

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



VDR AUDIO TRANSCRIPT

DCA08FM002

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

May 6, 2008

Voyage Data Recorder Audio Transcript

Group Chairman's Factual Report By Christopher Babcock

A. EVENT

Location: Approach to Staten Island, New York
Date: November 3, 2007, 0143 Eastern Daylight Time¹
Vehicle: *T/V Axel Spirit*
Operator: Teekay Shipping
NTSB Number: DCA08FM002

B. GROUP A group was convened on November 13, 2007.

Chairman: Christopher Babcock
Vehicle Recorder Specialist
National Transportation Safety Board

Member: Neil Davis
Director, Fleet Operational Services
Teekay Shipping

Member: Lieutenant Jake Hobson
Marine Casualty Investigator
United States Coast Guard

Member: Bill Woody
Marine Safety Investigator
National Transportation Safety Board

Member: Captain Dennis Wheeler
President
Sandy Hook Pilots Association

¹ All times are referenced to Eastern Daylight Time (EDT)

C. SUMMARY

On November 3, 2007, at approximately 0143 EDT, the Bahamas flag vessel *T/V Axel Spirit*, operating as a bulk oil carrier with a complement of 22 crew, allided with the Ambrose light tower on approach to New York Harbor. After the allision the vessel proceeded to its destination at Perth Amboy, NJ. The 800-foot vessel sustained substantial exterior and interior damage. No injuries were reported the crew no product was spilled from the vessel.

The following attachment is a transcription of bridge audio and radar imagery recovered from the VDR. For further information regarding the VDR see the "VDR Group Chairman's Factual Report."

Description of Audio Events

The accident occurs approximately 45 minutes into the recording. The transcription includes events from the beginning of the recording until the Sandy Hook pilot boards the vessel at approximately 0200 EDT. The recording continues until 1337 EDT.

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 *T/V Axel Spirit* which allided with the Ambrose light tower on approach to New York Harbor at 0143 EDT on November 3, 2007.

LEGEND

2M	Voice identified as the second mate
HELM	Voice identified as the helmsman
LOOK	Voice identified as the lookout
CPT	Voice identified as the captain
PUMP	Voice identified as the pumpman
PILOT	Voice identified as the pilot
NY	Transmission from Pilot Boat <i>New York</i>
NS	Transmission from the <i>Norwegian Spirit</i>
VHF	Transmission made or received over VHF radio
UHF	Transmission made or received over crew handheld radios
?	Unidentified voice
*	Unintelligible word
#	Expletive
@	Non-pertinent word
[]	Editorial insertion

Note 1: Times are expressed in Eastern Daylight Time (EDT).

Note 2: Generally, only radio transmissions to and from the accident vessel were transcribed.

Note 3: Words shown with excess vowels, letters, or drawn out syllables are a phonetic representation of the words as spoken.

Note 4: A non-pertinent word, where noted, refers to a word not directly related to the operation, control or condition of the vessel.

TIME and Source

Communication

Radar Imagery

0058:11
CPT

**

0058:12

[sound similar to engine telegraph]



0058:24



0058:38



TIME and Source

Communication

Radar Imagery

0058:53



0059:15

[sound similar to UHF radio keying]



0059:21



TIME and Source

Communication

Radar Imagery

0059:35



0059:50



0100:04



TIME and Source

Communication

Radar Imagery

0100:18



0100:32



0100:46



TIME and Source

Communication

Radar Imagery

0101:01



0101:15



0101:29



TIME and Source

Communication

Radar Imagery

0101:51

[sound similar to UHF radio keying]



0101:57



0102:12



TIME and Source

Communication

Radar Imagery

0102:26



0102:45
2M

* five minutes aboard the Norwegian Spirit * eight * knots.



0102:57
CPT

mmm.

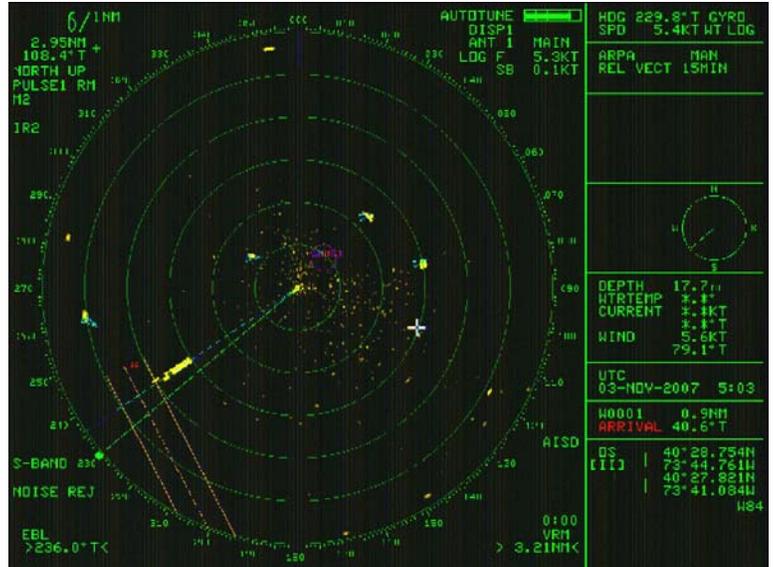


TIME and Source

Communication

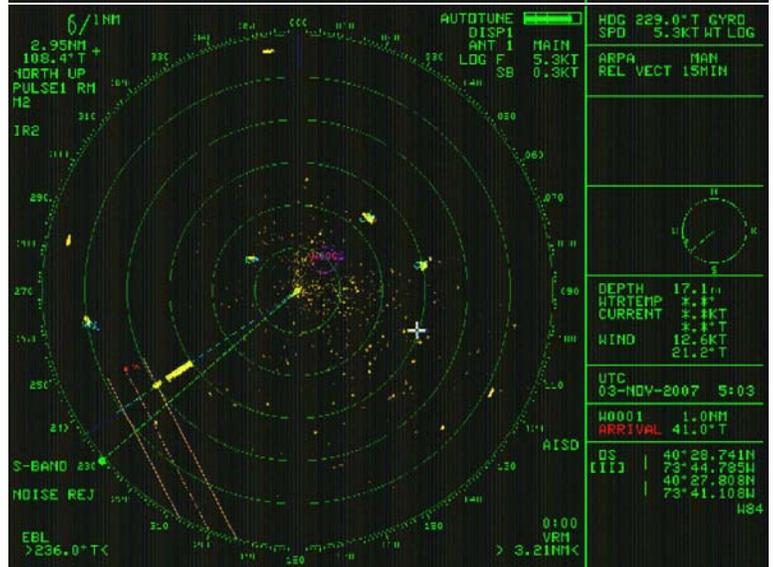
Radar Imagery

0103:09



0103:32
CPT

* making five point five dead slow.



0103:37
CPT

tell— tell me when she don't steer.

0103:43

[sound similar to engine telegraph]

0103:45
HELM

* yes sir I do yes sir.

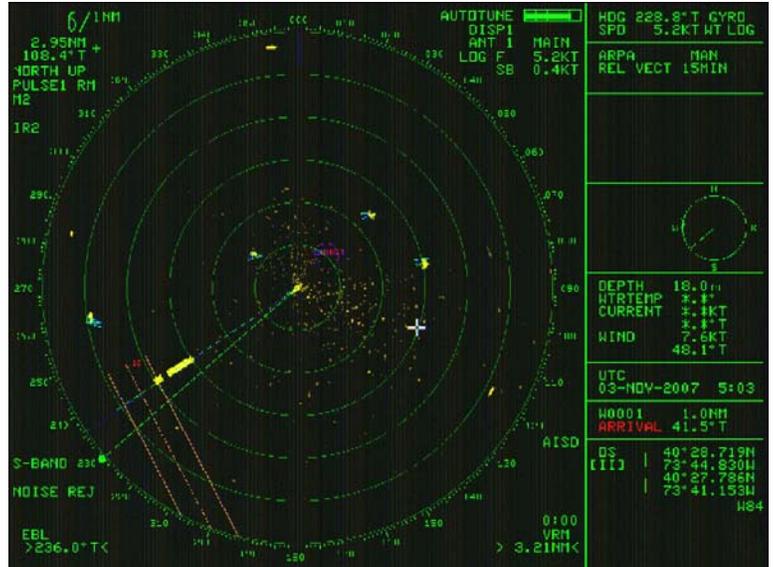


TIME and Source

Communication

Radar Imagery

0103:50



0104:05



0104:19



TIME and Source

Communication

Radar Imagery

0104:33



0104:47



0105:06

[sound similar to keystrokes on bridge equipment]



