get ready to heave anchor. tell him ** get ready to heave anchor.*

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09:59:28

**CHENG-
UHF** **.

09:59:39

PILOT-2 okay heave anchor now.

09:59:40

CAPT uh okay Coast Guard * chief mate **.

09:59:50

**CAPT-
UHF** *get ready to heave anchor.*

09:59:54

**CHENG -
UHF** *get ready to heave anchor.*

09:59:55

**CAPT-
UHF** *ready and heave anchor. when you do let me know. when you heave anchor let me know.*

10:00:02

**CHENG-
UHF** *okay *.*

10:00:13

**PILOT-2-
VHF** traffic three seven uh heaving anchor anchorage seven shifting to anchorage nine.

10:00:22

VTS three seven preparing to depart anchorage seven for anchorage nine deep draft forty feet four inches and what is your Bay Bridge span intentions over?

10:00:32

**PILOT-2-
VHF** alpha bravo alpha bravo.

10:00:50

**CREW-
UHF** ***.

10:01:06

**CHENG -
UHF** *heave anchor heave anchor.*

10:01:23

**PILOT-2-
CELL** ** starboard side northwest corner of anchorage nine.

10:01:38

[sound similar to door closing]

10:02:12

**CREW-
UHF** *bridge **.*

10:02:14

**CAPT-
UHF** *good heave anchor.*

10:02:16

**CHENG -
UHF** ***.

10:02:18

**CAPT-
UHF** *what is it?*

10:02:20

**CHENG -
UHF** ***.

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10:02:26
CAPT *tell the engineroom.*

10:02:40
CAPT-UHF *get ready to heave anchor **. hey get ready to heave anchor **.*

10:02:53
CAPT *we're heaving anchor now.*

10:03:07
[seven second unintelligible Chinese conversation]

10:03:22
CREW ****.*

10:04:29
PILOT-2 *captain we will go to uh...anchorage nine.*

10:04:37
CAPT *anchorage nine.*

10:04:39
PILOT-2 *here's the buoy. *** half mile from the buoy.*

10:05:11
? ***.*

10:05:17
CREW *what time is it now?*

10:05:21
CREW ****.*

10:05:22
CHENG - UHF *captain captain right now ** slow about a bit over one shackle.*

10:05:26
CAPT-UHF *still a bit over one shackle?*

10:05:28
CHENG - UHF *it's a little bit over **.*

10:05:31
CAPT *okay. * three seconds three seconds very slowly.*

10:05:43
CREW-UHF *captain **.*

10:06:02
CREW-UHF ***.*

10:06:07
CREW-UHF **.*

10:06:15
CREW *now it's smaller.*

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10:06:25
CHENG-UHF *right now it is ** deck.*

10:06:27
CAPT-UHF *okay the first one.*

10:06:34
CREW ***.*

10:06:40
CREW *like today's visibility.*

10:06:52
CREW ***.*

10:06:55
CREW ***.*

10:07:29
[thirty second unintelligible Chinese conversation]

10:08:20
CAPT-UHF *uhhh what is the anchor chain reading?*

10:08:24
CREW *at the time when the pilot **?*

10:08:27
CREW-UHF *anchor chain has been adjusted. then what?*

10:09:09
PILOT-2 *how's the chain now captain?*

10:09:12
CAPT *it's three shackles.*

10:09:13
PILOT-2 *still three?*

10:09:14
CAPT *yeah **.*

10:09:24
CAPT-UHF *direction (angle?) of anchor chain? chief engineer chief engineer where is the anchor chain **?*

10:09:32
CHENG-UHF **.*

10:09:34
CAPT-UHF *where is the anchor chain?*

10:09:35
CHENG-UHF ***.*

10:09:37
CAPT-UHF *okay.*

10:09:43

PILOT-2 the anchor's around the bow.

10:09:49

CHENG-UHF *captain right now it is two shackles at water level.*

10:09:51

CAPT okay two shackles.

10:09:55

CREW **.

10:10:03

PILOT-2 and it's starboard anchor?

10:10:05

CAPT yes.

10:10:34

CAPT *like chief engineer **.*

10:11:27

CHENG-UHF *captain right now it is two shackles ** same direction *.*

10:11:31

CAPT okay two shackles left.

10:11:34

CAPT-UHF *keep heaving.*

10:11:36

CHENG-UHF *okay copy.*

10:12:17

CREW *.

10:12:26

CREW *at the bow can it be seen?*

10:12:30

CREW ** can be seen.

10:12:36

CREW *now visibility is a bit better.*

10:12:39

PILOT-2 can we use bow thrusters captain?

10:12:40

CAPT yeah yes both sides are ready.

10:12:57

CHENG-UHF *captain right now the anchor chain reading is one shackle at water level ***.*

10:13:02

CAPT okay standing by one shackle left.

10:13:06
PILOT-2 tell me when up and down.

10:13:08
CAPT okay.

10:13:10
CAPT-UHF *when the anchor chain is vertical *** from the water line.*

10:13:12
PILOT-2 hard port rudder.

10:13:13
CREW hard port.

10:13:13
CHENG-UHF *okay good.*

10:13:22
CREW wheel hard port sir.

10:13:39
PILOT-2 wheel half to port.

10:13:50
CREW wheel is half port now.

10:13:52
PILOT-2 very well.

