



**RMS REPUBLIC – SALVAGE / RECOVERY PLAN  
SUMMER 2023  
v. 1.0 – May 1, 2021**



Project Name: RMS REPUBLIC Treasure Recovery  
Location: International Waters - 40°26'00" N, 69°46'00" W

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**Confidentiality Agreement**

The contents of this document shall not be disclosed to any third party  
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### Contents

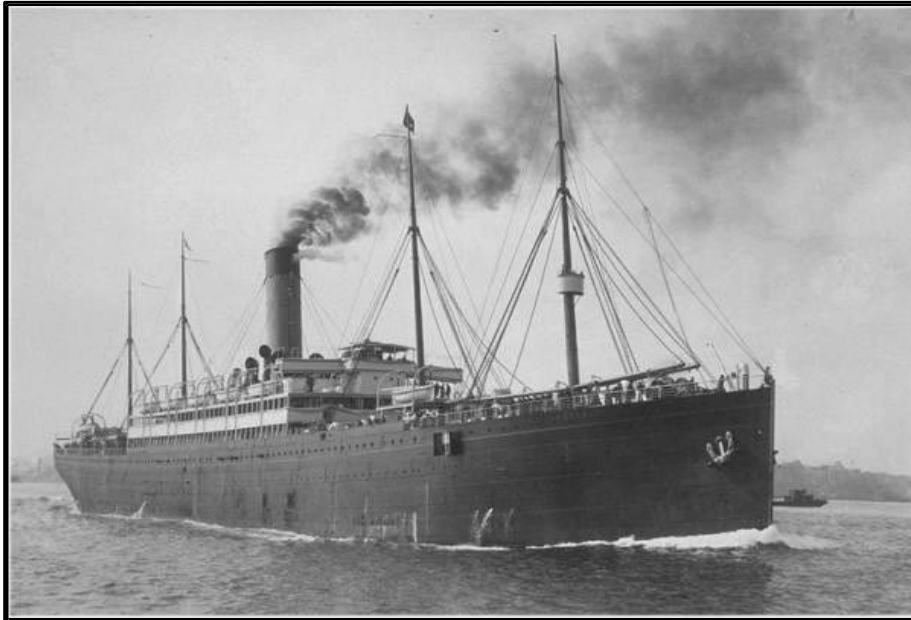
1.0	Introduction.....	3
1.1	Scope.....	4
2.0	Lords of Fortune Offshore .....	4
2.1	Mission and Vision.....	5
2.2	OHSE.....	5
3.0	Site Conditions .....	5
3.1	Weather.....	6
3.2	Diving Considerations.....	8
3.3	A Two-Pronged Approach.....	9
3.3	Project Logistics.....	9
3.4	The RMS Republic, General Information .....	10
3.5	Shipwreck Condition .....	11
3.6	Shipwreck Location .....	12
4.0	Work Platforms.....	12
4.1	Anchoring Systems .....	13
4.2	Dynamic Positioning Systems.....	14
5.0	1 <sup>st</sup> Prong: Excavation, Heavy Lift Barge MB1.....	15
5.1	Barge Mobilization, Excavation, Demobilization – Time Frame .....	16
5.2	Mooring.....	17
5.3	Fine Positioning.....	17
5.4	Grabbing.....	17
5.5	Guillotine.....	18
5.6	Dredging.....	18
5.7	Gold Recovery.....	18
5.8	Barge Personnel.....	19
5.8.1	Excavation Team - Barge.....	20
5.8.2	Project Management.....	20
6.0	2 <sup>nd</sup> Prong: Recovery, Multi-Purpose Offshore Construction and DSV.....	21
6.1	Mobilization – Diving Support Vessel.....	21
6.2	On Site Operations.....	22
6.3	Dive Operations.....	22

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6.4	Underwater Cutting and Removal Methodology.....	23
6.5	Silts and Sediment Removals.....	23
6.6	Treasure Recovery.....	23
6.7	Demobilization.....	24
6.8	Recovery Project Personnel.....	24
7.0	Estimated Costs.....	25
7.1	1st Prong – Excavation – Heavy Lift Barge.....	25
7.2	2 <sup>nd</sup> Prong – Recovery - DSV.....	25
7.2.1	Projected DSV Budget.....	27
7.2.2	Additional Expenses.....	28
8.0	Terms and Conditions.....	28

### 1.0 Introduction



RMS REPUBLIC underway

**RMS REPUBLIC** was a steam-powered ocean liner built in 1903 by Harland and Wolff in Belfast. In 1909 while sailing for the White Star Line, she collided with the immigrant ship SS Florida and was lost at sea. The RMS Republic was equipped with a new Marconi

wireless telegraphy transmitter, and issued a CQD distress call, resulting in the saving of around 1,500 lives. Known as the "Millionaires' Ship" because of the number of wealthy passengers who traveled by her, she was described as a "palatial liner" and was the flagship of White Star Line's Boston service. At 5:47 am on January 23<sup>rd</sup>, 1909, while in a dense fog, the inbound immigrant ship SS FLORIDA struck the outbound REPUBLIC on her port side just aft of amidships, opening her hull from the upper deck to below the waterline. Her engine room and after spaces immediately began to flood. Although considered "unsinkable," progressive flooding continued and the battle to save the ship was lost; while being towed back to New York, she sank stern first 39 hours after the collision.

Prior to her loss, she was one of the largest and most luxurious passenger liners afloat. Soon after her sinking, reports began to circulate that large gold shipments remained in her holds.

The wreck of the RMS Republic was discovered by Capt. Martin Bayerle in 1981. She lies upright approximately 50 miles (80 km) south of Nantucket Island in approximately 270 feet (82 m) of water. Salvage expeditions in the 1980s attempted to locate the gold, but were unsuccessful. However, the ship contains many other treasures. In addition to the gold, many ship and personal artifacts remain.

