

# District 7 Formal Investigation



**GOLDEN RAY Capsizing  
September 8, 2019**



# Purpose of the Investigation

Whether there is evidence that any failure of material (either physical or design) was involved or contributed to the casualty, so that proper recommendations for the prevention of the recurrence of similar casualties may be made;

Whether there is evidence that any act of misconduct, inattention to duty, negligence or willful violation of the law on the part of any licensed or certificated person contributed to the casualty, so that appropriate proceedings against the license or certificate of such person may be recommended and taken under 46 U.S.C. 6301; or

Whether there is evidence that any Coast Guard personnel or any representative or employee of any other government agency, or any other person, caused or contributed to the cause of the casualty;  
The cause of the accident.



# GOLDEN RAY Ship's Particulars

IMO Number	9775816
Flag	Republic of the Marshall Islands
Class	Korean Register of Shipping
Owner	GL NV24 Shipping, Inc.
Operator	G-Marine Service Co., Ltd.
Propulsion	Diesel Engine 12,927 kW x 1 Set(s)
Cargo	7742 vehicles
Built	2017
Construction	Hyundai MIPO Dockyard Ulsan, Korea

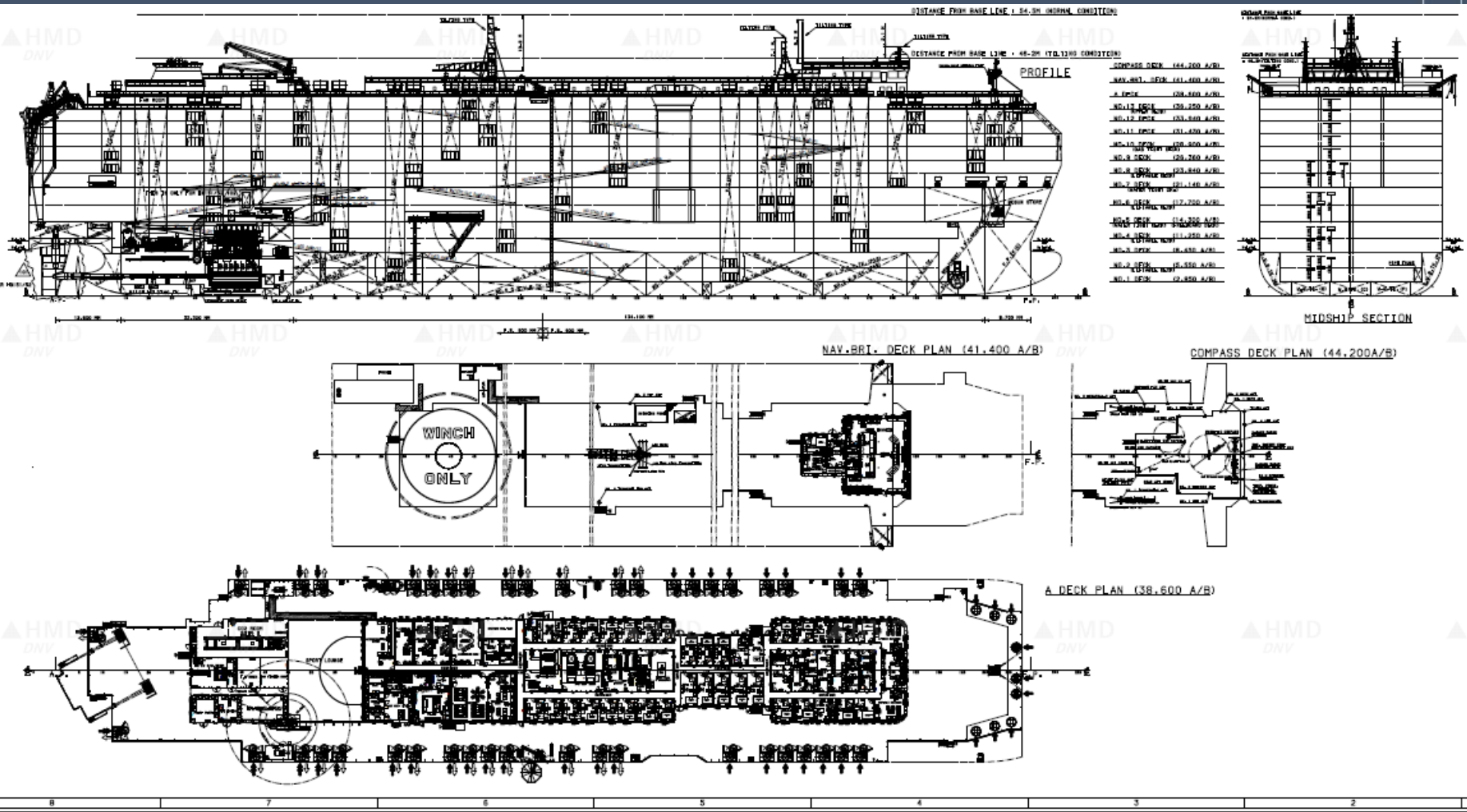


# GOLDEN RAY Ship's Particulars

Length Overall	199.95 Meters
Beam	35.40 Meters
Draft	10.60 Meters
Service	Car Carrier
Ahead KW	12,927 KW
Tonnage	71,178 Gross Tons
Full Speed	20 Kts @ 77.2 RPM
Steering	Rotary Vane Hydraulic