TIME and Source

Communication

Radar Imagery

0105:16



0105:30



0105:45

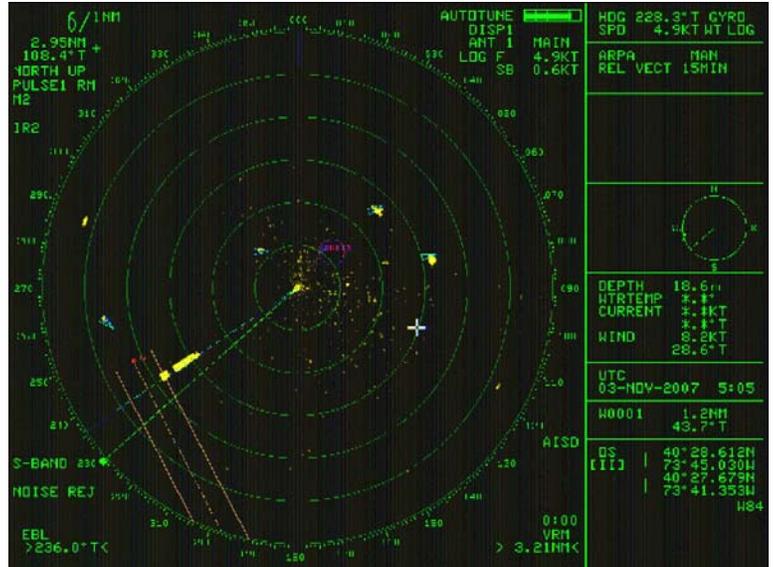


TIME and Source

Communication

Radar Imagery

0105:59



0106:13



0106:27

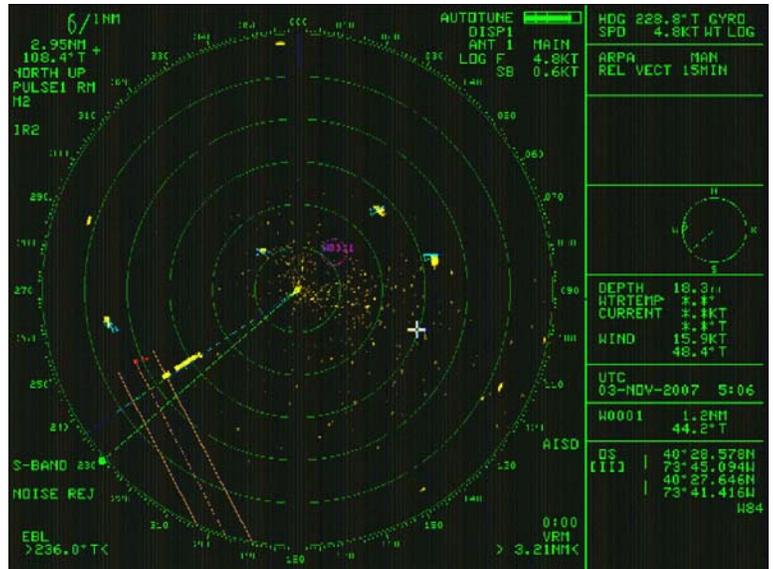


TIME and Source

Communication

Radar Imagery

0106:41



0106:56



0107:10



TIME and Source

Communication

Radar Imagery

0107:34
?

how are you?

0107:34
HELM

twenty.

0107:35
CPT

hmmm.

0107:37
HELM

twenty.

0107:39
2M

this is pilot boat.

0107:40
CPT

yeah.

0107:41
CPT

pilot ** take us in early.

0107:42
2M

mmm.

0107:55
2M

captain * Norwegian Spirit.



TIME and Source

Communication

Radar Imagery

0108:07



0108:25



0108:39



TIME and Source

Communication

Radar Imagery

0108:54



0109:08



0109:22



TIME and Source

Communication

Radar Imagery

0109:36



0109:51



0110:05

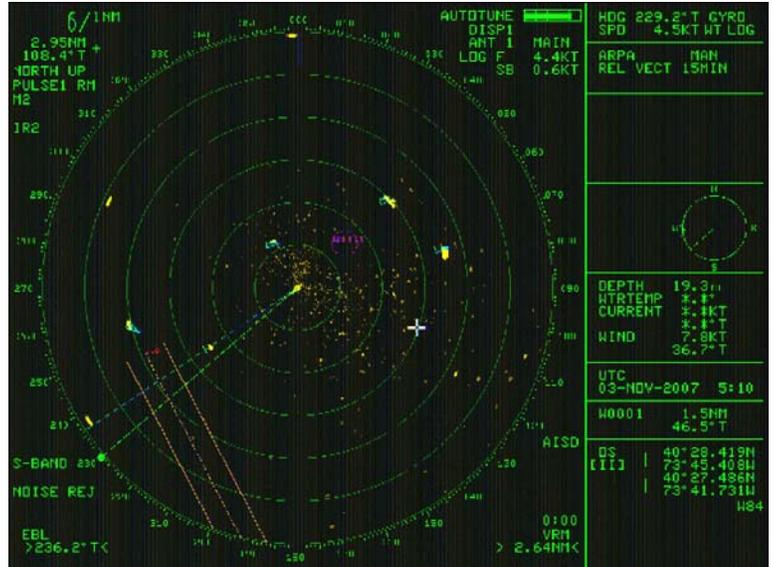


TIME and Source

Communication

Radar Imagery

0110:19



0110:47
CPT

where is the other watchman?



0110:53
2M-UHF

*

0110:55
LOOK-
UHF

yes go ahead.

0110:57
2M-UHF

please come to the bridge.

0110:57
LOOK-
UHF

okay.



TIME and Source

Communication

Radar Imagery

0111:02
2M-UHF

tell the pumpman he is on standby yeah.

0111:06
LOOK-UHF

yeah ** pumpman.

0111:07
2M-UHF

okay.

0111:29
2M

the pumpman will be in the messroom until the pilot boarding.

0111:32
CPT

yeah yeah yeah.

0111:39
2M-UHF

pumpy bridge.

0111:41
PUMP-UHF

go ahead sir.

0111:41
2M-UHF

* the pilot boarding time uh *. the pilot boarding time is far off.



TIME and Source

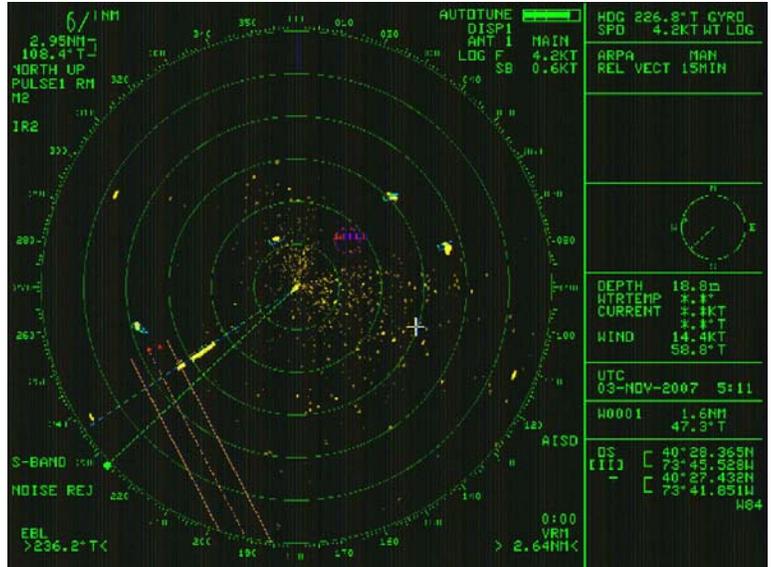
Communication

Radar Imagery

0111:51
PUMP-UHF
0111:54
2M-UHF

okay I'll stand by in the messroom.

okay.



0112:01
NY-VHF

0112:07
CPT-VHF

Axel Spirit Pilot Boat New York.

Pilot Boat New York.



0112:10
NY-VHF

0112:16
CPT-VHF

0112:23
NY-VHF

good morning again sir I just want to confirm are you gonna pass north or south of the uh Ambrose Light Tower.

I'm heading south of uh Ambrose.

okay you'll be passing uh east and south of the tower. okay sir we'll board your vessel approximately one mile west of the Ambrose Light Tower and you're planning on staying ahead of the Norwegian Sprit that cruise ship approaching from the east.



TIME and Source

Communication

Radar Imagery

0112:34
CPT

okay how far is it?

0112:37
2M

she's uh...

0112:38
CPT-VHF

yeah I'm uh planning on uh staying ahead of uh Norwegian Spirit.

0112:42
?

good plan sir.

0112:43
NY-VHF

okay sir. thanks for the information and uh just please get in touch with the Norwegian Spirit and let them know of your intentions.

0112:51
CPT-VHF

okay.

0111:43
2M

good *.