Survey expeditions were completed in 2009 and 2010 to image the wreck utilizing sidescan and multibeam sonar. In 2010 an ROV inspection was completed utilizing color video and sector scanning sonar. In 2015, the wreck was re-inspected as a part of the History Channel nine one-hour episode series Billion Dollar Wreck.

The target areas where the gold would have been stored remain unexcavated and

unexplored.

### 1.1 Scope

This commercial proposal describes a two-pronged recovery plan: the first, the utilization of a state-of-the-art Heavy Lift Barge to open the wreck in order to reach the target areas via the excavation of several thousand tons of debris, collapsed decking and overburden; the Second Prong, a Diving Support Vessel and saturation divers will be used for the recovery of delicate coins and other artifacts from the RMS Republic. The project is anticipated to start onsite the 1st of June, 2023, and operations are planned to take place over a period of 50 working days during the June through August 2023 recovery season. Historically, cargo recoveries of this scale have taken several seasons to complete.

## 2 Lords of Fortune Offshore

Lords of Fortune Offshore's management and personnel have extensive experience in wreck removal, marine & civil construction, heavy lifting, crane rental, barge and DSV operations and the establishment of support facilities for mobilization, completion, and demobilization of offshore projects.

Today, with our experience, skilled personnel, worldwide strategic partners and specialized resources, we have both the necessary assets and capability to complete complex marine salvage projects around the globe, with particular application to the recovery of valuable cargoes from the RMS Republic.



*Installation of 850 ton buoyancy tanks on Costa Concordia, Italy 2014, using crane barge MB1.*

Our team’s extensive work experience includes all forms of offshore heavy lifting ranging up to 1400 metric tons with the use of heavy duty offshore rated crawler cranes, the heavy duty crane barge MB1, four point moored deck barges, Saturation Diving, Heavy Duty ROV operations, DP 2 and DP3 Diving Support and offshore construction vessels suitable for marine excavation including salvage and wreck removal. The reputation and experience of our LoFO team, our can-do mentality and our thorough understanding of the complex requirements of the RMS Republic Project, will allow us to successfully achieve our objective – the recovery from the RMS Republic of the greatest lost treasure in history.

### 2.1 Mission and Vision

#### Mission Statement

Our mission is to be an internationally recognized, resourceful and reliable marine contractor providing the project management, personnel and tools for construction, offshore wind installation, salvage and decommissioning – we are Lords of Fortune Offshore!

#### Vision statement

With the right project management, planning, and resources every job is possible; by applying the best people, innovations and proven methods in the most efficient manner to the task at hand, success will follow.

### 2.2 QHSE

QHSE (Quality, Health, Safety and environment) forms an integral part of LoFO and all of our projects. Safety policies, practices, resources and activities relevant to the work are set out to encourage the maintenance of high Quality, Health, Safety and Environment standards among all employees.

**Safety**

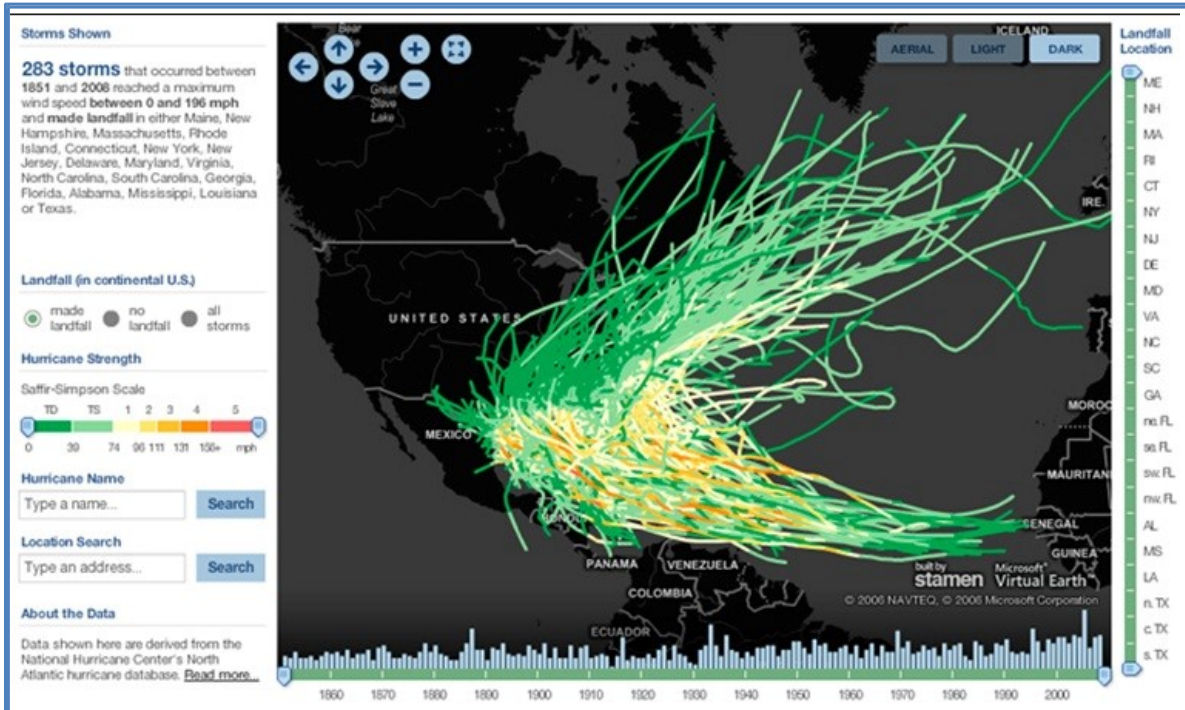


### 3.0 Site Conditions

The site is located in open ocean waters approximately 50 miles south-southeast of Nantucket Island. Though weather and sea conditions are unpredictable at this time, the anticipated timeframe for operations of June-August, 2023 provides the best opportunity for favorable conditions on site. While on site weather forecasts can be favorable, the area is fully exposed to wave action originating elsewhere in the Atlantic Ocean