10:14:46
[ten seconds of unintelligible Chinese conversation]

10:15:25
[sound similar to cell phone ringing]

10:15:29
PILOT-2-CELL hello? yeah...okay...I am I'm just uh anchor is just about up now. * anchorage nine...uh **.

10:15:46
CHENG-UHF ***.

10:15:48
CAPT-UHF *okay.*

10:15:52
PILOT-2 slow ahead.

10:15:54
CREW slow ahead.

10:15:55
[sound similar to engine order telegraph]

10:16:00
CREW the wheel is half port.

10:16:11

PILOT-2-CELL at this point I don't know. I witnessed—. I was not the pilot on board. ** captain and ***. ***. pretty light grade stuff...

10:17:05

CREW mister pilot the wheel is half port.

10:17:10

PILOT-2-CELL ...okay...probably in an hour. thank you.

10:17:12

CAPT-PHONE hello? right now it's not known ***.

10:17:22

CREW wheel is half port sir.

10:17:31

CAPT-PHONE the chief engineer is heaving anchor. the chief engineer is heaving anchor. I'll let you know.

10:17:55

CREW-UHF ***.

10:17:58

CAPT-UHF okay okay.

10:18:05

CREW **.

10:18:22

USCG-IMD is this the captain?

10:18:24

CAPT yeah.

10:18:25

USCG-IMD @ US Coast Guard.

10:18:27

CAPT yeah.

10:18:28

USCG-IMD uh I need to get a contact number for your oil spill response organization.

10:18:32

CAPT yeah yeah.

10:18:39

CAPT **.

10:18:43

USCG-IMD so MSRC is your uh. have you called them?

10:18:51

CAPT yeah yeah I talked to them.

10:18:52

USCG-IMD do you have a policy number? number?

10:18:59

CAPT *.

10:19:00

USCG-IMD that's for the telephone for your um like you know like a policy number you know for MSRC.

10:19:11

CAPT no no I don't know this number.

10:19:12

USCG-IMD you don't know that?

10:19:13

CAPT no.

10:19:13

USCG-IMD your agent?

10:19:13

CAPT uh my agent is uh uh not *.

10:19:20

USCG-IMD do you know who uh the company rep is that's local rep?

10:19:27

CAPT uh agent?

10:19:28

USCG-IMD yeah agent.

10:19:30

CAPT yeah yeah is @.

10:19:32

USCG-IMD what is it?

10:19:33

CAPT it's @.

10:19:33

USCG-IMD @? do you know his number?

10:19:37

CAPT yes sir. @.

10:19:40

USCG-IMD **.

10:19:42

CAPT yeah yeah. **.

10:19:44

[twenty six seconds of unintelligible Chinese conversation]

10:20:14

VTS three seven Cosco Busan making his way from anchorage seven to anchorage nine over.

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10:20:18

VTS copy three seven.

10:20:32

CAPT **.

10:22:08

CAPT *telephone* **.

10:22:18

PILOT-2 let's go half ahead now.

10:22:20

CREW half ahead.

10:22:23

[sound similar to engine order telegraph]

10:22:36

PILOT-2 midship.

10:22:37

CREW midship.

10:22:40

CREW half ahead.

10:22:41

PILOT-2 uh very well.

10:22:46

CREW midship. midship sir.

10:22:49

PILOT-2 very well.

10:23:00

[sound similar to door closing]

10:23:01

**USCG-
IMD** when you get a chance I need you to fill out this form. just stuff like what happened and uh fax it to that number.

10:23:09

CAPT **.

10:23:14

**USCG-
IMD** yeah that's our office. and uh * call that number.

10:23:22

CAPT no that's that *.

10:23:25

**USCG-
IMD** we need to get your uh MSRC out here. we need to boom off and start cleanup. but uh we're trying to figure out how much— how much went in the water.

10:23:39

CAPT **.

10:23:42

**USCG-
IMD** that's that's what we're trying to do yeah.

10:23:43

CAPT yeah yeah * the transfer.

10:23:46

**USCG-
IMD** once transfer is complete then we'll know right?

10:23:48

CAPT yeah yeah **.

10:23:52

TERN Cosco Busan Cosco Busan Coast Guard Cutter Tern one three over.

10:23:55

**USCG-
IMD** how long do you think it'll be before transfer is complete?

10:23:58

CAPT uh let me call the—. I sent the chief engineer the number for *. * not leaking.

10:24:01

PILOT-2 port ten.

10:24:02

CREW port ten.

10:24:05

**PILOT-2-
VHF** three seven on the Cosco Busan over.

10:24:11

CREW port ten.

10:24:17

CAPT ***. started leaking now. yeah * started leaking. **.

10:24:21

**USCG-
IMD** okay...okay.

10:24:23

PILOT-2 midship.

10:24:24

CREW midship.

10:24:26

CAPT are you trying to prevent **?

10:24:27

**USCG-
IMD** it's just the **.

10:24:28

CREW midship sir.

10:24:31

**USCG-
IMD** captain do you have...your uh document?

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10:24:38

CAPT yeah.

10:24:39

[twenty four second unintelligible conversation between captain and Coast Guard IMD]

10:25:04

CAPT Coast Guard ** my document.

10:25:19

[sound similar to door closing]

10:25:31

VTS three seven traffic.

10:25:36

**PILOT-2-
VHF** three seven *.

10:25:42

CREW **.

10:25:45

PILOT-2 let's go slow ahead now.