0113:01
CPT-VHF

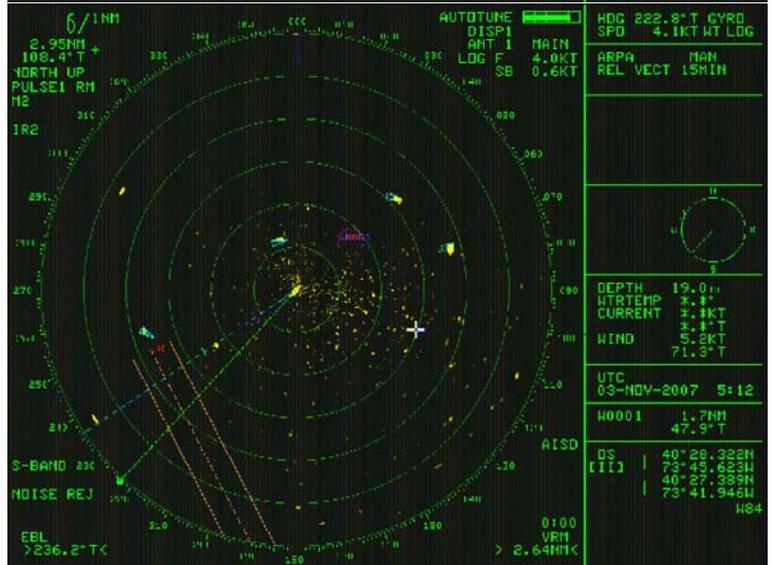
Norwegian Spirit uh Axel Spirit.

0113:05
NS-VHF

yes Axel Spirit Norwegian Spirit go ahead.

0113:09
CPT-VHF

good morning to you I just eh left the anchorage I'm bound for the pilot station so uh I'm steering a bit south of uh Ambrose and I am supposed to be at pilot station at zero two hundred.



TIME and Source

Communication

Radar Imagery

0113:11



0113:29
NS-VHF

yeah okay I will consider it on my approach.



0113:42
NS-VHF

Axel Spirit Norwegian Spirit I will consider this on my approach.



0113:47
CPT-VHF

thank you very much.

TIME and Source

Communication

Radar Imagery

0113:55
CPT

wheel?

0113:57
HELM

hard starboard sir no steering.

0114:00
CPT

okay.

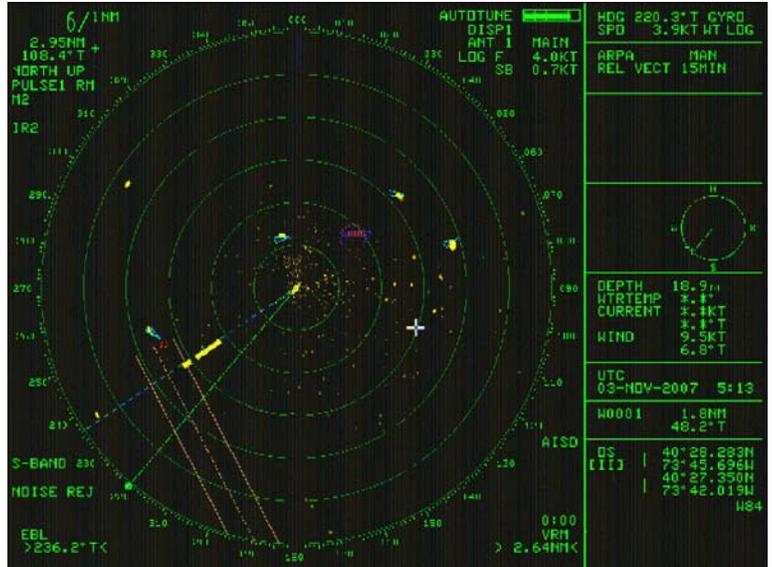
0114:01

[sound similar to engine telegraph]

0114:08

0114:30
LOOK

morning.

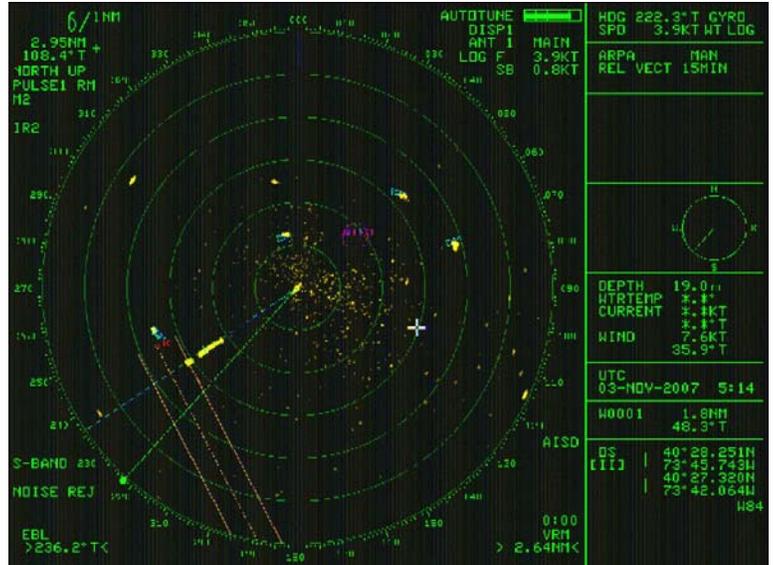


TIME and Source

Communication

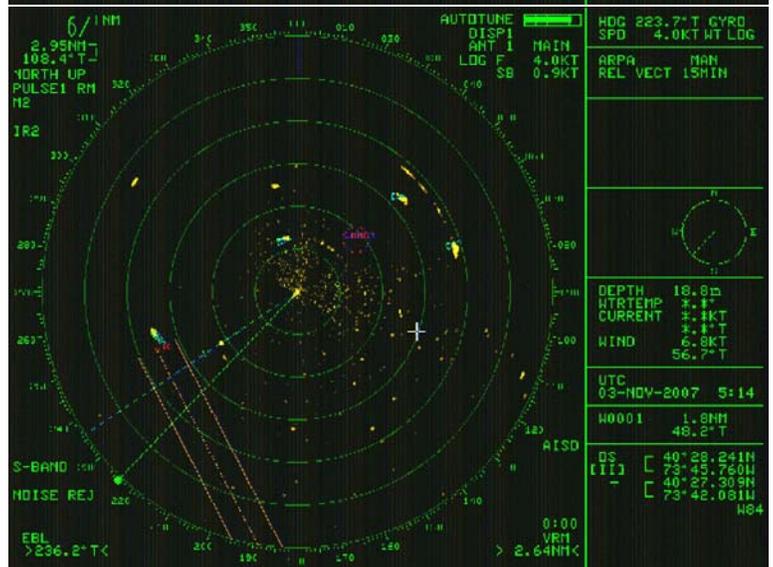
Radar Imagery

0114:36

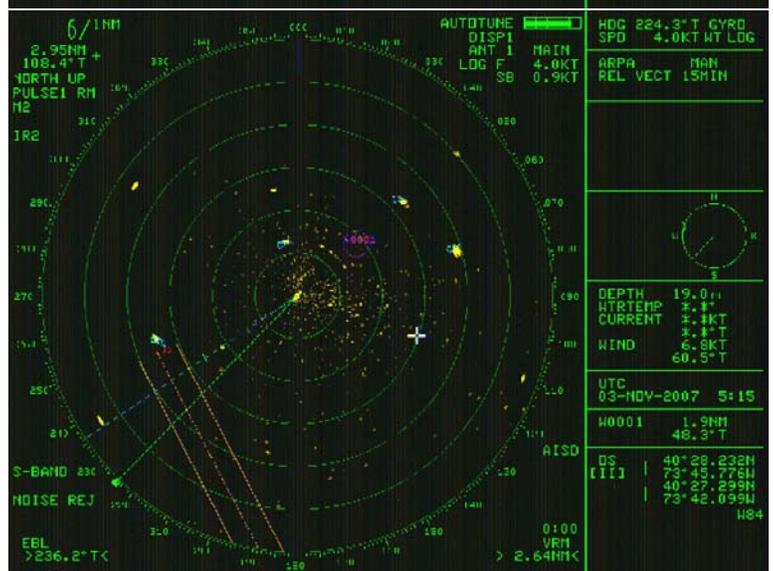


0114:59
CPT

**



0115:05



TIME and Source

Communication

Radar Imagery

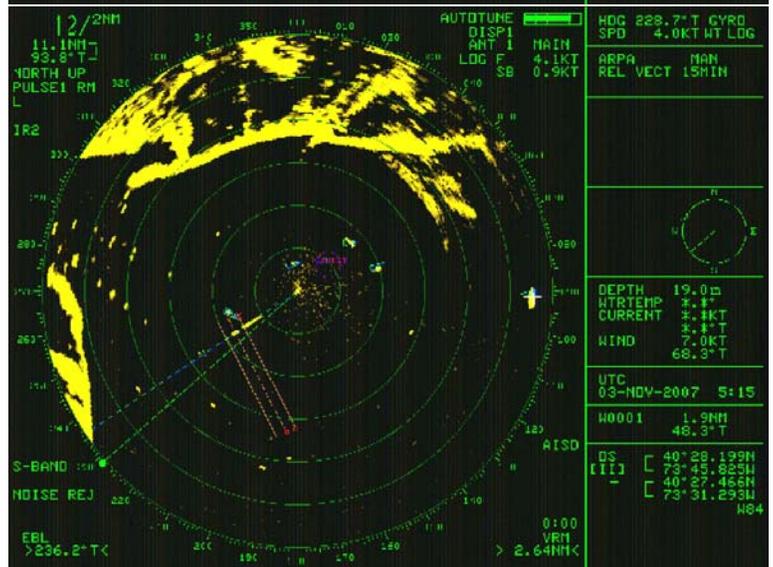
0115:19



0115:34



0115:48



TIME and Source

Communication

Radar Imagery

0116:44



0116:58



0117:12



TIME and Source

Communication

Radar Imagery

0117:27



0117:41



0117:55



TIME and Source

Communication

Radar Imagery

0118:15
CPT

what are you steering now?