### 3.1 Weather

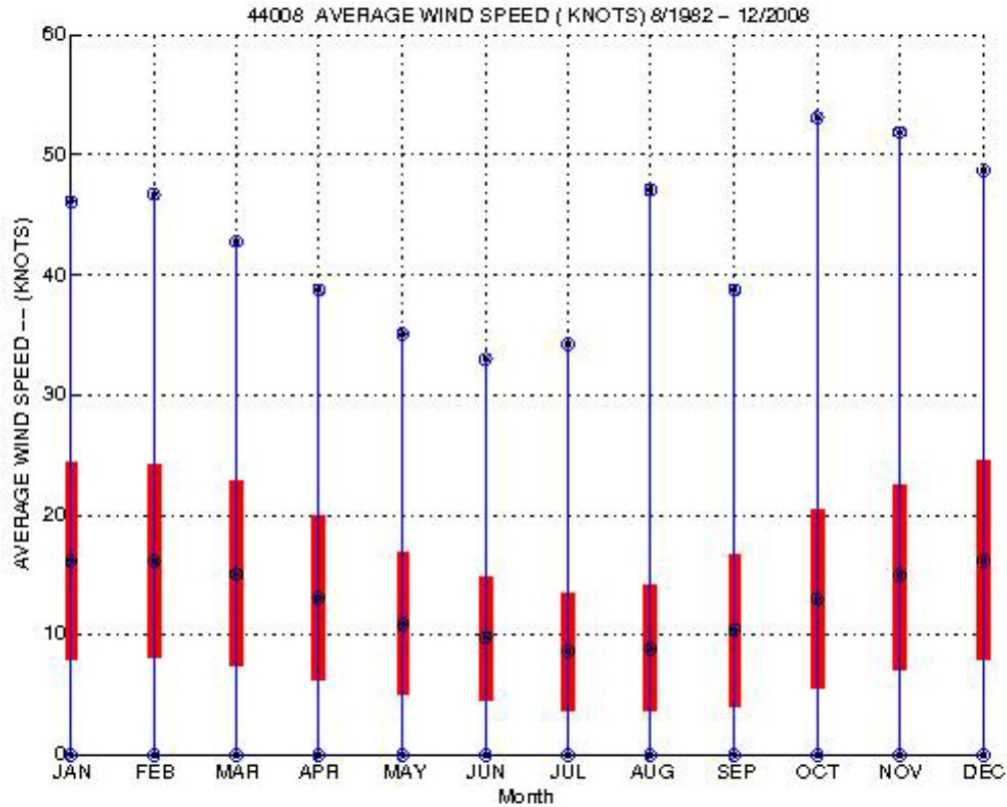
The official start of hurricane season begins on June 1<sup>st</sup>. As evidenced by the graphic below, the location of the RMS Republic lies in the direct path of serious storms. The potential for encountering a significant weather system increases as we move into late summer and early fall.



Storm Paths - Tropical Depression and greater storms between 1851 and 2008

Major storms notwithstanding, wind speeds are constantly monitored by an ocean buoy placed by NOAA's National Data Buoy Center. The buoy, #44008, is located approximately 20 miles to the east of the RMS Republic. Conditions are continuously monitored and the data recorded.

The data sets presented below represent the monthly average wind speed and average monthly wave heights recorded by buoy #44008 during the time period between August, 1987 and December, 2008.



**Graph Key**

The top blue dot-within-the-circle indicates the maximum value for the month. The top of the red bar indicates the value of one (1) Standard Deviation above the Mean Value. The bottom blue dot-within-the-circle indicates the Minimum Value. The blue dot-within-the circle in the middle of the red bar indicates the Mean or Average value. The bottom of the red bar indicates the value one (1) Standard Deviation below the Mean Value.

Based on the data contained in the above graphs it appears that mobilization of the project should be planned to occur in April with a target for excavation operations to commence June 1, 2023. In order to arrive on-site and commence excavation operations, it will take typically 60 to 90 days of advance preparation, mobilization and transit of equipment and personnel.

**3.2 Diving Considerations**

The water depth at the work location averages approximately 220 FSW in the area of the main deck between hatches #5 and #6 and varies to a maximum observed depth of 270 FSW on the surrounding seabed. Diving conditions will be fair with marginal visibility and

current impacts. The sub-aqueous visibility at the site will be 0' to 15' depending on the prevailing conditions and turbidity created by ongoing operations. However, underwater visibility generally increases as the recovery season progresses, the further time has elapsed from the underwater turbidity created by the spring runoff of winter snows but before the consequences of major hurricane-season storms.

### **3.3 A Two-Pronged Approach**

Initial excavation of the site will begin with the use of a heavy lift barge to clear several thousand tons of overburden and debris above the gold target areas. Once precious cargo is reached, the nature of RMS Republic's cargoes, rare gold coins and artifacts, the duration of the recovery and the depth of water will mandate the use of manned intervention, saturation diving techniques. Given these goals, the use of a DSV is the safest and most economical means to conduct 24/7 dive operations. As evidenced in the attached Statement of Qualifications, Lords of Fortune Offshore (LoFO) and our sub-contractors are uniquely suited to this project through our extensive experience in saturation dive operations and having previously worked on, in and around RMS Republic - which culminated in our successful prior excavations to pre-selected target areas within the ship.