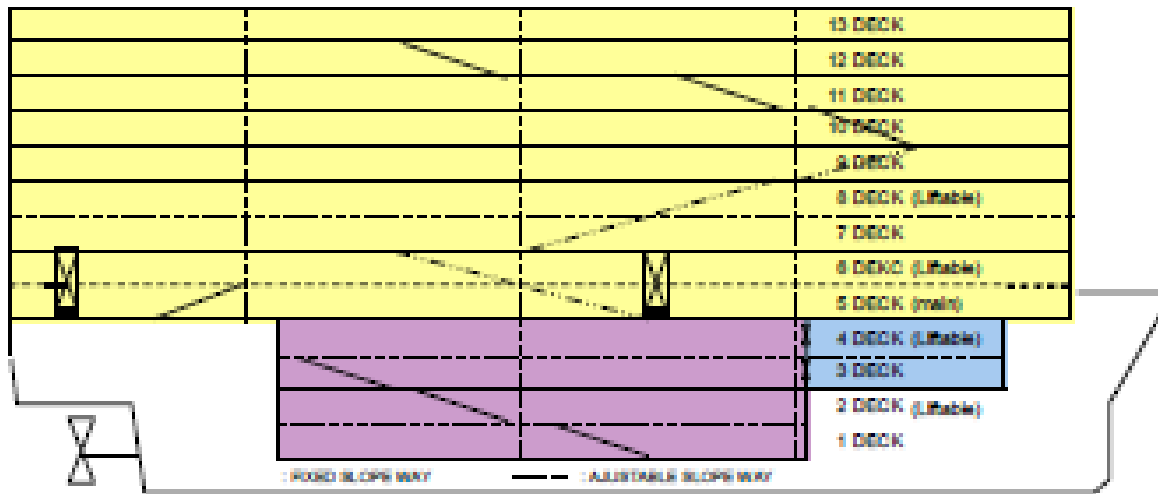


# GOLDEN RAY General Arrangement

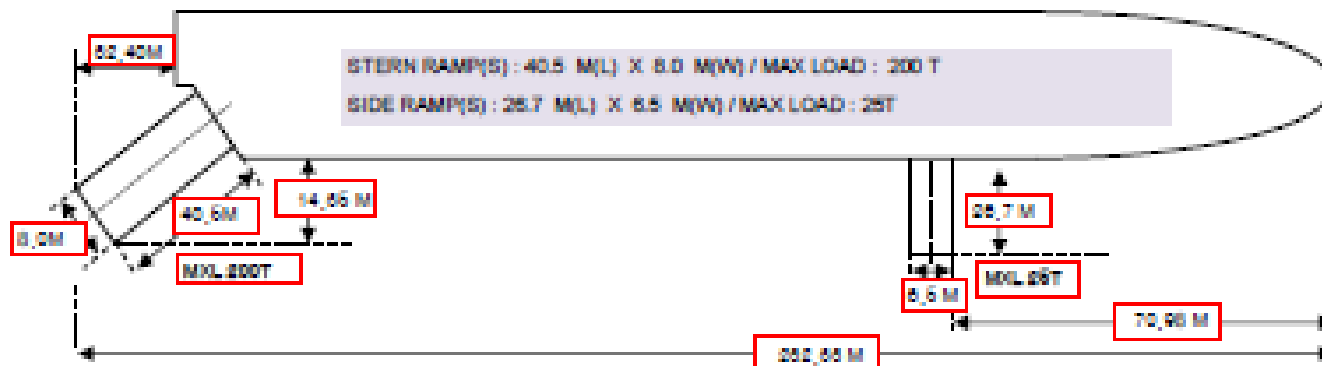


# GOLDEN RAY

## 1. LONGITUDINAL SECTION



## 