10:25:50

[sound similar to engine order telegraph]

10:26:02

CREW slow ahead now.

10:26:03

PILOT-2 very well.

10:26:13

PILOT-2 can you bring this up *?

10:26:25

**USCG-
IMD** **.

10:26:29

PILOT-2 steady as she goes now.

10:26:31

CREW yes sir steady.

10:26:33

PILOT-2 one seven zero.

10:26:33

CREW one seven zero.

10:26:45

CREW one seven zero sir.

10:26:47

PILOT-2 steady.

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10:27:21
PILOT-2 after the bridge.

10:27:24
**USCG-
IMD** uh and—.

10:27:26
[sound similar to cell phone ringing]

10:27:29
**USCG-
IMD-
CELL** Petty Officer @...what's that? yeah...yeah. *...roger that...**.

10:28:03
PILOT-2 one six five.

10:28:04
CREW one six five.

10:28:07
**USCG-
IMD-
CELL** all right no problem chief. right now I have two POB. it's uh myself and uh MST three * yes...and right now...yes they should have been...all right. right...no we just uh all right.

10:28:55
CREW course one six five sir.

10:28:57
PILOT-2 one six zero.

10:28:58
CREW one six zero.

10:29:01
**USCG-
IMD-
CELL** all right.

10:29:08
**USCG-
IMD** 'scuse me captain? captain how many— how many— how many crew do you have on board?

10:29:14
CAPT uh twenty four.

10:29:14
**USCG-
IMD-
CELL** twenty four and plus one for the captain. yeah twenty five people...** the pilot plus one so twenty five. all right *.

10:30:01
CREW course is one six zero sir.

10:30:04
PILOT-2 steady.

10:30:05
CREW steady.

10:30:33
**USCG-
IMD** where do they have you going back? do you know? do you know where you're going now?

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10:30:38

CAPT **.

10:30:41

**USCG-
IMD** okay.

10:30:47

PILOT-2 one five five.

10:30:48

CREW one five five.

10:30:50

**USCG-
IMD** excuse me captain I know you're a little busy right now but uh * it's a witness statement. * fill it out at your earliest convenience and fax it over to our office.

10:30:58

CAPT * okay. **.

10:31:02

**USCG-
IMD** yeah * we understand *. * the pilot that was on board during it he already left?

10:31:09

CAPT yeah.

10:31:10

**USCG-
IMD** okay so I'll just uh—. I'll contact * captain. thank you.

10:31:29

**USCG-
IMD** captain I'm going to back and talk to the chief mate if I can. he'll be doing all the soundings. we're going to have two more people come on board. uh a marine inspector uh to investigate the damage. okay captain? sorry for the situation.

10:31:32

CREW course one ** sir.

10:31:35

CAPT steady.

10:31:36

CREW steady.

10:31:52

CAPT **.

10:31:54

**USCG-
IMD** I didn't have one *.

10:31:56

CAPT **.

10:31:58

**USCG-
IMD** I think it's probably down there.

10:31:59

CAPT yeah yeah yeah.

10:32:00
USCG-IMD okay thank you captain.

10:32:00
CAPT here here here that— that's the toilet.

10:32:08
[sound similar to door closing]

10:33:04
PILOT-2 ** is that what that is?

10:33:07
[fifteen seconds of unintelligible conversation]

10:33:22
CREW course is one **.

10:33:23
PILOT-2 very well one five...one five three steady.

10:33:30
CREW ** three.

10:34:32
[ten seconds of unintelligible Chinese conversation]

10:34:42
PILOT-2 one five zero.

10:34:43
CREW one five zero.

10:34:44
CAPT let's go dead slow ahead gentlemen.

10:34:46
CREW okay dead slow ahead.

10:34:47
[ten seconds of unintelligible Chinese conversation]

10:34:49
[sound similar to engine order telegraph]

10:35:05
CREW engine now dead slow ahead.

10:35:07
PILOT-2 very well.

10:35:26
CREW course one seven zero sir.

10:35:30
PILOT-2 steady.

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10:35:31
CREW steady.

10:36:02
CAPT-UHF *chief engineer.*

10:36:03
CHENG-UHF *um-hum.*

10:36:03
CAPT-UHF *do you know what the phone number is for their London headquarters?*

10:36:05
CHENG-UHF *their London headquarters? whom are you talking about?*

10:36:09
CAPT MGM. FMGM **.

10:36:14
CREW ***.

10:36:32
CAPT **.

10:36:35
PILOT-2 one four five.

10:36:36
CREW one four five.

10:36:53
[fifteen seconds of unintelligible Chinese conversation]

10:37:32
PILOT-2 one four zero.

10:37:33
CREW one four zero.

10:37:53
PILOT-2 one three five.

10:37:54
CREW one three five.

10:38:01
CAPT-SAT hello ** can you tell me the exact number of the office? I want to talk to the main office. here is the * number.

10:38:30
CREW course one three five sir.

10:38:35
CAPT-SAT yes. which * yeah yeah. uh-huh.

10:38:42
PILOT-2 steady.

10:38:42

CREW steady.

10:38:45

CAPT-SAT @ [phone number]. I repeat @ [phone number]. correct? okay. um-huh. @ [phone number]. okay I repeat @ [phone number]. okay. yeah yeah yeah. ***. we're now moving ** anchorage * near shore anchorage *...uh **...yeah yeah okay.