Despite an over 40-year search for RMS Republic's general arrangement (GA) drawings, her drawings have not yet been located; her drawings were likely destroyed or removed from public access. However, based on extensive research conducted over the intervening years of earlier sequential ship designs, designs which culminated in RMS Republic's development, and with the cooperation of historians, engineers and the RMS Republic's builders, Harland & Wolff, LoFO has identified the two areas of the ship most likely to contain her gold cargoes.

These new target areas remain unexplored and unexcavated.

### **3.3 Project Logistics**

As this project is located far offshore, and access to supplies and equipment will be problematic, thorough planning and preparation will be critical to ensure that all potential needs are identified and met in terms of materials required for the project. Necessary personnel transportation and materials delivery services are available by vessel and/or helicopter.

LoFO has solicited quotations for support services from two firms engaged in offshore logistical support who operate in the area. The costs associated with these services are detailed in Section 6.

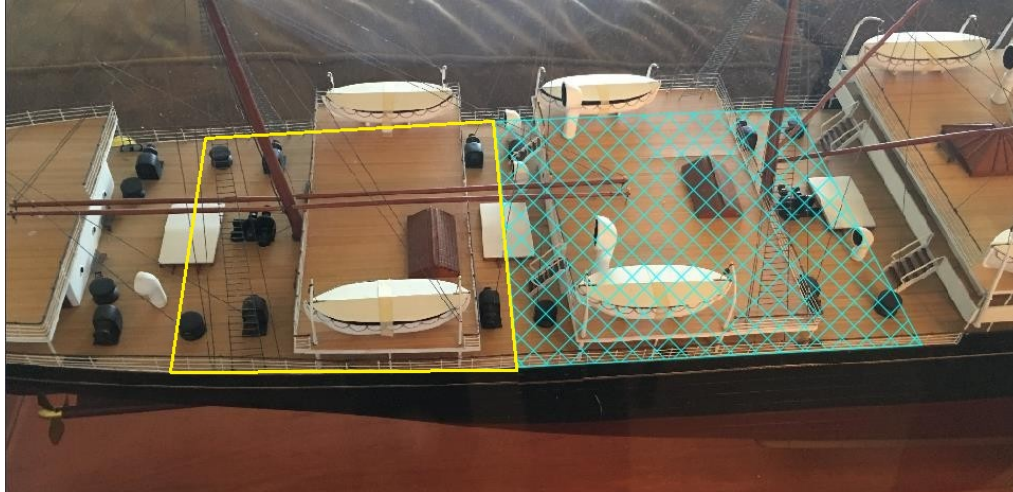
### 3.4 The RMS Republic, General Information

In her original state the RMS Republic was a 570' (173.3M) LOA vessel with a beam of 67.4' (20.7M), At her maximum draft of 34.1' (10.4M) she displaced 27,220 tons. She was equipped to carry 2,830 passengers and 300 crew. She has a riveted steel hull, five decks and seven cargo holds, holds #1 through #4 forward, and #5 through #7 aft.

Our targets are; 1. RMS Republic's Second Class Baggage Room whose location *is* known, and; 2. her Mail and 3. Specie Rooms whose locations, based upon information and belief, are within our primary target area. With holds numbered from bow to stern, the primary target area for this operation begins at the aft end of hatch #5 (leading to the hold immediately aft of the main deck house) and extends aft to the forward edge of hatch #6. If precious cargos are not found there, the secondary target area will be excavated through the forward edge of hatch #7.



***Figure 3-1 Ship Model based on sonar surveys, stern section. Hold #5 was excavated by Capt. Bayerle in 1987, but that effort focused forward , not aft, of the hatch.***



*Figure 3-2 Model Highlighting areas above Target Areas, Primary Blue, Secondary Yellow.*

### **The First Prong of Our Operations**

LoFO will deploy an offshore construction crane barge, the pictured MB1 or comparable, sufficient to conduct sequential excavation of the target areas until precious cargo is reached. The tools will include a large salvage grab to remove large structures, as well as an assortment of smaller precision grabs and cutting equipment to precisely sort and remove debris subsea. The initial excavation will be supported by a light work class ROV in-lieu of divers to reduce operational costs.

### **3.5 Shipwreck Condition**

Recent inspections of the shipwreck (2015) reveal a seriously degraded condition with decks collapsed and the port side hull plate collapsed inward, partially over the aft main deck area inway of cargo hatches #5 and #6, the primary Area of Interest (AOI) known to contain the Second Class Baggage Room, and believed to contain the Mail and Specie Rooms. The deck in the AOI appears to be littered with collapsed structural materials and is covered with marine growth.

Structural integrity of the steel will likely be challenging as excavation begins first with our heavy lift barge to remove RMS Republic's collapsed decks' steel and debris, if necessary, to the sea floor or until precious cargo is seen; once precious cargo is seen, the barge's ROV will begin the gold's recovery until the arrival of our DSV with saturation divers.

Once the precious cargo is reached and its dispersment within the wreck assessed, whether the gold coins are concentrated or dispersed throughout debris, determination of the actual recovery requirements will be made. This may entail recovering individual coins one-by-one, strapping coin boxes, and possibly strapping and lifting the entire section of the ship – whichever method would be the most cost effective in order to

maximize both the value of the coins and the recovery operation as a whole.

### **3.6 Shipwreck Location**

The wreck is located approximately 50 miles south of Nantucket Island in international waters at 40°26' N, 69°46' W lying in a general silt-to-sandy sea bed at a circumjacent bottom depth of 240 FSW; she rises to 215 FSW and in her washout (a depression created by currents scouring the bottom adjacent to the wreck) will fall to 270 FSW (82.3M).