0118:16
HELM

two nine sir.

0118:18
CPT

huh?

0118:18
HELM

two two nine.

0118:20
CPT

okay steer two two five.

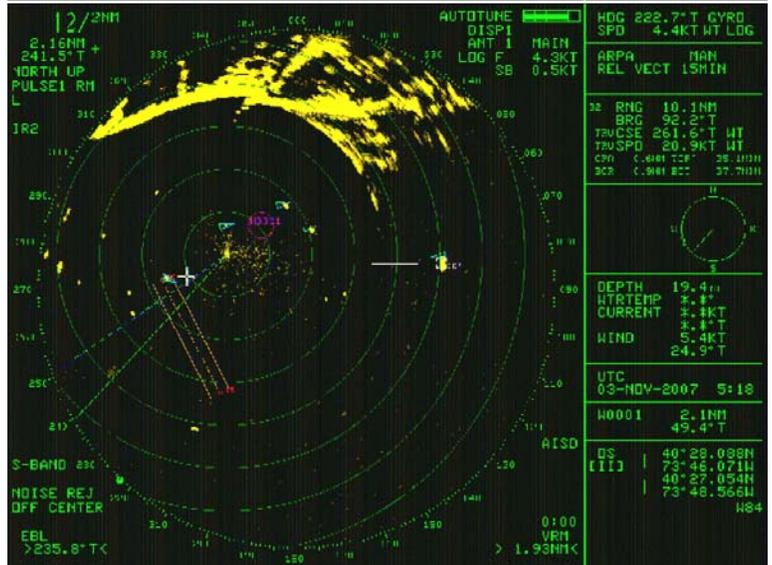
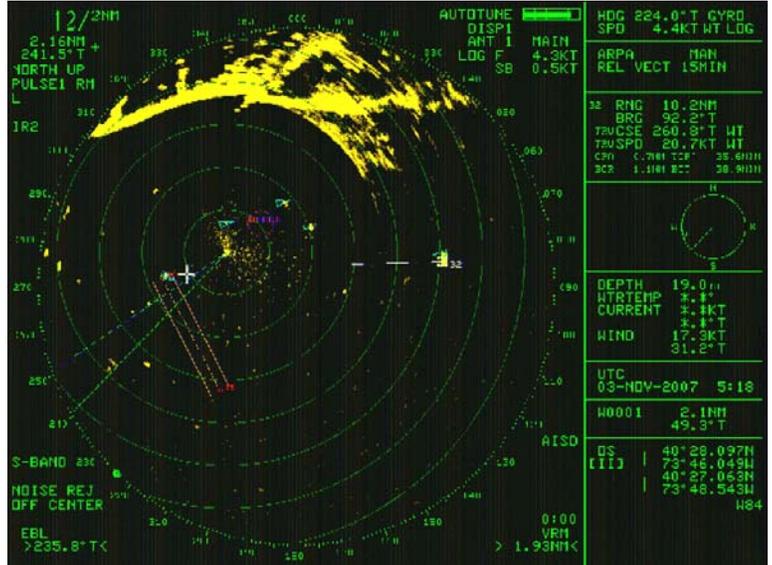
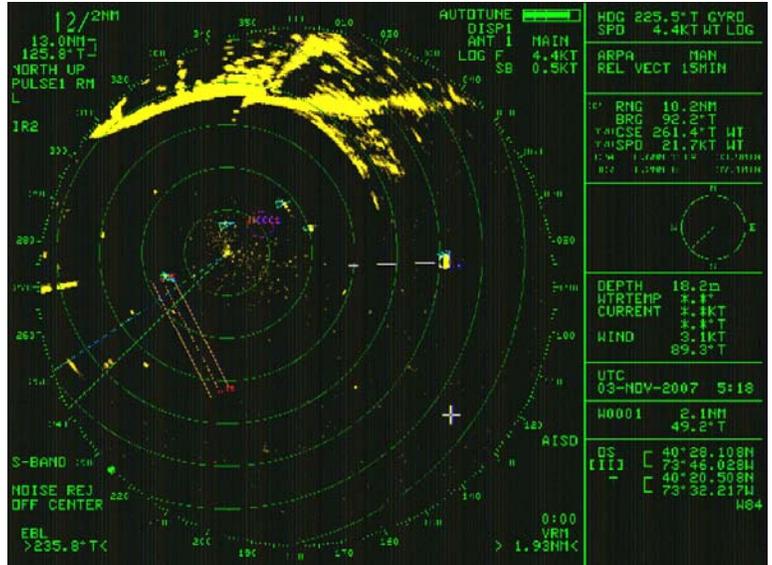
0118:21
HELM

two two five.

0118:26
CPT

* too close.

0118:39



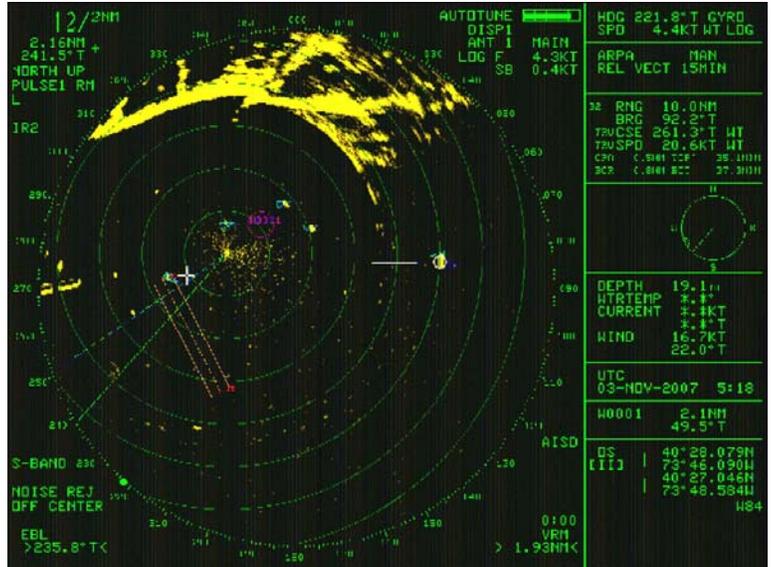
TIME and Source

Communication

Radar Imagery

0119:00
CPT

so how much uhhhhhhh is the distance four miles?



0119:08
2M

from uh?

0119:09
CPT

pilot station.

0119:10
2M

from pilot station.

0119:11
CPT

yeah four miles.



0119:23
LOOK

sir there is one target bearing two four eight.

0119:26
CPT

huh?

0119:27
LOOK

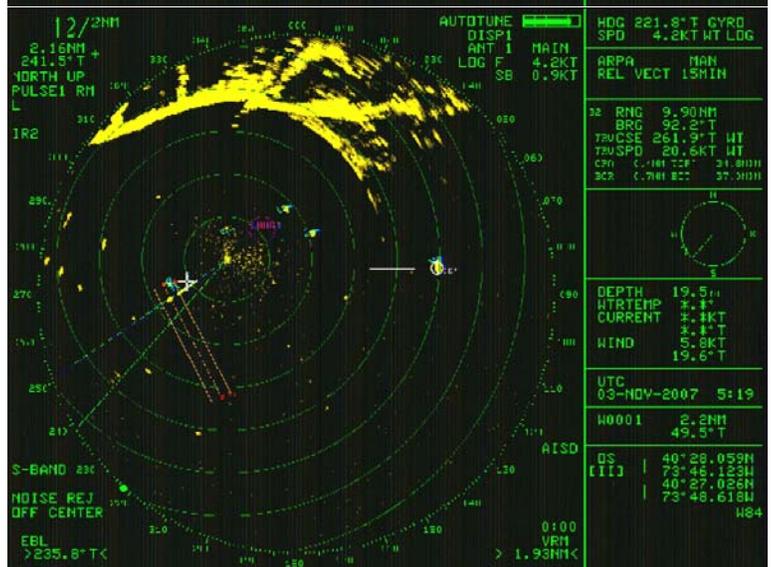
one target sir bearing two four eight.

0119:29
CPT

*

0119:33
2M

pilot station two point five...two point five.



TIME and Source

Communication

Radar Imagery

0119:42

CPT

to Ambrose yes but then one mile.