2. PLAN VIEW OF MAIN DECK



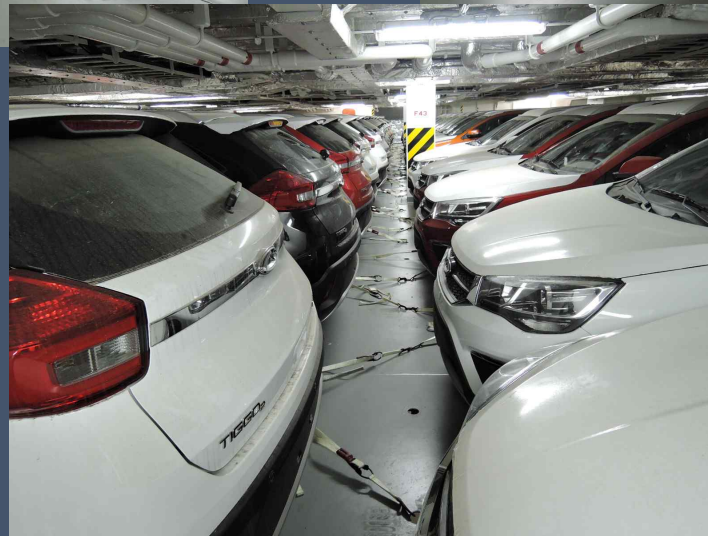
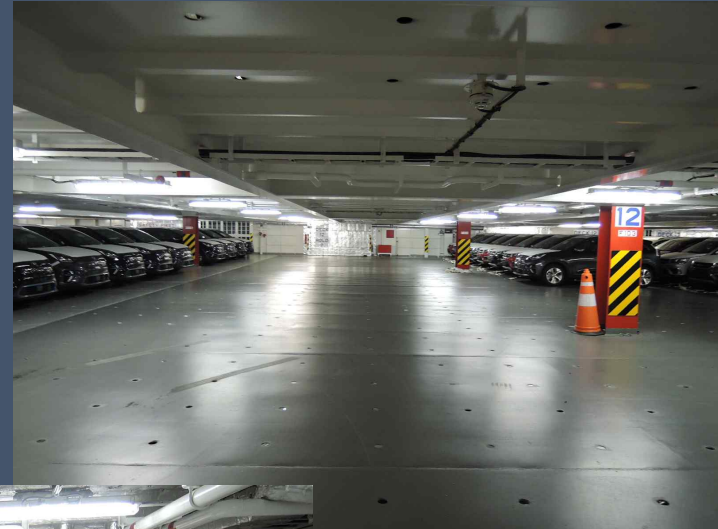
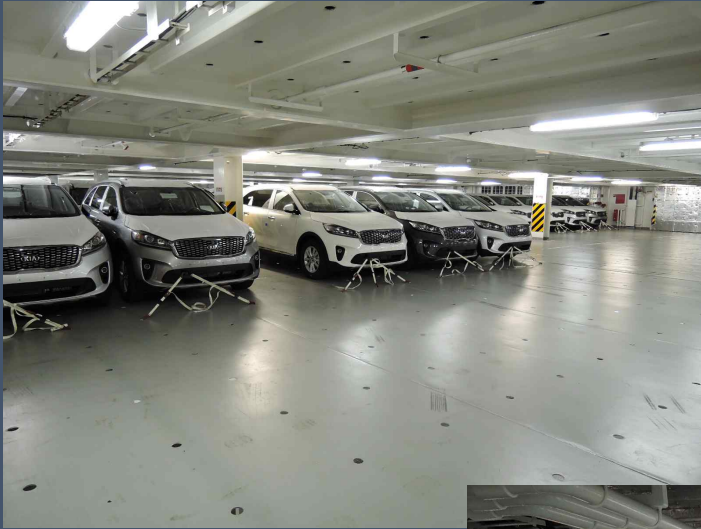
# GOLDEN RAY