### **4.0 Work Platforms**

LoFO is actively seeking options for suitable platforms from which to conduct the operations. In its two pronged approach, LoFO plans to use, initially, a derrick barge equipped with either Dynamic Positioning or an anchoring system to remove the debris and overburden in the target areas until precious cargo is reached.

Once reached, a Diving Support Vessel (DSV) with saturation divers will be used to recover the coin cargoes. As of this writing, vessels suitable for the operation are located in the Gulf of Mexico, New England, Nova Scotia and in Europe.

For comparison the following table compares the advantages and disadvantages of the positioning of vessels with anchoring and dynamic positioning systems. Barges are most commonly anchored.

Anchoring	Dynamic Positioning
<p><b>Advantages:</b>                      No complex control systems.                      No chance of losing station through system failures or blackouts.                      No underwater hazards from thrusters.</p>	<p><b>Advantages:</b>                      Very easy to change position.                      No anchor handling tugs are required.                      Not dependent on water depth.                      Can weathervane to limit sea and weather impacts.                      Quick setup on location.                      Not affected by obstructed seabed.                      Easy breakaway from adverse weather.</p>
<p><b>Disadvantages:</b>                      Limited maneuverability once anchored.                      Anchors can drag in heavy weather or current.                      Anchor handling tugs are required. Less suitable in deep water.                      Time to anchor out varies between several hours to several days.                      Limited by obstructed seabed (pipelines, seabed).                      Anchors must be retrieved or disconnected in order to break away due to weather.</p>	<p><b>Disadvantages:</b>                      Complex systems with sensors, thrusters, extra generators and controllers. High fuel costs.                      Chance of losing station through system failures or blackouts.                      Underwater hazards from thrusters for surface divers and ROVs.                      Higher maintenance of the mechanical systems.</p>

#### **4.1 Anchoring Systems**

Anchor systems vary widely and are fabricated subject to the requirements of the vessel being moored, the water depth and environmental considerations of the location which include bottom type, current, sea and weather conditions. For purposes of the RMS Republic operation we will only consider, for the excavation phase, a barge platform capable of deploying a 4 point mooring spread. Our Diving Support Vessel will either be 6 point moored or operating on dynamic positioning as circumstances dictate.

Anchoring systems will always include crown buoys which are round floats that support the end of a recovery wire attached to the crown of the anchor. These buoys generally mark the locations of the anchors but their primary purpose is to allow deployment, shifting and recovery of the anchors by an anchor handling assist tug.

Where the possibility of adverse sea and/or weather conditions persist peg top buoys are often installed into the system. These large buoys are connected to the anchor by a section

of chain, the length of which is determined by water depth. The vessel entering the moor connects a cable to the top of the buoy. When all cables are connected the vessel can maneuver into position through use of its onboard anchor winches. If adverse weather is forecast the vessel can quickly disconnect the cables from the peg top buoys and depart for safe harbor leaving the anchors and buoys in place.

A detailed anchor plan specific to the vessel will be developed if the vessel selected for the operation is an anchoring vessel.

### **4.2 Dynamic Positioning Systems**

After initial excavation with a deconstruction barge, a Diving Support Vessel and saturation diving will be used to conduct coin recovery. LoFO has several vessels under consideration.

For reference the information below describes the basic differences and considerations between the classes of DP systems, DP 1, DP 2 and DP 3.

- Class DP 1 has no redundancy. Loss of position may occur in the event of a single fault.
- Class DP 2 has redundancy so that no single fault in an active system will cause the system to fail. Loss of position should not occur from a single fault of an active component or system such as generators, thruster, switchboards, remote controlled valves etc. but may occur after failure of a static component such as cables, pipes, manual valves etc.
- Class DP 3 has to meet the requirements of DP 2 but also must withstand fire or flood in any one compartment without the system failing. Loss of position should not occur from any single failure including a completely burnt fire sub division or flooded watertight compartment.

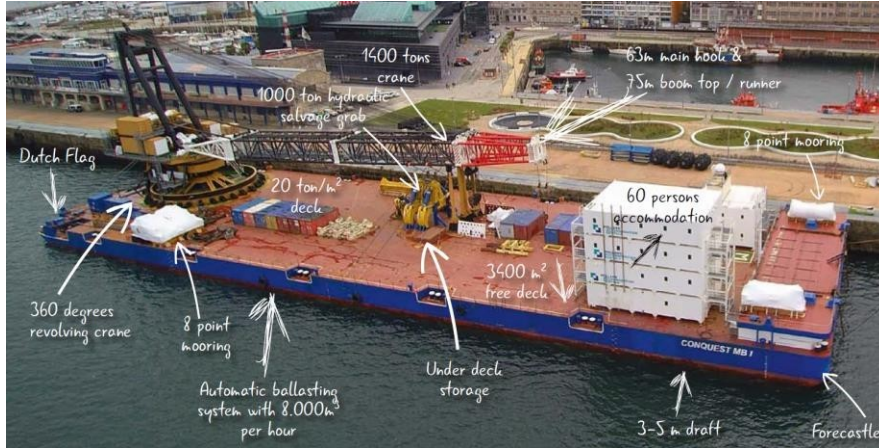
### 5.0 1<sup>st</sup> PRONG: EXCAVATION, HEAVY LIFT BARGE MB1

The work platform for the initial excavation will be the MB1 or comparable. This crane barge has a 1400 ton lifting capacity, will handle the salvage grab and will accommodate the salvage crew for more details please see the annexes.

