



United States Coast Guard

The loss of the SS EL FARO in Hurricane Juaquin 2015

Missed Possibilities

Date: April 26, 2023

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U. S. Coast Guard
EL FARO Commandant Marine Board
Marine Casualty Investigator**





United States Coast Guard



In Memory:

On the evening of September 29th, 2015 the S.S. EL FARO departed Jacksonville, Florida and headed to San Juan, Puerto Rico. A hurricane was developing in close proximity to the ship's route.



33 seafarers, the entire crew perished.

"Disaster struck despite the following pre-accident conditions".

- The ship was reported to be in compliance with the vast majority of applicable laws and regulations.
- The crew were properly certificated to perform their duties.
- The company had a safety management system in place.
- The company conducted internal audits.



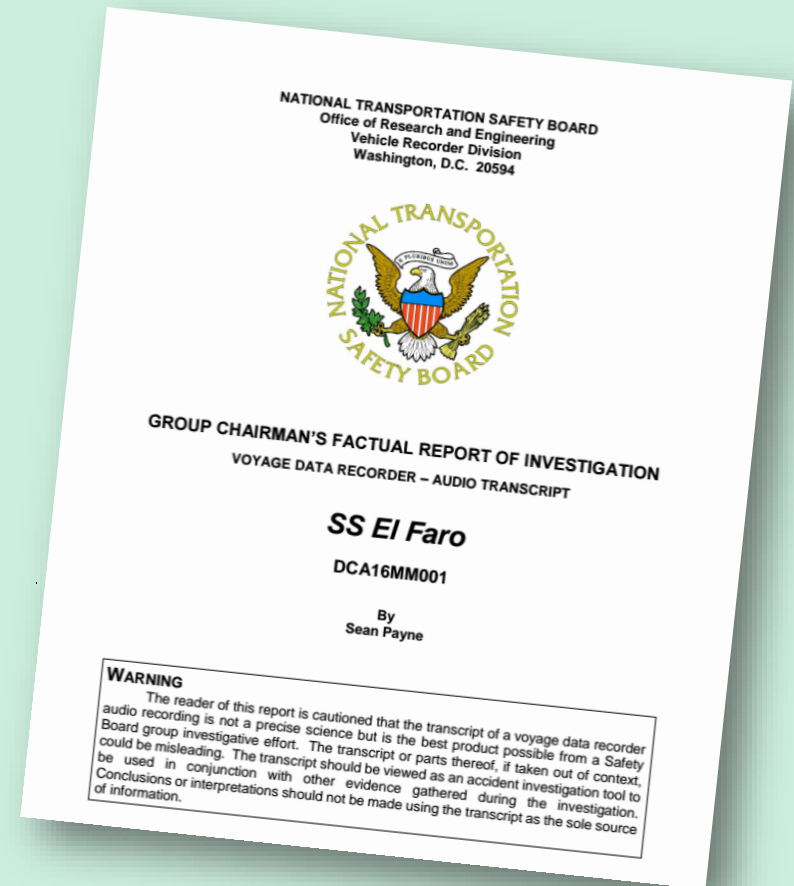
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This investigation examined thousands of facts.

The ship's black box, the voyage data recorder (VDR) was a critical piece of evidence.

The audio recording in the VDR ended at 07:39:41 on October 1, 2015.





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The voyage:



S.S. El Faro
Built 1975

CAPT *oh. no no no. we're not gunna turn around- we're not gunna turn around. [there is a brief unintelligible comment by either CM or AB-1 during the time the CAPT is speaking.]*

CM *so that's it then.*

CAPT *the- the- the storm is very **unpredictable- very unpredictable.***

CM *the storm could... [spoken over by the CAPT's comment above.]*

CM *it went high- it went left- it went right- it went back again.*

CAPT ***this one in particular is very erratic.***



The EL FARO's destination

WEDNESDAY
SEPTEMBER 30, 2015



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Reliance on single source of weather information:

The deck officers on the EL FARO had at their disposal a wide variety of weather information:

- BVS Weather Software with specific weather data for the ship

They collectively, did not effectively use the information provided by:

- National Weather Service via Sat C Terminal
- The Weather Channel on television
- Satellite radio streaming from a radio station in NYC
- Unique Broadcasts from CG Aircraft overhead
- Reports from her sister ship on a reciprocal course, the EL YUNQUE

They did not attempt to use:

- NHC products available via email from FTPmail.
- NAVTEX weather messages



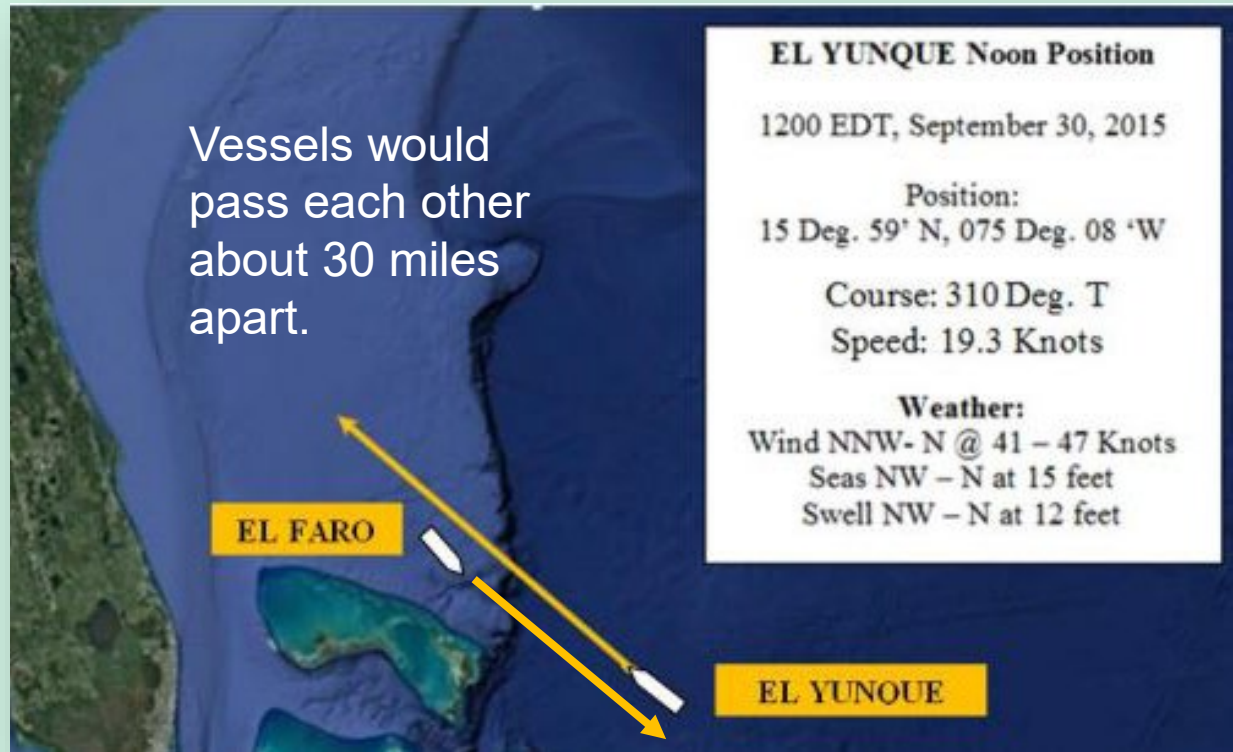
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The day before the sinking, emails and radio calls were exchanged between company vessels:

At 11:21 AM, EL YUNQUE's Master responded to the Master of EL FARO,

"[t]hat's good to hear. Hopefully, it will turn to the North soon. As we passed to the west of it we recorded a 100 knot relative wind gust. Luckily, it was coming from directly ahead."





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Unique Broadcasts from CG Aircraft overhead

On two separate occasions

2:15 PM and 2:38 PM, September 30th

2:15 PM

2M

CAPT

CAPT

2M

CAPT

aircraft he said? oh wow.

so hurricane warnings for- ohhh exactly.

[sound of chuckle]

yeah.

Abaco Island.

yep. they have all those right here written up.

Due to the nature of the storm, a decision was made by the Coast Guard to have its fixed wing patrol aircraft make broadcasts regarding Joaquin on its flight track. During the flight, **five vessels responded to the aircraft sécurité asking for additional information regarding the call outs about Joaquin.**

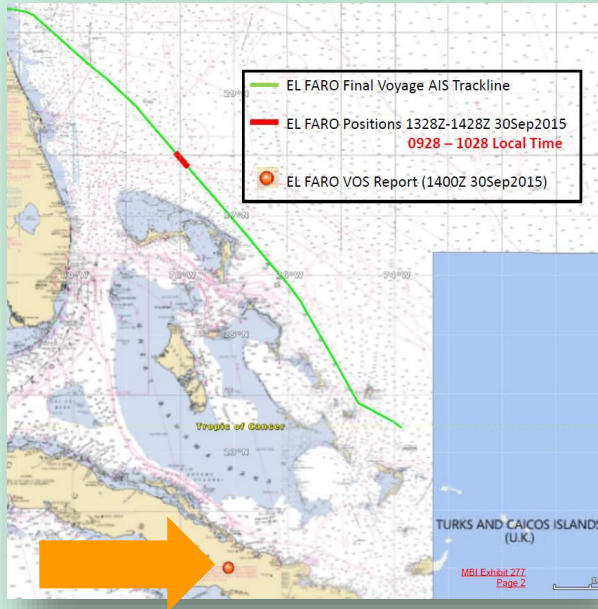
EL FARO was not one of the five vessels .



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Lost opportunity to over vessels. The error in the Voluntary Observing Ships Program Report to the NOAA



During a tropical cyclone, NOAA asked ships that transit within 300 miles of the movement of the storm's eye to make 3 hourly reports under the VOS Program.