CG Ex. 01



# Examples of vehicles loaded and secured on the vessel.





# Port State Control and Regulatory History

- 10 total Port State examinations since 2017 with no detentions or notable deficiencies.
- Two prior USCG Port State examinations
  - February 2, 2018 Coast Guard Sector San Francisco
  - May 19, 2019 Coast Guard Sector San Francisco



# Crew Qualifications and Manning

- The GOLDEN RAY crew were properly credentialed for the positions they filled onboard the vessel and all held appropriate flag State endorsements.
- The vessel was manned in compliance with the Minimum Safe Manning Certificate issued under the provisions of regulation V/14.2 of the International Convention for the Safety of Life at Sea, 1974 as amended by the Marshall Islands.



# Person on Board at time of Incident

- Ships Crew – 23
- Persons in addition – 1 (State Pilot)



# **GOLDEN RAY Voyage Timeline**

- **Veracruz**                      **19 Aug 2019 – 22 Aug 2019**
- **Altamira**                      **24 Aug 2019 – 25 Aug 2019**
- **Freeport**                      **27 Aug 2019 – 30 Aug 2019**
- **Jacksonville**                **6 Sep 2019 – 7 Sep 2019**
- **Brunswick**                    **7 Sep 2019 – 8 Sep 2019**



# Safety and Communication Equipment Overview

- Vessel held all required SOLAS Safety Certificates.
- All certificates were valid.
- There were no indications that any vessel safety or communication equipment contributed to the incident.



# Machinery, and other Equipment.

- Vessel held required SOLAS Safety Construction Certificate.
- The certificate was valid.
- There were no indications that vessel machinery or other equipment contributed to the incident.





UNITED STATES - EAST COAST

GEORGIA

# ST SIMONS SOUND BRUNSWICK HARBOR AND TURTLE RIVER

Scale 1:62,500 or LAR 31' 30"  
North Arrow and Datum of 1983  
SOUNDINGS IN FEET

TIDE DATA	
Mean High Water	1.0
Mean Low Water	0.0
High Water	1.5
Low Water	-0.5
Range of Tides	2.0