#### SPECIFICATIONS

- 1400 ton capacity
- The crane fully rotates 360 degrees (6 min with full load)
- Dimensions are 136 m long by 36 m breadth with 8 m hull
- Free deck space of 3,400 m<sup>2</sup>
- Deck strength of 20 ton/m<sup>2</sup>
- The barge has an automatic ballast system (8000 m<sup>3</sup> per hour)
- 8 point mooring system (50 ton line pull/120 ton brake)
- 2 x 753 kW power supply
- 12 or 60 pax accommodation in 18 double cabins and 8 triple cabins





### 5.1 Barge Mobilization, Excavation, Demobilization – Time Frame

Once contracted, the MB1 will be outfitted with a small work class ROV, the guillotine and airlift. The tugboat will be connected and tow it to the wreck location off Nantucket. The

MB1 will be towed by tug to the wreck site; during anchoring an additional tug from the Boston area will be used to assist in anchoring.

Based on past experience, the barge excavation phase of the operation would proceed according to the following schedule (subject to local authority approval and weather permitting):

Outfitting and preparing crane barge	5
Sailing to the wreck site	10
Setting up mooring	1
Surveying & mapping wreck	3
Fine positioning	1
Removing decks with salvage grab	10
Contingency for guillotine & airlifting	5
Weather downtime	5
Sailing back to port of origin	10
	-----
	50 days

Once precious cargo is reached, the excavation barge’s ROV will begin recovery and await the onsite arrival of the DSV; the DSV with saturation divers will complete the recovery.

It is anticipated that a proper gold recovery will take several months in each of 2 to 3 seasons. Recoveries of this size, historically, have taken several years to

complete a full recovery. The time-to-completion will be determined primarily upon how the cargo is found within the wreckage, whether concentrated or dispersed. The DSV used for recovery (as opposed to the barge for excavation), as a result of its mobility (operating with dynamic positioning), will extend the operational window and allows greater flexibility in all weather conditions.

### **5.2 Mooring**

On arrival onsite the barge will be 4 point moored above the wreck using the 10 ton Delta flippers anchors. For this operation an additional anchor handler tug will be used. The heading of the MB1 will be according to the prevailing winds and sea state to optimize workability.

### **5.3 Fine positioning**

With the ROV the wreck will be mapped out with markers and the mooring winches the MB1 will be fine positioned above the decks that need to be removed and well within reach of the crane.

### **5.4 Grabbing**

With the crane of the MB 1 the open salvage grab will be lowered onto the section that needs to be removed, the ROV will be used to fine positioning. Once that is done the grab will be closed hydraulically and the crane will start lifting and the section will be torn off. The section will be landed next to the wreck.

The salvage grab's weight is approximately 160 metric tons with a grabbing capacity of 1000 metric ton pulling. The grab will be used to pull, separate and lifts the decks off the wreck. For more details please see the annexes. To minimize the threat of bulkhead collapse and diver entrapment LoFO intends to excavate downward into the ship removing decks and other obstacles that impede progress to the AOIs.



### 5.5 Guillotine

It is expected that there is not much integrity will remain in this riveted ship. However, as a contingency, we will bring along a so called guillotine, a purpose built tool which consists of a steel plate of 5 tons that will fall between two guide beams to be used as a chisel to cut steel plates, beams and other structural elements for grab removal.

### 5.6 Dredging

The wreck is in sections silted up. An airlift will be used to clear out sand and silt inside the wreck. An airlift is basically a large pipe where compressed air is blown in through a hose connection and with the rise and expanding of the air bubbles suction is created.

### 5.7 Gold recovery

The gold cargos may be discovered relatively intact, or the coins may be dispersed under potentially tons of additional collapsed decks and debris, or some combination.

Saturation divers working from a Diving Support Vessel will most likely be the method of choice for the most efficient recovery of delicate coins and artifacts. Until the DSV arrives on site, recovery will be initially carried out by our barge's ROV. The ROV will have a suction cup which is hooked up to the manipulator. The manipulator will place the suction cup onto the coin and with light vacuum pressure the coin will be lifted and placed inside a letterbox style storage casing. The casing will then be lifted onboard the MB1 and the coins can be removed and stored. Proper documentation and custody trail of the coin will be administered.



*Figure 5-1: Example Light Work Class ROV SAAB COUGAR XT*



*Wreck removal of DB1, offshore Gulf of Mexico July 2018*

## **5.8 Barge Personnel**

The following personnel will be employed for the excavation phase of the operation. LoFO will be supported by our appointed local agency service for the project duration and liaison with the local authorities.

**5.8.1 Excavation Team - Barge**

Qty	Position	Name	Years Experience
1	Salvage Master	TBN	
1	Naval Architect (Ship historical)	TBN	
1	Barge Captain	TBN	
2	Crane drivers	TBN	
1	Salvage foremen	TBN	
4	Salvage riggers	TBN	
6	ROV Pilot & Technicians	TBN	

**5.8.2 Project Management**

Qty	Position	Name	Years Experience
1	Project Manager	Bas Coppes	15+
1	Cost control	TBN	

Curriculum Vitae (CVs) and additional relevant certificates can be provided upon request. Depending on time of contract award, changes in availability might lead to deployment of other similar personnel.

Additional personnel required, such as welders, operators, riggers, etc. will be contracted on a case-by-case basis. Please note this overview excludes of the marine crews onboard the proposed floating assets. Project execution will be carried out 24/7, presumably in 12-hour shifts.

## 6.0 2<sup>nd</sup> PRONG: RECOVERY, MULTI-PURPOSE OFFSHORE CONSTRUCTION AND DSV

After completion of excavation using the heavy lift barge, LoFO will employ a Multi-Purpose Offshore Construction and Dive Support Vessel (DSV) as the primary work platform for the precious cargo recovery.