0119:43

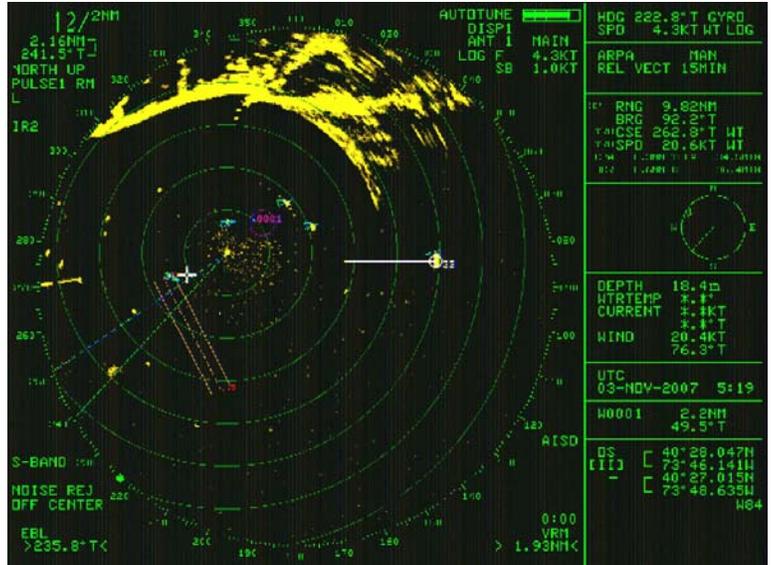
2M

one mile.

0119:44

LOOK

the bearing * two * five.



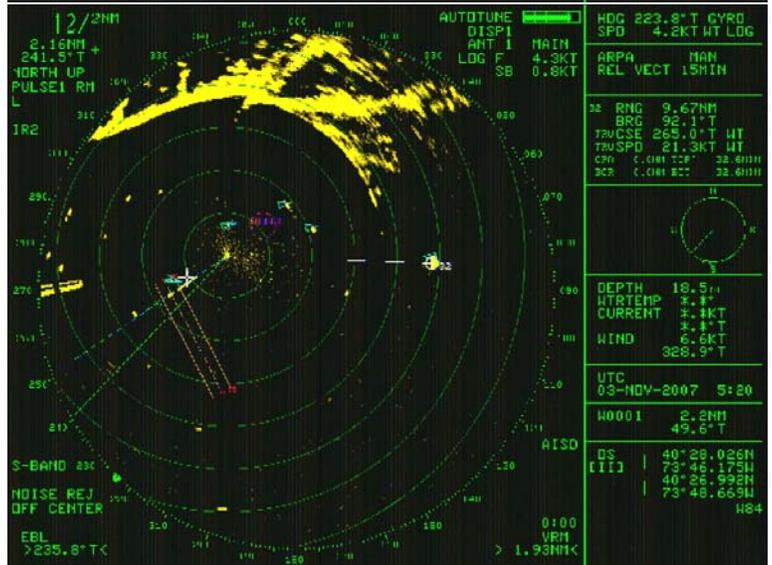
0119:49

2M

Ambrose Light...one point nine.



0120:02



TIME and Source

Communication

Radar Imagery

0120:19
2M

range ten miles.

0120:21
CPT

stop engines.

0120:22

[sound similar to engine telegraph]

0120:24
CPT

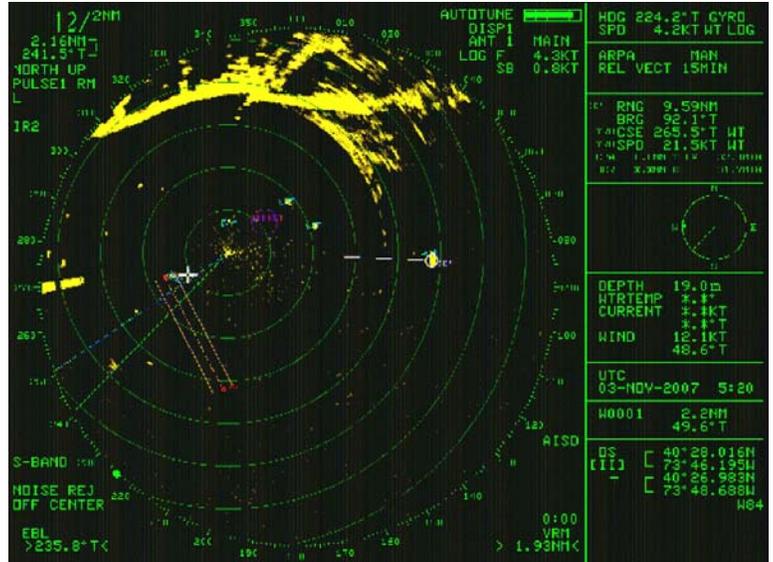
tell me when she don't steer.

0120:26
HELM

okay captain.

0120:30

0120:44



TIME and Source

Communication

Radar Imagery

0120:59



0121:23
CPT

one.

0121:26
?

** sir.



0121:27
CPT

three miles yeah.

0121:35
2M

CPA to the Norwegian Spirit about half an hour. thirty minutes.

0121:37
CPT

hmmm.



TIME and Source

Communication

Radar Imagery

0121:42
CPT

he's going north of the tower.



0121:55



0122:09



TIME and Source

Communication

Radar Imagery

0122:23



0122:37



0122:52



TIME and Source

Communication

Radar Imagery

0123:06



0123:20



0123:34



TIME and Source

Communication

Radar Imagery

0123:48



0124:02

HELM

wheel now starboard ten no steering again.

0124:04

CPT

okay.

0124:06

[sound similar to engine telegraph]



0124:16



TIME and Source

Communication

Radar Imagery

0124:37
CPT

we have this one I think. we go.



0124:46
2M

**



0124:48
CPT

midships is fine.



0124:58

TIME and Source

Communication

Radar Imagery

0125:12



0125:27



0125:41



TIME and Source

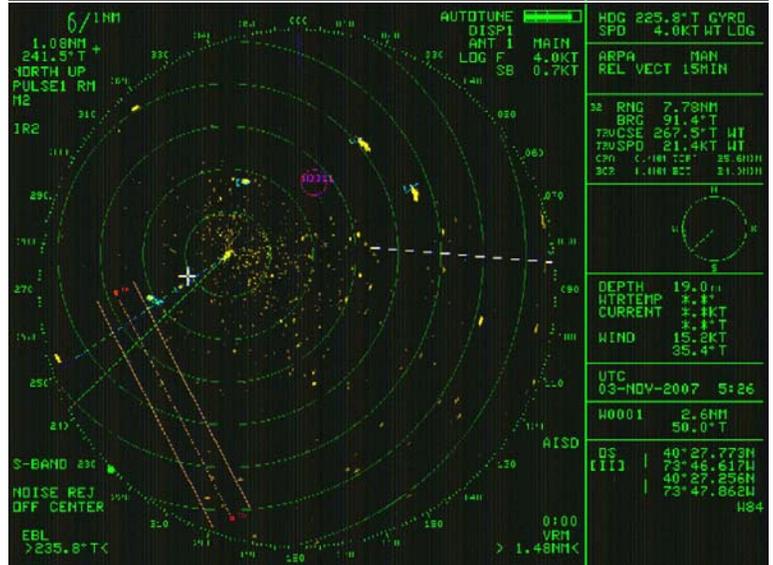
Communication

Radar Imagery

0125:55



0126:09



0126:23



TIME and Source

Communication

Radar Imagery

0126:39
CPT

soooo four miles and be expected at two oh clock.

0126:47
2M

*

0126:48
CPT

it is *.

0126:51

0127:14
CPT

this is the pilot boat *.



TIME and Source

Communication

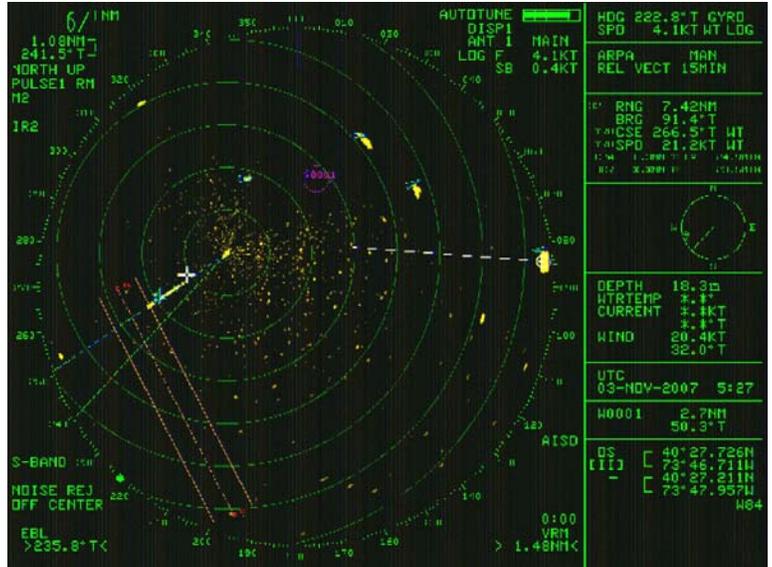
Radar Imagery

0127:28
2M

she's **.

0127:32
CPT

huh?



0127:34
2M

***.

0127:41
2M

one mile. * point five.



0127:48



TIME and Source

Communication

Radar Imagery

0128:02



0128:18



0128:32



TIME and Source

Communication

Radar Imagery

0128:59
CPT

this is Ambrose we have there yeah.



0129:00



0129:14



TIME and Source

Communication

Radar Imagery

0129:28



0129:52
CPT

he's coming also south.

0129:55
2M

yeah.