**NOTES**

1. This chart is based on the latest available information. It is subject to change without notice.

2. The soundings on this chart are in feet.

3. The datum for the soundings is Mean Low Water.

4. The chart is based on the latest available information. It is subject to change without notice.

5. The chart is based on the latest available information. It is subject to change without notice.

6. The chart is based on the latest available information. It is subject to change without notice.

7. The chart is based on the latest available information. It is subject to change without notice.

8. The chart is based on the latest available information. It is subject to change without notice.

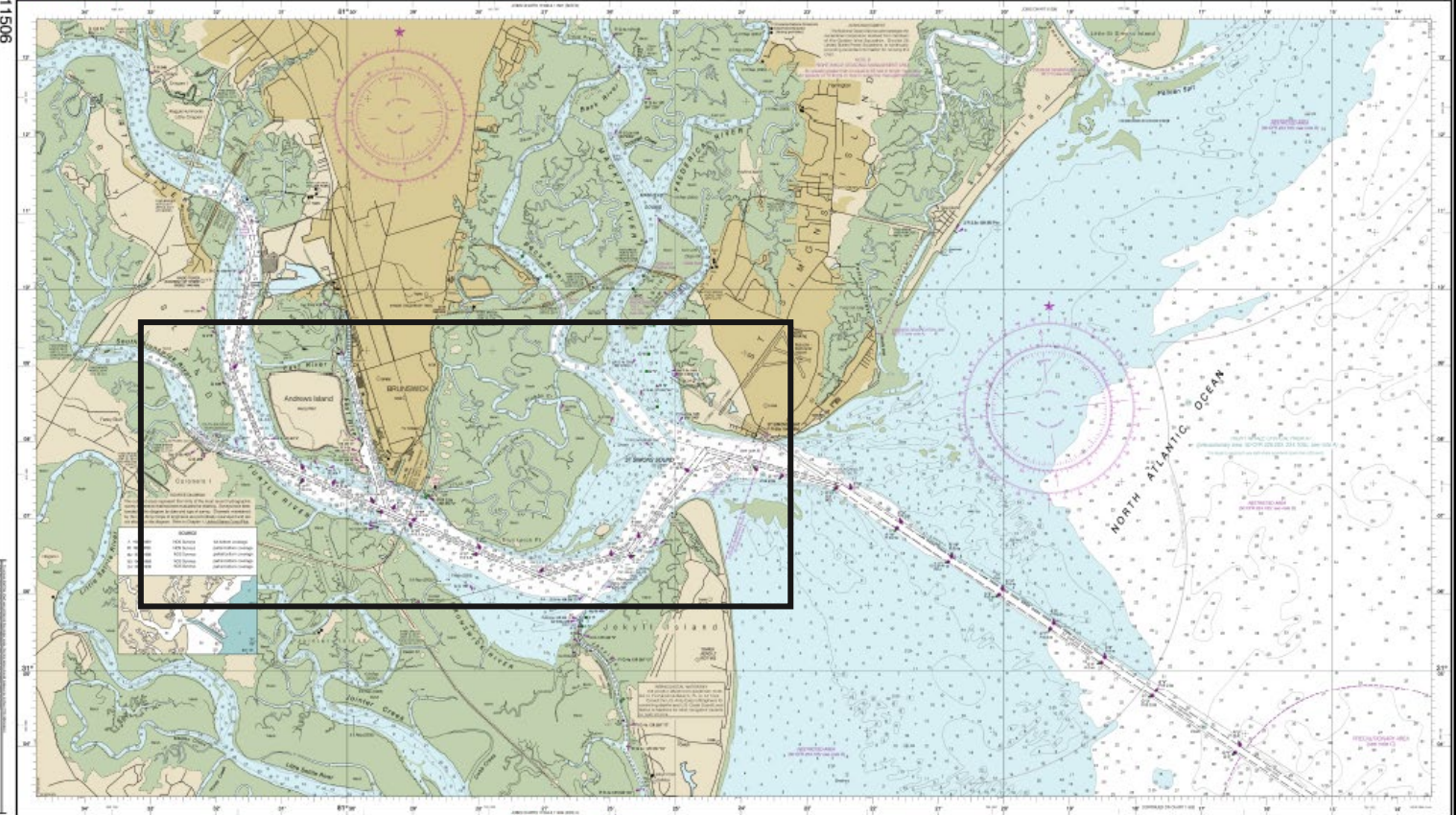
9. The chart is based on the latest available information. It is subject to change without notice.