At 2:16 PM on September 30, 2015, the 2/M made the following statement about her VOS report:

*I sent a weather report I hope it works 'cause I've never had to do it before. Oh but it's for fourteen hundred and eighteen hundred weather report. Uh (send as) an email (I guess) * *.*

The Master then responded to the 2/M that she should email it out.

Upon receipt of EL FARO's weather observation report on the afternoon of September 30, 2015, the NWS forecasters discounted it because the ship's geographic coordinates contained in the message placed EL FARO over the mainland of Cuba.

This error in EL FARO's latitude and longitude made the observations unusable.



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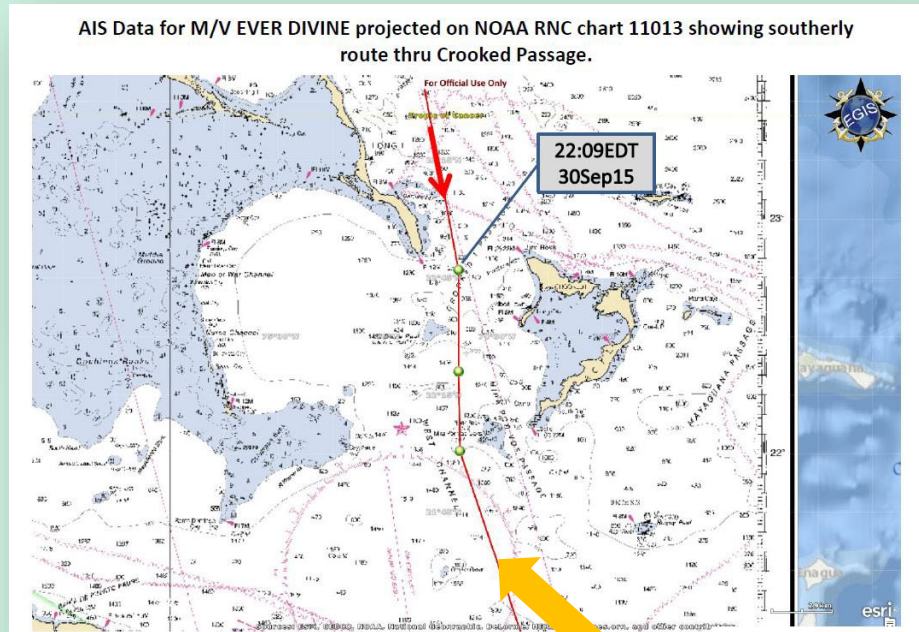
If the M/V EVER DIVINE was fitted with an Automatic Weather System (AWS)

M/V EVER DIVINE
IMO No. 9134282
Type: Container Ship
LOA: 965 ft



The M/V EVER DIVINE took the Crooked Island Passage approximately 4 hours before the EL FARO got there.

An AWS system, if fitted, would have shown the EL FARO the much better weather conditions that the EVER DIVINE was encountering.



The precise escape route the 3rd Mate (11:05 PM) and 2nd (1:20 AM) Mate proposed to the EL FARO Captain.



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Two different ships management ...the EL YUNQUE and the EL FARO

On the EL FARO the BVS Weather Data came in via email as data and the Master had to send it up to the bridge to be input into the computer so that the bridge officers could assess the information in the bridge laptop.

At 11:05 pm, September 30th, 2015, eight and a half hours before the sinking...

As the 3/M was conversing with the Master, the inbound email with the BVS weather attachment arrived in the Master's email inbox. The 3/M and 2/M were expecting the BVS weather update to be forwarded to the bridge computer for their review and potential action. The Master did not forward the 11 PM BVS package to the bridge until the next morning at 4:45 AM.



United States Coast Guard BVS Weather Software



BVS weather package transmitted to EL FARO at 11:04 PM on September 30, 2015, and downloaded at 4:45 AM on October 1, 2015.



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Overreliance on a single source of weather information:

BVS Weather Software with specific weather data for the ship

*From the VDR Audio Transcript, Accident Morning
Captain 05:03 am*

*That- that's fine- but here's the thing- you got two G-P-Ss- you got five G-P-Ss- you gunna get five different positions. you got one weather program (and I use/and use) B-V-S and that's what I (sent) up here * we're gettin' conflicting reports as to where the center of the storm is.*

Unlike the sister ship the El Yunque on a reciprocal voyage in the same weather the Captain of the EL FARO had to send the BVS weather packet from his cabin to the bridge.

On the accident voyage night, he did not send it up to the bridge officers to act on when he received the message.



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Complacency: "The Milk Run"



The ships wind measurement devices (2) had not been functioning properly for some time.

A professional 2nd Mate who had been on the EL FARO was asked how he determined wind direction after the accident

His preliminary answer was "Bubbles" on the water. This was later to prove telling.....

*From the VDR Audio Transcript,
Accident Morning 5:10 am*

SUP-1?

what's the wind speed?

CAPT

*we don't know. we don't
have (any) anemometer.*



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The crew of the SS El Faro



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U. S. Coast Guard
Investigations National Center of Expertise