0130:06
?

***.



TIME and Source

Communication

Radar Imagery

0130:10



0130:24



0130:38



TIME and Source

Communication

Radar Imagery

0130:52



0131:06



0131:21



TIME and Source

Communication

Radar Imagery

0131:35



0131:49



0132:03



TIME and Source

Communication

Radar Imagery

0132:17



0132:31



0132:45



TIME and Source

Communication

Radar Imagery

0133:04
CPT

and uhh—.

0133:05
NS-VHF

Sandy Hook Pilot this is Norwegian Spirit.

0133:10
CPT

be sure we have a heaving line there.

0133:12
NY-VHF

Norwegian Spirit this is Pilot Boat New York go ahead.

0133:15
NS-VHF

yes sir pilot uh we are passing uh november bravo buoy.

0133:20
NY-VHF

okay sir we will board your vessel at two oh clock approximately one mile west of the Ambrose Light Tower.

0133:26
NS-VHF

okay understand uh two— two oh clock at uh one mile west. just a quick question uh which ship is uh entering first the channel? the Axel Spirit or us?

0133:39
NY-VHF

yes sir Axel Spirit right now is uh pretty much only a half a mile from the tower so we'll be boarding that vessel first and that ship will be bound for Sandy Hook Channel.



TIME and Source

Communication

Radar Imagery

0133:50
NS-VHF

okay we understand so uh Axel Spirit first then we follow.

0133:54
NY-VHF

yes sir that vessel right now is much closer so it looks like we'll be boarding that vessel first. you'll be number two.

0134:00
NS-VHF

okay understood thank you.

0134:15
CPT

that's good. [sound of exhale]

0134:15
2M

yeah that's good. that's good.

0134:24



TIME and Source

Communication

Radar Imagery

0134:38



0134:52



0135:06



TIME and Source

Communication

Radar Imagery

0135:20



0135:34



0135:51

[sound similar to internal bridge door]

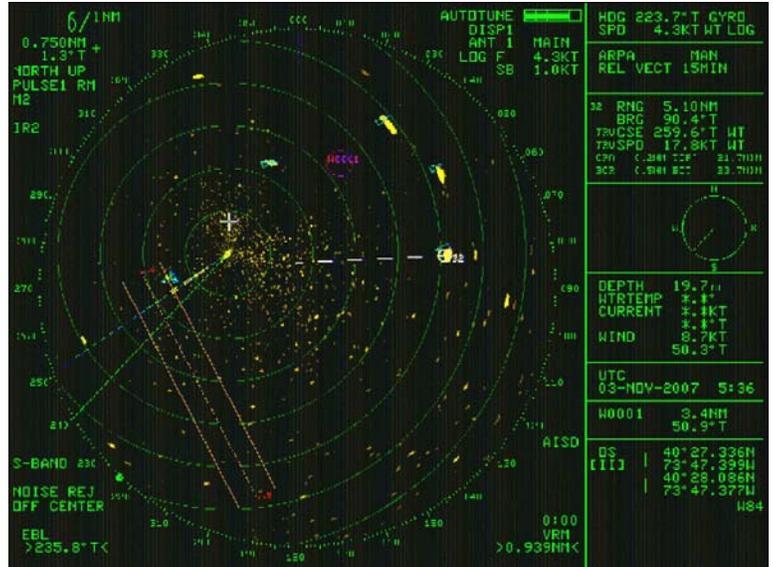


TIME and Source

Communication

Radar Imagery

0136:02



0136:16



0136:30



TIME and Source

Communication

Radar Imagery

0136:44



0136:58



0137:22

CPT

sooo distance to pilot station is one and a half mile.



TIME and Source

Communication

Radar Imagery

0137:32
2M

one mile. this is uhh— this is. one point * to pilot boats.



0137:41
CPT

uh-huh.

0137:50
?-VHF

Norge Spirit Norge Spirit.



0138:05
?-VHF

*



TIME and Source

Communication

Radar Imagery

0138:11
CPT

so what speed do we need for uh being uh two oh clock maintaining.

0138:19
2M

**

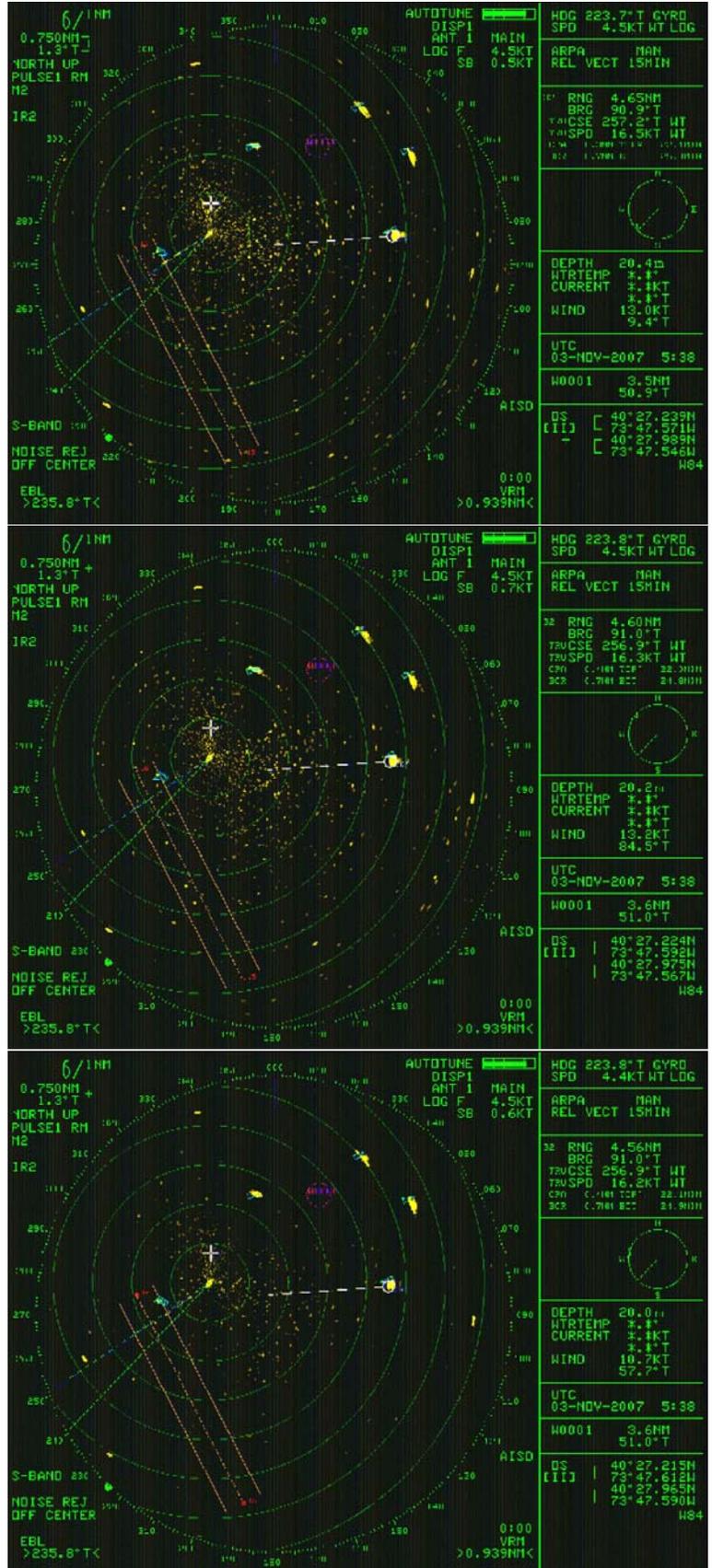
0138:32
2M

four point five.

0138:33
CPT

four point five. yeah that's what we are making.

0138:40



TIME and Source

Communication

Radar Imagery

0138:54



0139:08



0139:22



TIME and Source

Communication

Radar Imagery

0139:36



0139:50



0140:04



TIME and Source

Communication

Radar Imagery

0140:18



0140:32



0140:56
LOOK

sec?

0140:57
2M

yeah.

0140:58
LOOK

**.

0141:00
2M

yeah.



TIME and Source

Communication

Radar Imagery

0141:01
LOOK

**



0141:02
2M

** starboard side *

0141:14
?

yeah.

0141:21
2M

very close Ambrose Light.

0141:24
CPT

huh?

0141:25
2M

Ambrose Light is very close.



0141:29
CPT

which one?

0141:30
2M

this one this light on the starboard side.

0141:33
LOOK

we are very close sir.

0141:35
CPT

Ambrose?

0141:35
2M

yeah.

0141:37
CPT

that one?



TIME and Source

Communication

Radar Imagery

0141:38
2M

that one.

0141:40
CPT

too close you mean.

0141:41
2M

yeah.

0141:42
CPT

so we can go two twenty.

0141:46
CPT

two two zero.

0141:46
HELM

two two zero.



0142:08
NY-VHF

Axel Spirit Pilot Boat New York.



TIME and Source

Communication

Radar Imagery

0142:13
CPT-VHF

Axel Spirit replying.