10. The chart is based on the latest available information. It is subject to change without notice.

SCALE 1:62,500



SOUNDINGS IN FEET



11506

SOUNDINGS IN FEET

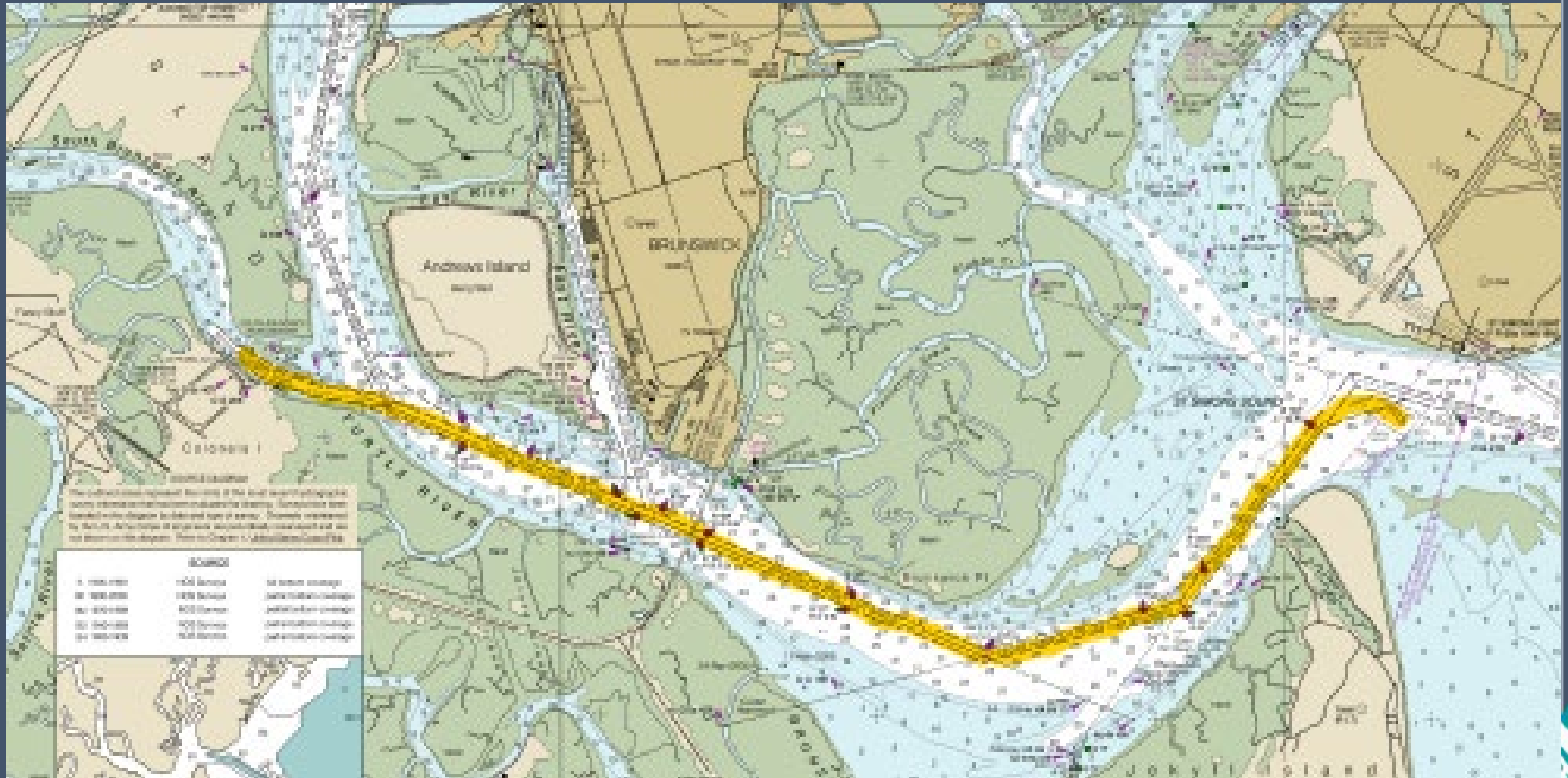
11506

**LEGEND**

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4.0	4.0	4.0	4.0
5.0	5.0	5.0	5.0
6.0	6.0	6.0	6.0
7.0	7.0	7.0	7.0
8.0	8.0	8.0	8.0
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96.0	96.0	96.0	96.0
97.0	97.0	97.0	97.0
98.0	98.0	98.0	98.0
99.0	99.0	99.0	99.0
100.0	100.0	100.0	100.0



# GOLDEN RAY Track History Brunswick





# Animation of Incident from Personal Pilot Unit and Voyage Data Recorder

Compiled by Mr. Marc DeJesus – USCG Investigations  
National Center of Expertise