Several DSVs are under consideration. Several are equipped with a dual moonpool 18 man saturation dive systems to permit two teams working 24/7. Many DSVs are ideally suited for the proposed scope of work and carry all of the accoutrements

necessary for the project. This would include a large 150-400 metric ton heave compensated crane that will allow for operations in seas up to 5-7 feet and, as opposed to our moored excavation barge, can operate in a wider range of weather and sea conditions thereby extending the opportunities for cargo recovery.

### 6.1 Mobilization - Diving Support Vessel

Our DSV will be mobilized and demobilized from Davisville, RI or other point of origin. The DSV will transit from her mobilization port to the wreck site.

LoFO personnel will be dispatched to ports proximate to, and will transit to, the work site via launch where the divers will enter the saturation system and commence compression.

An ideal configuration and desired equipment of our selected DSV includes:

#### **Saturation Diving Package (100-850 FSW)**

Twin Bell 18 person Saturation dive system installed below deck frames 71-95.  
Bell handling system installed in integrated deckhouse ; Bells mate with flanges to decompress.  
Chambers installed on 2nd Deck.  
Sat. Control located on 2nd Deck.

Dive Control located on 3rd Deck.

Two 18-man Hyperbaric lifeboats installed-one on port and one on starboard side.

Air Dive Control Room Stbd. Side Deck 3 Dedicated Dive Emergency Generator of 750kW

### **Ancillary Equipment**

2ea - Hydraulic Power Units

2ea - Hydraulic Hose Reels

2ea - Hydraulic Reciprocating Saws

1ea - Hydraulic Circular Saw

1ea - Hydraulic Mag Drill

2ea - Welding Machine

2ea - Burning Package

2ea - Underwater Video Units

2ea - 6x6 Jetting Packages - Complete

1ea - 400 CFM Hi/Lo Air Compressor

1 ea - Work Rated ROV

1 ea – Video Ray ROV

## **6.2 On Site Operations**

The vessel will enter into a dynamically controlled position (DP) above the RMS Republic. The diving bell will be positioned above the AOIs and operations will proceed.

Positioning of the DSV, dive bell, ROV and divers relative to the Republic will be monitored by a survey crew utilizing an underwater acoustical navigation and survey system. The costs associated with the survey personnel and equipment have been included in the daily rate for a desired DSV as detailed in Section 6.

## **6.3 Dive Operations**

Divers will be deployed to survey the conditions on the vessel and map out the AOI. At that time detailed plans will be developed to remove any obstacles remaining from the barge excavation including cutting down any remaining deck structures in order to safely begin the removal of RMS Republic's gold cargoes.

The most opportune approach will be determined once divers have accessed the wreck and conditions are directly observed.

#### 6.4 Underwater Cutting and Removal Methodology



As listed above, LoFO will utilize a wide array of underwater cutting tools and methodologies to access the internal spaces of the ship. These will include exothermic underwater cutting as well as hydraulically operated reciprocating and circular saws, underwater chisels and grinders. Hydraulically operated underwater drilling equipment will also be employed if necessary.

A crane on the DSV will be utilized to remove any sections of decking or other obstructions which remain after the excavation phase is completed. As they are cut away, these will be placed on the seabed along the port side of the RMS Republic. If, during the recovery, artifacts are encountered these will be assessed by LoFO personnel monitoring the divers video and recovered to the surface as appropriate.

#### 6.5 Silts and Sediment Removals

A range of underwater tools available on the DSV and will be employed to remove accumulated silts. These will include air lifts fitted with a flexible hose which allows the diver to control the amount of suction and to direct the suction head to carefully excavate when necessary. Other methods will include water jetting and silt displacement utilizing hydraulically powered trash pumps.

#### 6.6 Treasure Recovery

LoFO experts will evaluate the situation and determine the best approach to a safe recovery that ensures the recovery operations are conducted in the best manner to preserve the treasure.

Recovered artifacts and treasure will be brought to the surface either by crane or with the diving bell during a bell run. All recovered items will be handled under the direct supervision of LoF/LoFO personnel.

Recovery operations will continue until LoF is satisfied that all recovery efforts have been completed. LoF will be solely responsible for preserving and securing the recovered materials.

**NOTE:** At the time of this writing there has been discussion by LoFO of divers accessing other areas of the wreck to recover other valuables in the passenger accommodation areas of the vessel. It is anticipated that the extent of these efforts will be predicated on the successful recovery of treasure from the Specie Room.

### 6.7 Demobilization

LoF will be responsible to take whatever steps are necessary to remove (or secure onboard) recovered materials from the vessel.

LoFO crews and their sub-contractors will demobilize equipment and personnel will depart the project via a launch.

The vessel will depart the project. Treasure and recovered items may be delivered by the vessel or auxiliary vessels to port(s) of convenience as determined by LoF/LoFO.

**NOTE:** If necessary the DSV will sail to shore where off loading and demobilization can be conducted.

### 6.8 Recovery Project Personnel

**LoFO and our sub-contractors** are providing all crew necessary to conduct continuous 24 hour per day saturation diving operations. Eight (8) divers will be compressed in the system with four (4) divers engaged in work at any given time.

- 1 ea - Project Manager
- 1 ea - Salvage / Recovery Master
- 2 ea - Saturation Diving Superintendent
- 4 ea - Saturation Diving Supervisors
- 8 ea - Saturation Divers
- 4 ea - Life Support Technicians
- 4ea - Saturation Technicians (Mechanical / Electrical)
- 4ea - Surface Divers
- 12ea - Tenders
- 2 ea – ROV Pilots

This crew will be briefed on the specifics of the job as a whole and their responsibilities to it. All questions will be answered and operations will only proceed when the Salvage / Recovery Master deems it prudent. All Supervisors will stay in close communication with the Salvage / Recovery Master and will alert him to any problems.