10:39:38

[sound similar to bridge phone ringing]

10:39:42

CREW-PHONE hello?

10:40:40

PILOT-2 stop the engine.

10:40:42

CREW stop engines.

10:40:45

[sound similar to engine order telegraph]

10:40:46

[sound similar to cell phone ringing]

10:40:52

PILOT-2-CELL hello? that's me...okay...well I can certainly ask the captain if he can *.

10:41:14

CAPT-SAT ** yea now I'm shift— shifting...

10:41:28

PILOT-2-CELL okay he's on the phone.

10:41:31

CAPT-SAT **...yup...hello...yeah I'm going to **...

10:41:57

PILOT-2-CELL very well.

10:42:00

CAPT-SAT yeah now now on the way to shift the anchorage.

10:42:09

PILOT-2-CELL we're moving into the— we're in the south bay now comin' into anchorage nine.

10:42:13

CAPT-SAT yeah I think ** the bay...***...uh bridge ** yeah yeah...*** two and a half meters uh...yes...yes out of the already when the * leak out of the boat **..

10:42:23

PILOT-2-CELL the oil that came out of the ship down here in the south bay produced pretty much just a sheen from there...yeah...well I can't— I can't see how distinct it is the sheen but uh ** weather down here. why don't you call me back in about fifteen minutes and I'll see if the captain when he's off the phone I'll see if I can get him to come up with a good number...okay well at this point I don't think I don't think there is anything to boom and uh as far as I uh don't know what you could use these days dispersant or absorbent pads some uh uh...I don't think so...yeah I don't think— I think that will be minimum too...especially if...okay. bye bye.

10:44:03

CREW **.

10:44:07

PILOT-2 * see this buoy? we're looking for it. down there some place. we go— no I think that's a boat.

10:44:15

CAPT okay...a boat?

10:44:19

PILOT-2 yeah oh no there's the buoy. yeah there's the buoy. very good.

10:44:21

CAPT yeah yeah yeah.

10:44:23

PILOT-2 so we go down about half mile.

10:44:25

CAPT half mile from uh—.

10:44:26

PILOT-2 from that buoy.

10:44:27

CAPT from the buoy.

10:44:27

PILOT-2 we stop drop the anchor. now current coming this way so we can go stop and drop the anchor. ebbing going out.

10:44:29

CAPT okay...yeah yeah.

10:45:15

PILOT-2 captain have you been able to asses about how much oil?

10:45:25

CAPT not yet.

10:45:25

PILOT-2 yeah.

10:45:26

CAPT now they are sounding now.

10:45:28

PILOT-2 the engineer?

10:45:29

CAPT yeah yeah.

10:45:31

PILOT-2 I don't think— I don't think uh so much and you know very little sheen. that was pretty fine oil. light not heavy

10:45:46

CAPT I hope so *. ***.

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10:45:54

PILOT-2 so this other representative of your company just called me saying we we really need a pretty good estimate and I said I don't see any and I think I think there's some over there but uh not— I think very low shoreline impact. not so bad. **.

10:46:42

CREW **.

10:46:45

PILOT-2 okay. hard *.

10:46:51

**CAPT-
PHONE** *okay okay okay. what is the status of ***?*

10:47:37

[sound similar to satellite phone ringing]

10:47:38

CAPT *what was the situation just now?*

10:47:40

CREW *it was like **
*.

10:47:49

CREW *would it be all right for you to take it?*

10:47:59

**CAPT-
SAT** hello? yes *...sorry...yeah yeah @ **...uh this company. *** @ [phone number] yeah I repeat this is captain @ [phone number] **.

10:49:15

PILOT-2 midship.

10:49:16

CREW midship.

10:49:17

PILOT-2 dead slow ahead.

10:49:17

CREW dead slow ahead.

10:49:19

**CAPT-
SAT** the company is Fleet Management Limited. Fleet Management. Fleet Management Limited.

10:49:20

[sound similar to engine order telegraph]

10:49:23

PILOT-2 one three five.

10:49:25

CREW one three five.

10:49:33

CREW dead slow ahead.

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10:49:34
PILOT-2 very well.

10:50:21
PILOT-2 one four zero.

10:50:23
CREW one four zero.

10:50:56
[eight seconds of unintelligible Chinese conversation]

10:51:37
PILOT-2 one four five.

10:51:38
CREW one four five.

10:52:12
CAPT *how much more to go?*

10:52:13
CREW *right now the oil **.*

10:52:19
**CREW-
UHF** *captain **.*

10:52:23
**CAPT-
UHF** *okay okay.*

10:52:25
**CREW-
UHF** *good I see it. you still need to **.*

10:52:29
[fourteen seconds of unintelligible Chinese conversation]

10:52:31
PILOT-2 stop the engine.

10:52:32
CREW okay.

10:52:36
[sound similar to engine order telegraph]

10:52:47
CREW engine stopped.

10:52:49
PILOT-2 very well.

10:52:49
CREW one four five sir.

10:52:51
PILOT-2 steady.

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10:52:52

CREW steady.

10:52:57

CREW **.

10:55:02

PILOT-2 midship.

10:55:03

CREW midship.

10:55:12

CREW midship sir.