0142:15
NY-VHF

yes sir after you clear the tower I want you to leave the pilot cutter over your port side. port to port red to red with the pilot boat. boarding speed will be about eight knots. once you get a little bit closer I'll send the launch and the pilot to you *.

0142:30
CPT-VHF

okay.

0142:36
2M

captain.

0142:38
CPT

where the # is he?

0142:42
LOOK

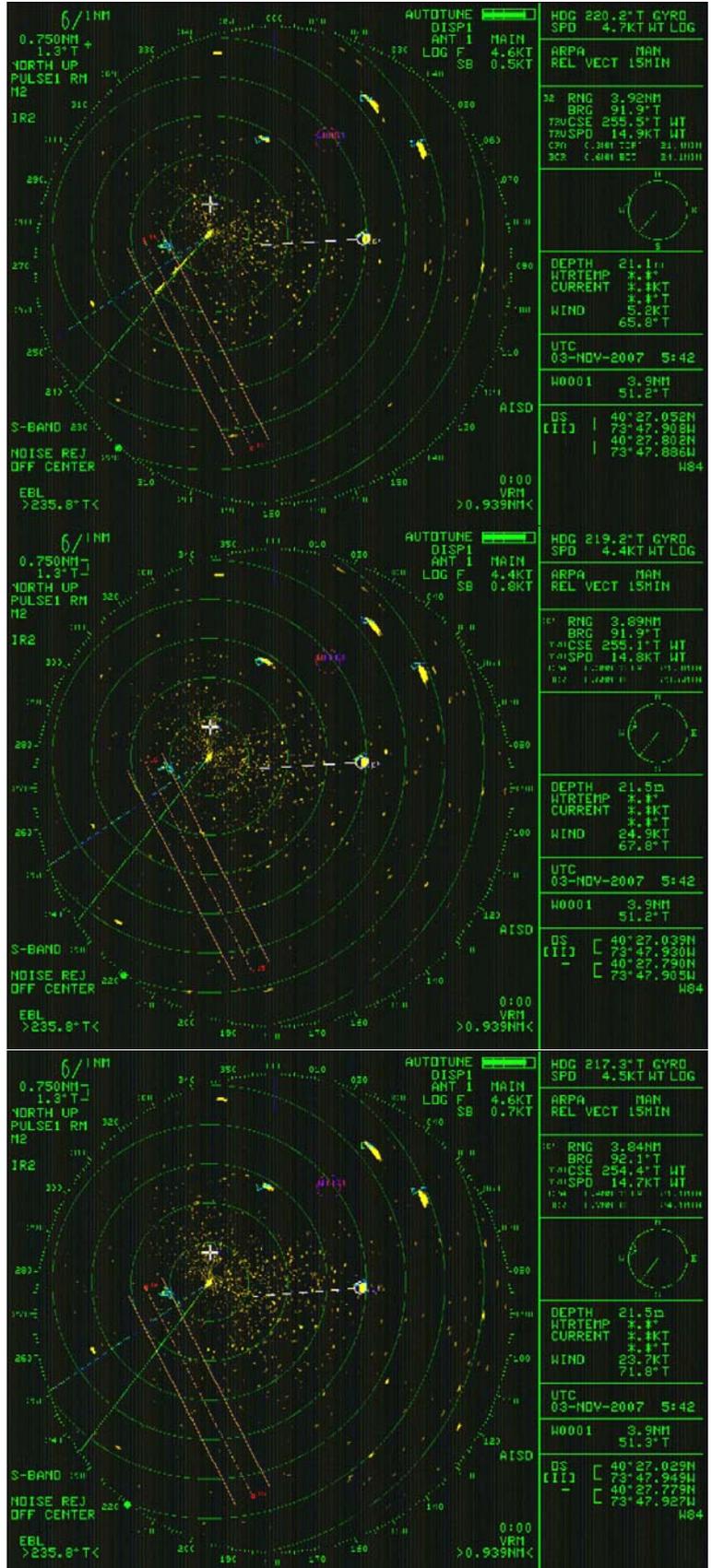
starboard flashing there. sec?

0142:46
2M

**.

0142:49
HELM

two two zero sir.



TIME and Source

Communication

Radar Imagery

0143:01
CPT come starboard ten.

0143:03
HELM starboard ten.

0143:03
CPT no port ten.

0143:04
HELM port ten.

0143:08
 [sound similar to engine telegraph]

0143:10
HELM port ten.

0143:14
 [sound of impact]

0143:17
 [sound of impact]

0143:19
 ? *

0143:22
CPT #.

0143:23
 [sound of impact]

0143:23
CPT starboard ten.

0143:24
HELM starboard ten.

0143:30
 [sound similar to engine telegraph]



TIME and Source

Communication

Radar Imagery

0143:38
HELM

starboard ten.

0143:42
CPT

starboard twenty.

0143:44
HELM

starboard twenty.

0143:53

[sound similar to alarm tone]

0143:55
HELM

starboard twenty sir.

0143:56

[sound similar to multiple alarm tones]

0144:06
CPT

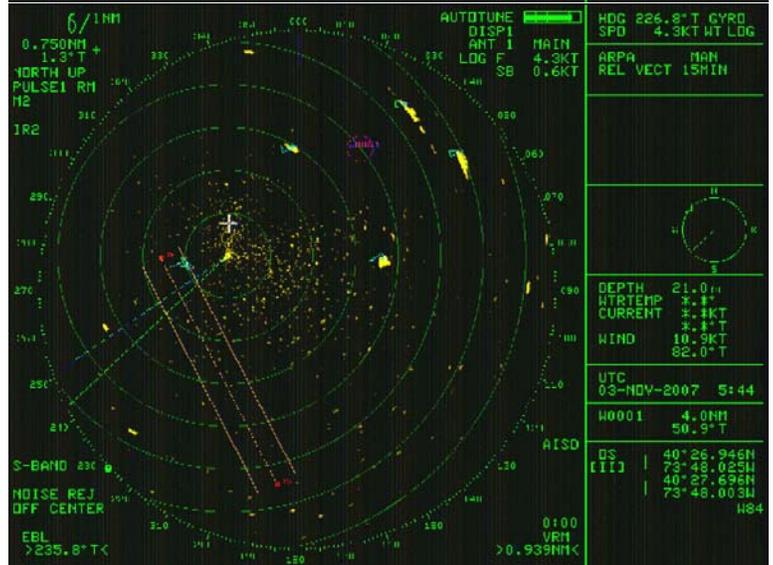
hard astarboard.

0144:07
HELM

hard starboard.

0144:08

[sound similar to multiple alarm tones]



TIME and Source

Communication

Radar Imagery

0144:23
CPT

we touched.

0144:27
HELM

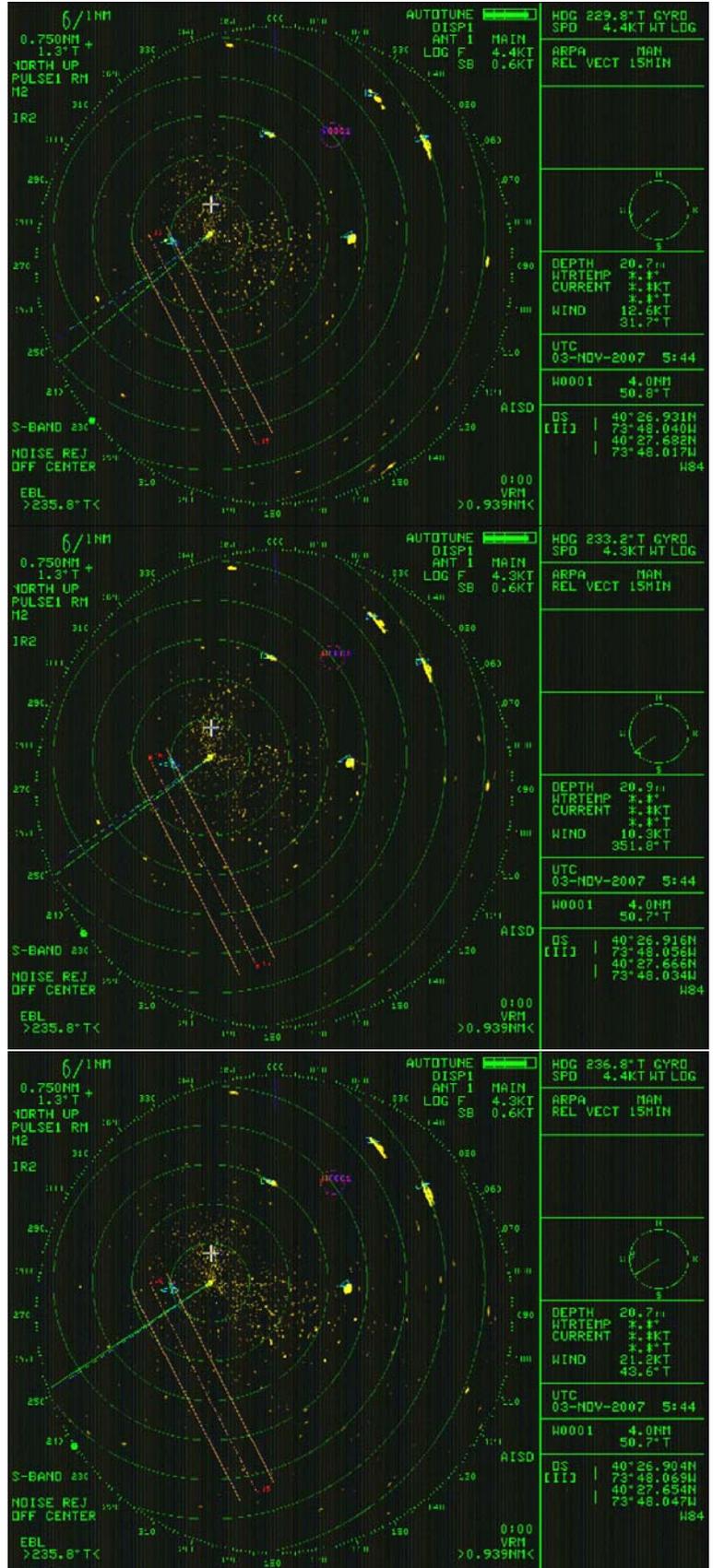
hard starboard.

0144:39

[sound similar to exterior bridge wing door]

0144:50

[sound similar to exterior bridge wing door]



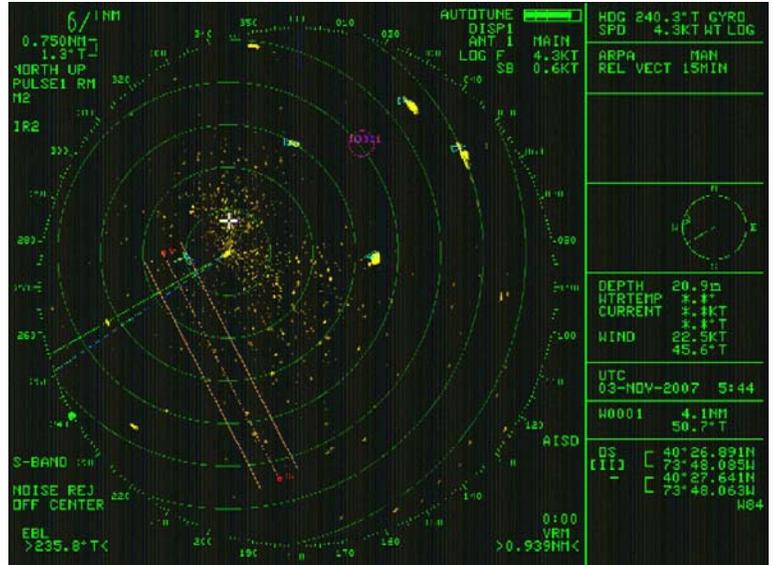
TIME and Source

Communication

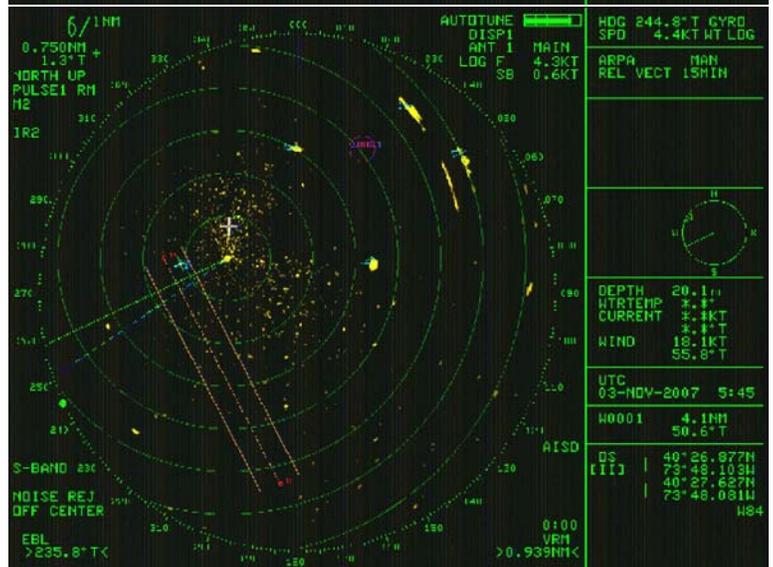
Radar Imagery

0145:08
HELM

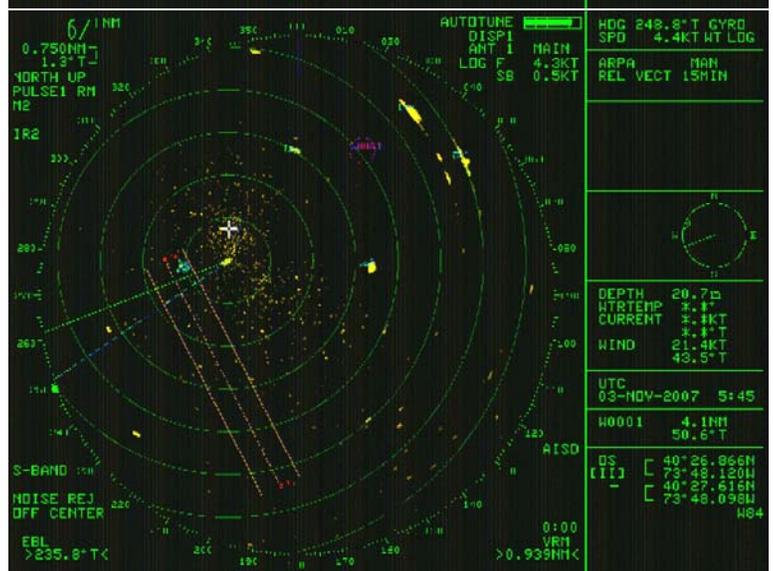
we are hard starboard captain.



0145:13



0145:27



TIME and Source

Communication

Radar Imagery

0145:42 ?	two two zero.	[End of pertinent radar imagery]
0146:05	[sound similar to engine telegraph]	
0146:35 ?	two six zero	
0146:38 CPT	midships.	
0146:39 HELM	midships.	
0147:05 HELM	wheel midship.	
0147:11 CPT	my God this will be hell.	
0147:14	[sound similar to engine telegraph]	
0147:21 CPT	I wonder if it's...showing much.	
0147:48	[sound similar to exterior bridge wing door]	
0148:12	[sound similar to exterior bridge wing door]	
0149:22 CPT	yeah come port uh twenty.	
0149:51 HELM	port twenty.	
0150:21	[sound similar to internal bridge door]	
0151:08 CPT	midship.	
0151:08 HELM	midship.	
0151:10 CPT	**.	
0151:22 HELM	midship.	
0152:04 CPT	steady.	
0152:05 HELM	steady.	

TIME and Source

Communication

Radar Imagery

0152:52
2M

that looks—.

0152:54
CPT

yeah so standby there up there.

0152:58
?

pumpy.

0152:58
CPT

alright pumpy.

0153:00
2M-UHF

bridge.

0153:00
?-UHF

control here.

0153:01
PUMP-UHF

go ahead.

0153:01
2M-UHF

please stand by pilot launch is coming.

0153:05
PUMP-UHF

I'm going down.

0153:15
2M

is it alright go down to deck?

0153:17
CPT

yeah you go down.

0153:28
HELM

steady as she goes sir course two six five.

0153:31
CPT

okay.

0156:11
CPT-UHF

is the pilot coming?

0156:17
PUMP-UHF

yes pilot coming.

0156:35
NY-VHF

Axel Spirit Pilot Boat New York.

0156:41
CPT-VHF

Axel Spirit replying. yeah go ahead pilot boat.

0156:47
NY-VHF

on the Axel Spirit uh please uh come more to starboard to make a good lee for launch.

0156:52
CPT-UHF

okay.

0156:56
CPT

starboard twenty.

TIME and Source

Communication

Radar Imagery

0156:57
HELM starboard twenty.

0157:04
[sound similar to engine telegraph]

0157:14
HELM starboard twenty.

0157:45
CPT-UHF is the boat coming alongside?

0157:48
2M-UHF not yet. it's coming closer.

0157:52
CPT okay midship.

0157:53
HELM midship.

0158:03
HELM midship sir.

0158:06
CPT okay.

0158:57
[sound similar to alarm tone]

0159:05
CPT-UHF is the pilot entering?

0159:08
2M-UHF uh the pilot uh is on the way now.

0159:123
CPT-UHF one or two?

0159:15
2M-UHF one.

0159:44
2M-UHF * pilot *.

0159:46
[sound similar to printer]

0159:48
CPT-UHF pilot on board. ask him if we should go hard to port again.

0159:58
2M-UHF yes captain you can go hard to port.

0200:01
CPT okay hard to port.

0200:02
HELM hard to port.

TIME and
Source

Communication

Radar Imagery

0201:25
CPT to port.

0201:47
PILOT good morning.

0201:48
CPT good morning.

0201:49
PILOT how are you captain?

0201:49
END of TRANSCRIPT

1337:24
END of RECORDING