10:55:36

**CREW-
UHF** *uh captain shall we drop anchor soon?*

10:55:38

**CAPT-
UHF** *oh yes when we reach here we'll drop anchor.*

10:55:41

**CREW-
UHF** *oh good good.*

10:55:43

**CAPT-
UHF** *they have backed it out. once we get there we will drop anchor.*

10:55:52

**CREW-
UHF** *uh *.*

10:56:02

**CREW-
UHF** *captain shall we drop left anchor or right anchor?*

10:56:05

**CAPT-
UHF** *is the right anchor in good order?*

10:56:09

**CREW-
UHF** *the right anchor is in good order.*

10:56:10

CREW *shall we try the right anchor?*

10:56:11

CAPT *do you want to try the left anchor?*

10:56:12

**CREW-
UHF** **.

10:56:45

PILOT-2 steady as she goes. let's go dead slow ahead.

10:56:48

CREW dead slow ahead.

10:56:49

[sound similar to engine order telegraph]

10:56:52

PILOT-2 we want to go about one half mile.

10:57:02

PILOT-2 when the boat comes captain if you would like you can come on my boat and go take a look...and see the damage to the bow.

10:58:04

CREW steady one five zero.

10:58:07

PILOT-2 yes. very well thank you.

10:58:08

CG25 Cosco Busan Cosco Busan this is Coast Guard Cutter two five. Coast Guard two five five zero on channel one three over.

10:58:15

CREW **.

10:58:55

[sound similar to cell phone ringing]

10:58:58

PILOT-2-CELL @. right.

10:59:06

PILOT-2 captain has your engineer been able to get some estimate on about much oil * out of the tank?

10:59:15

CAPT uh no...*.

10:59:22

PILOT-2 it's that Kelly uh the O'Brien Group the uh underwriters or oil—.

10:59:25

CAPT **.

10:59:29

PILOT-2-CELL what is your role here? oh I got it.

10:59:32

CAPT *if they ask you do this once we have discussed this we will drop anchor very soon. tell him that in all cabins we have *** from Shanghai.*

10:59:41

CG25 Cosco Busan Cosco Busan Coast Guard two five five zero nine six on channel one three over.

10:59:47

PILOT-2-CELL where are you located? uh-huh...okay...and are—. okay...yeah well as I say uh I think it's going to turn out to be not not very much.

11:00:21

CAPT **.

11:00:23

PILOT-2 stop the engine.

11:00:25

[sound similar to engine order telegraph]

11:00:30

CAPT *is the chief engineer **?*

11:00:33

[ten seconds of unintelligible Chinese conversation]

11:00:33

PILOT-2-CELL okay for your purposes northwest corner of anchorage nine...okay. thirty seven forty six latitude one twenty two twenty one longitude... uh-huh...uh-huh...sure...oh sure yeah.

11:00:40

CAPT-UHF *okay take a look at the ballast hold and see if there is water.*

11:00:42

CREW-UHF *I just asked I just asked. they said no.*

11:00:45

CAPT-UHF *okay okay **.*

11:01:15

CAPT ***.*

11:01:16

[sound similar to door closing]

11:01:20

USCG-IMD oh no that's okay. that's why I was looking at this. we've got uh one more thing for you. it's just a notice of federal interest. just means there is still have you know and this is the general location and you know you may be responsible ** you are responsible * meet the maximum fine. so it's it's not a legal document it's just a notification. if I could get you to sign right here...yeah. you think you *?

11:01:36

PILOT-2 dead slow astern

11:01:37

CREW dead slow astern.

11:01:39

[sound similar to engine order telegraph]

11:01:40

PILOT-2-CELL * the ship here.

11:01:44

PILOT-2 midship.

11:01:45

PILOT-2-CELL so um...yeah we're uh stopping the ship. okay well I'm gonna be off the ship soon and uh..so I talked to this fellow out in Richmond who said he was involved with sending some stuff out here.

11:02:17

CREW engine dead slow astern.

11:02:21

PILOT-2 let's go slow astern.

11:02:25

[sound similar to engine order telegraph]

11:02:33

CREW engine slow astern.

11:02:36

PILOT-2-CELL I don't think so...yeah I can't see how that would be the case...correct. I don't know how long I'll be here.

11:02:42

USCG-IMD I mean I have to—. we we can't uh...yeah we we can get it out of the water. we can get it out of the water and I guess we'll try to ** pictures *.

11:02:53

PILOT-2 half astern.

11:02:57

[sound similar to engine order telegraph]

11:03:11

PILOT-2-CELL okay...yeah I—. you know it could have been considerably less. you know could have been ten could have five so I don't know...sure okay well I think you'd be safe to go with ten barrels or less...okay bye bye.

11:03:15

USCG-IMD no I'm just saying that uh ***.

11:03:38

CREW ** engine.

11:03:45

PILOT-2 slow astern.

11:03:46

CREW slow astern.

11:03:48

[sound similar to engine order telegraph]

11:03:56

USCG-IMD the boat is further inland **.

11:04:04

? **.

11:04:10

PILOT-2 stop the engines.

11:04:12

CREW stop the engine.

11:04:13

[sound similar to engine order telegraph]

11:04:52

[sound similar to cell phone ringing]

11:04:53

PILOT-2 we are standing bye to drop anchor captain?

11:04:56

CAPT port anchor **.

11:05:02

PILOT-2 you can let which— whichever anchor go.

11:05:06

PILOT-2-CELL hello? that's me...okay...okay...correct and we just dropped anchor in anchorage nine.

11:05:29

TERN unit thirty seven aboard the Cosco Busan Cutter Tern channel one three over.

11:05:34

PILOT-2 dead slow astern.

11:05:34

CREW dead slow astern.

11:05:36

[sound similar to engine order telegraph]

11:05:47

PILOT-2 let's put six in the water.

11:05:50

CAPT now?

11:05:51

PILOT-2 yeah.

11:05:52

CAPT-UHF *chief engineer drop left anchor ***.*

11:05:56

TERN unit thirty seven aboard the Cosco Busan Cutter Tern channel one three over.

11:05:57

CREW-UHF **.

11:06:01

PILOT-2-VHF three seven back go ahead.

11:06:02

TERN three seven this is Tern roger if you could please lower the combination ladder over the side we have uh * transfer to your vessel.

11:06:10

PILOT-2-VHF okay.

11:06:12

PILOT-2 okay uh starboard ladder down for Coast Guard.

11:06:17

CREW-UHF *second engineer do you hear me? lower the *** by a little bit.*

11:06:20

PILOT-2-CELL okay uh ** no...well if you're gonna boom it you'd have to do the whole thing but I don't think that there is a need to do that.

11:06:24

2ndENG- UHF ***.

11:06:27

CAPT- UHF *okay okay. anchor chain direction? anchor chain direction? chief engineer anchor chain direction? chief engineer did you hear me? chief engineer did you hear me? anchor chain direction?*

11:06:49

CHENG- UHF **.

11:06:54

CAPT- UHF *okay ***.*

11:06:56

CHENG- UHF *anchor chain there is no tension on the anchor chain.*

11:07:04

PILOT-2 *okay uh let me know when chain is leading forward.*

11:07:05

CAPT- UHF *we let down six shackles.*

11:07:11

CREW *chain leading chain leading. chain direction.*

11:07:15

PILOT-2 *now is chain leading?*

11:07:17

CAPT *chain direction now eleven eleven.*

11:07:21

PILOT-2 *stop the engine.*

11:07:22

CREW *stop engine.*

11:07:23

[sound similar to engine order telegraph]

11:07:24

CREW *right now direction is still eleven oh clock, right?.*

11:07:27

PILOT-2- CELL *okay next question...correct...yes I am...right. I was not the pilot on board when the allision happened. I was the—.*

11:07:27

CHENG- UHF *we have let *** then we will let more.*

11:07:31

CAPT *okay okay.*

11:08:15

CREW **.

11:08:21

PILOT-2 *so captain let me know how chain is leading and how many shackles.*

11:08:26

CAPT-UHF *okay okay. what is the reading now?*

11:08:26

PILOT-2-CELL *okay well uh we're here. we got the Coast Guard aboard and I'm sure others will be here. so anything else I can do for you? okay bye bye.*

11:08:29

CHENG-UHF *uh right now ***.*

11:08:50

CAPT-UHF *what is it?*

11:08:51

CHENG-UHF ***.*

11:08:53

CAPT-UHF *four shackles in water right?*

11:08:54

CHENG-UHF *four shackles in water right now.*

11:08:56

CAPT-UHF *okay. chain direction?*

11:08:57

CHENG-UHF *chain direction is a bit over nine oh clock.*

11:09:58

PILOT-2 *Captain @. ***

11:10:02

CREW-UHF *chief engineer take a look at **.*

11:10:19

[ten seconds of unintelligible Chinese conversation]

11:10:45

[twenty five seconds of unintelligible Chinese conversation]

11:11:11

PILOT-2 *** and that ship had been having gyro problems so came around. ** Sperry sixteen inch Sperry ***. ship had variable **.*

11:11:35

CREW-UHF *captain right now it is eight oh clock. six shackles in water.*

11:12:34

CAPT *time of dropping anchor right now six oh clock **.*

11:12:36

PILOT-2 ** anchored?*

11:12:37

CAPT *yeah yeah.*

11:12:42

PILOT-2-VHF *traffic three seven uh we're anchored northwest corner anchorage nine **.*

11:12:53

VTS roger copy six in the water thank you three seven traffic out.

11:13:03

[five seconds of unintelligible Chinese conversation]

11:13:09

PILOT-2 so have you heard from your agent?

11:13:11

CAPT agent * first time notify agent.

11:13:13

PILOT-2 uh-huh...I would uh—. ten years ago Maersk ship going in outer harbor and uh engine would not go astern and it hit it stem on and it uh opened up uh a hole like that and they repaired the ship at the dock. * barges and uh they welded all the pieces into it and the ship sat there. it took a month or so to do it buy my feeling is—. do you have a shipyard over here? but uh I don't think I don't think you'd have to drydock. I think they would do it from alongside. and there's a uh this is a shipyard and they might be able to do it here and do the repair uh and maybe you know you could stay at this draft but maybe you'd have to go back and discharge cargo and then uh move to uh a berth like this where they could do the temporary repairs so you can proceed. that is—.

11:13:53

CREW-UHF ** bridge.

11:13:57

CAPT-UHF okay okay.

11:14:47

CAPT yeah.

11:15:01

CAPT **.

11:15:02

PILOT-2 that's pier D that's the shipyard and it's right over here.

11:15:09

CAPT it's a **. it it yeah. a **.

11:15:26

PILOT-2 uh if it should get bad then maybe a few more shackles but uh * no wind **.

11:15:42

CAPT yeah I don't know now.

11:15:44

PILOT-2 so let's keep an eye on your position and if it seems like wind starting to get strong then more chain.

11:15:52

CAPT yeah yeah yeah yeah.

11:16:09

CREW-UHF uh anchor has been dropped.

11:16:13

CAPT-UHF hang up the anchor rope and turn off the sailing lights

11:16:27

CREW hey captain somebody is coming up. somebody is coming up.

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11:16:31

CREW sir this is Captain *.

11:16:32

[sound similar to door closing]

11:16:35

USCG-1 Captain *. good morning.

11:16:38

CAPT good morning.

11:16:42

[sound similar to door closing]

11:16:43

USCG-2 Chief Warrant Officer @ and Chief @. uh chief we would like to uh * safety ** vessel **. captain you can act as a translator?

11:16:56

CAPT yeah yeah **.

11:16:59

USCG-2 yeah yeah okay I'd like someone to take me uh to take a look to see the damage. is it possible to see the inside of the of the vessel * um is it possible to see the damage inside the hull?

11:17:12

CAPT ***.

11:17:16

USCG-2 okay * captain **.

11:17:32

USCG-2 is it possible for us to see the damage to the side or is it— or does the layout of the container ship chance to really see it **.

11:17:44

PILOT-2 well you know it's up there in the turn—.

11:17:47

USCG-2 turn of the *.

11:17:49

PILOT-2 and did you get close to it on *?

11:17:53

USCG-2 yeah.

11:17:53

PILOT-2 so captain uh going up the uh uh * on the port side can you go all the way up to the area here?

11:17:55

CREW- **.

UHF

11:17:57

CAPT- go ahead.

UHF

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11:17:58

**CREW-
UHF** ***.

11:18:04

CAPT yeah **.

11:18:10

**CREW-
UHF** ***.

11:18:13

USCG-2 ** can I see the damage from inside *?

11:18:18

CAPT I— I— I— I— * the chief mate to **.

11:18:27

USCG-2 we— we— we can only see it from outside. once the containers are off can we see it?

11:18:28

CAPT yeah yeah yeah.

11:18:33

PILOT-2 uh no because there on the uh inside bulkhead * down then you've got these walkways it's the walkway in the area of the walkway from what I saw.

11:18:48

USCG-2 okay so we just go down the walkway **.

11:18:51

PILOT-2 I don't know that.

11:18:53

USCG-3 uh the walkway going down to the *?

11:18:57

PILOT-2 go down into the engine room and go to the tunnel and go forward in the hull. can you go forward into area of damage?

11:19:01

CAPT yeah yeah. yeah yeah yeah ***.

11:19:17

USCG-2 hey captain can someone take me down there?

11:19:18

CAPT right yeah okay I go *.

11:19:20

**CAPT-
UHF** *call chief engineer chief engineer do you hear?*

11:19:25

**CHENG-
UHF** **.

11:19:25

**CAPT-
UHF** *send for somebody. we have passageways on both sides right? send for somebody to check if there is water in the hold.*

11:19:31

PILOT-2 * answer questions because uh as I was explaining to the * he uh—. I think the repair **.

11:19:35

**CREW-
UHF** **.

11:19:35

**CAPT-
UHF** *don't we have passageways on both sides?*

11:19:36

[twelve seconds of unintelligible Chinese conversation]

11:19:43

USCG-4 has anyone on board given you alcohol alcohol?

11:19:46

[ten seconds of unintelligible conversation]

11:19:56

USCG-4 captain has anyone given you alcohol testing on the crew yet?

11:20:00

CAPT no no.

11:20:01

USCG-4 well we're gonna need to do that.

11:20:02

CAPT yeah.

11:20:03

USCG-4 I'm @. I'm with the investigations department San Francisco. uh sorry about this morning. * you the chief mate the chief engineer we're going to need to get witness statements from you so I'm going to need to interview you.

11:20:20

CAPT yeah okay now * me chief engineer chief officer only need three?

11:20:29

USCG-4 uh anybody that was on the bridge at the time.

11:20:31

CAPT **.

11:20:35

USCG-4 okay and yourself. okay so you three chief engineer interview you and alcohol testing. um I'm gonna need some copies ***.

11:20:49

CAPT **.

11:20:53

USCG-4 ** chart that was being used at the time if can I get a copy of that. um do you have an automated casualty reporting system on board let's you know if you have casualties and I need a copy of that.

11:21:04

CAPT yeah * I have *. **.

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11:21:21

USCG-4 oh yeah that's good. uh this is actually the—. the automated casualty reporting system is something the Coast Guard says in the engine room itself that let's you know if there's any kind engineering casualties or anything that's going on on the boat. do you have that kind of system on board?

11:21:37

CAPT yeah *.

11:21:39

USCG-4 okay yeah I need a copy of that report. it shouldn't be manual it should be something that's generated like in the system.

11:22:18

USCG-4 all right first up.

11:22:20

[forty seconds of unintelligible conversation]

11:22:59

CAPT-UHF *tell him that the Coast Guard up here wants the chief mate to come up.*

11:23:05

CREW-UHF ***.

11:23:18

CAPT uh mister pilot does * engine have to stand by engine?

11:23:22

PILOT-2 no.

11:23:22

CAPT is finished?

11:23:23

PILOT-2 yes finished with engine. and my boat will be here in five minutes and will go down. do you have a camera?

11:23:31

CAPT yeah * chief mate.

11:23:32

PILOT-2 okay will go take a look. we will need to stand by starboard gangway.

11:23:38

CAPT yeah yeah okay.

11:23:41

[sound similar to general alarm bell]

11:23:47

USCG-2 could really use turn the * to about *.

11:24:00

? **.

11:24:30

CREW *.

11:24:34

CAPT *what time did * jot it down. what's the matter with you? I told you ***.*

11:24:41

USCG-4 okay who wants to be first?

11:24:43

CAPT yeah yeah yeah okay me.

11:24:44

USCG-4 okay.

11:24:56

PILOT-2 do you have your uh **.

11:24:59

USCG-4 captain * take a deep breath and blow out **. okay?

11:24:59

USCG-3 do you take a paper plot when you're in the harbor? do you have um did you take fixes?

11:25:15

USCG-2 **.

11:25:22

USCG-4 take a deep breath *. okay that's okay. take a deep breath and—. zero that's good. and this is all a formality. chief engineer?

11:25:40

CAPT zero...**.

11:25:53

CAPT *hey chief engineer ** a test.*

11:26:03

[eleven seconds of unintelligible Chinese conversation]

11:26:30

USCG-4 okay take a deep and blow into this *. gotta keep blowing until I tell you to stop. okay? keep blowing until I tell you to stop.

11:26:32

TERN Golden Gate Golden Gate this is Coast Guard Cutter Tern channel one three.

11:26:47

CAPT *hey *** why is the computer sounding the alarm all the time and I couldn't get rid of it?*

11:26:54

CREW *I'll fix it.*

11:26:55

CREW ***.

11:26:58

USCG-4 and your role? what's your position?

11:26:58

TERN Pilot Boat Golden Gate Golden Gate this is Coast Guard Cutter Tern channel one three over.

11:27:03
CREW ***.

11:27:04
GG Coast Guard Cutter Tern Pilot Boat Golden Gate.

11:27:12
? **.

11:27:22
TERN Golden Gate this Tern uh we are enforcing a safety zone if you could next time report in.

11:27:25
PILOT-2 are you ready to go down captain?

11:27:28
CAPT **.

11:27:29
USCG-4 blow in the ** blow out. **.

11:27:30
GG roger we didn't hear the *.

11:27:35
PILOT-2 you want me to—. okay so do you want to go down and get on the boat? do you want your engineer—?

11:27:47
CAPT yeah. sir?

11:27:47
USCG-? yes.

11:27:49
[twenty one seconds of unintelligible conversation]

11:28:11
CAPT-UHF *hey chief engineer bring out the camera. chief engineer do you hear?*

11:28:23
[sound similar to door closing]

11:28:26
CREW *we were first ** here. drop anchor.*

11:28:27
CREW *right.*

11:28:31
CREW *can it be deleted?*

11:28:36
CREW *it cannot. ***.*

11:28:39
[twenty five seconds of unintelligible conversation]

11:29:05

USCG-3 you're the third mate?

11:29:06

3M yes.

11:29:07

USCG-3 do you have uh automatic casualty...do you have that?

11:29:11

[sound similar to door closing]

11:29:18

3M **.

11:29:21

USCG-3 okay.

11:29:56

CREW **.

11:30:08

USCG-4 do you have a copier? like a machine that makes copies? can I get four?

11:30:13

CREW four copies.

11:30:14

USCG-4 four copies.

11:30:24

[sound similar to door closing]

11:30:48

[sound similar to door closing]

11:30:49

CAPT **.

11:30:50

CHOFF **. chief mate.

11:30:52

USCG-4 chief mate? okay. were you on the bridge at the time of the incident or were you in the engine room? at the time of the incident where were you?

11:31:02

CHOFF ** deck.

11:31:06

USCG-4 you were on the deck? okay. can you write in English? can you ask if he does he write in English?

11:31:18

? **.

11:31:25

USCG-4 can you understand me?

11:31:27

CHOFF yeah yeah.

11:31:30

USCG-4 okay can you write down what you saw and heard at the time of the incident when you hit the bridge?

11:31:38

CHOFF ***.

11:31:41

USCG-4 right.

11:31:41

CHOFF **.

11:31:43

USCG-4 okay okay you were forward on the bow? okay was it really foggy?

11:31:50

CHOFF yes. foggy could not see.

11:31:53

USCG-4 you couldn't see the bridge?

11:31:53

CHOFF yes could not see.

11:31:55

USCG-4 **...could you write your name for me?

11:32:19

[sound similar to door closing]

11:32:20

USCG-4 yes. write your name. okay. thank you very much.

11:32:37

USCG-4 so very foggy couldn't see the bridge?

11:32:39

CHOFF uh no. I no see. **.

11:32:52

USCG-4 when you hit the bridge **?

11:32:57

CHOFF ***.

11:33:24

USCG-4 okay did you catch that chief?

11:33:27

USCG-3 when it got really close you went hard astarboard?

11:33:29

USCG-4 you went hard astarboard.

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11:33:51

[sound similar to door closing]

11:33:54

USCG-4 were you on the port side?

11:33:56

CHOFF no no **.

11:34:02

[nine seconds of unintelligible Chinese conversations]

11:34:13

USCG-4 you were— so let me draw a picture of the ship. when you hit the bridge where were you? when you actually hit the bridge where were you?

11:34:22

[six seconds of unintelligible Chinese conversation]

11:34:22

END of TRANSCRIPT

23:04:59

END of RECORDING