**7.0 Estimated Costs**

The following estimated costs are best estimates based on the financial and logistical conditions in place at the present time. LoFO reserves the right to modify these prices to reflect conditions at the time the work is performed.

**7.1 1<sup>st</sup> Prong – Excavation – Heavy Lift Barge**

LoFO believes the work of excavating to the AOI can be completed within 15 working days once the MB1 and her crew are on location above the wreck and begin excavation. As a contingency, additional extensions were factored in to account for unexpected delays due to weather, equipment issues, etc., making the time frame necessary to clear the AOI a total of 25 working days on location.

Task	Days	LoFO
Outfitting and prep	5	\$60,000
Tow out	10	\$480,000
Mooring set-up	1	\$120,000
Wreck mapping	3	\$360,000
Fine positioning	1	\$120,000
Salvage grab work	10	\$1,800,000
Guillotine contingency	5	\$900,000
Weather Downtime	5	\$450,000
Return tow	10	\$480,000
Totals	50	\$4,770,000
Average Dayrate:		\$95,400

**7.2 2<sup>nd</sup> Prong – Recovery – DSV**

Historically, gold cargo recoveries on this scale have taken place over a period of several years, particularly where the weather window for operations is limited as in this case, from June through generally August. The DSV will arrive only once the excavation prong of our operations has been completed and the gold cargo physically sighted.

LoFO has initially budgeted 25 days for DSV cargo recovery. Although a DSV has greater flexibility in operating in various sea state conditions, beyond the capabilities of our excavation barge, weather always become a consideration and will at some point limit recovery operations. LoFO will continue operations to recover precious cargoes within the limits of economic feasibility. It is assumed that, to sustain operations, additional debt funding at market rates can be acquired once recovery of precious cargoes is commenced and that the contract, under these conditions, can be extended.

## Lords of Fortune Offshore

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Following is a breakdown of the typical market costs associated with our planned DSV cargo recovery:

**Mobilization to work site** - \$180,000 – Inclusive of all vessel costs, saturation diving personnel, equipment, diving consumables, cordage, diving gases, fuel, lube, and water. Rate is not Inclusive of customs clearances for DSV or supply vessel, personnel transfers.

**Operating Day Rate** - \$134,000 per day. Inclusive of all vessel costs, subsistence, saturation diving personnel, survey personnel, equipment, diving consumables, cordage, diving gases, fuel, lube, water, and water. Day rate not inclusive of customs clearances for DSV or supply vessel, personnel transfers or client personnel. Overtime rates apply to personnel on shifts that extend past 12 hours.

Survey personnel and equipment consists of (2) technicians, (1) Starfix Navigation/ DPGS, (1) Mesotech MS1000 Scanning sonar complete with MS 1071 High Resolution Head, interface box, security dongle, laptop PC, 600' cable and seabed mounting head frame. (7) mini beacons with two beacon chargers, (1) MRU Motion Sensor and (5) Mk5 Compatts with float collars

**Demobilization to home port** - \$180,000.00 - Inclusive of all vessel costs, saturation diving personnel, equipment, diving consumables, cordage, diving gases, fuel, lube, and water. Rate is not Inclusive of customs clearances for DSV or supply vessel, personnel transfers.

**MAVIS Personnel Subsistence** - \$120 per day - per person

### SEA TOW / TIDE RUNNER MARINE:

**Launch / Crew Boat Services** - LoFO solicited quotations from several firms that provide launch and crew boat services. The most responsive firm was [Sea Tow / Tide Runner Marine](#) of Atlantic City, NJ who has offered the following quotation for charter of their crew boat "CAPE HATTERAS":

"It appears that the closest port to run out of would be Point Judith, RI with approx 65 nm. This appears to be the most reasonable port to run out of at this point, unless we / you area able to find a closer location to your site.

12 hour day rate with licensed Capt & Deckhand - \$1850.00

24 hour day rate with licensed Capt & Deckhand - \$2900.00

These charges are Port to Port, with our home port being at Atlantic City, New Jersey. Prices quoted are fully found including fuel, lube and dockage."

The charges for the 24 hour services are included in the spreadsheet below and have been marked up 15% to cover handling.

Specifications for the CAPE HATTERAS are found in Attachment 2.

### **HYDRO FLEX:**

**Underwater Lighting System** – LoFO has utilized the services of [Hydro Flex](#) to provide underwater illumination to large work areas. LoFO solicited a quotation for the equipment and was provided a verbal budgetary daily rate of \$1,725 for a 3 light system. This price assumes LoFO personnel will manage the light system.

The charge for the lighting system is included in the spreadsheet below and has been marked up 15% to cover handling.

### **7.2.1 Projected DSV Budget**

Senior LoFO personnel met with several potential sub-contractors and discussed the most recent developments and the history of work on the wreck. As a result of these discussions a projected time table for the complete excavation of the AOI was developed and agreed to as a basis for budgetary planning.

LoFO believes the work of excavating the AOI can be completed within 10 working days once the MB1 and excavation crew are on location above the wreck. As a contingency, additional extensions were factored in to account for unexpected delays due to weather, equipment issues, etc., making the time frame initially budgeted for recovery operations within the AOI a total of 25 working days on location.

The spread sheet below details the major market-based expenses associated with conducting the operation for a 27 day operational period. Note LoFO personnel are estimated at 10 persons.

<b>RMS REPUBLIC - Projected Recovery Expenses</b>				
<b>Mobilization</b>				
	Lump Sum	1	\$ 180,000.00	\$ 180,000.00
<b>Recovery Operations</b>				
	<b>DSV</b>			
	Day Rate	25	\$ 134,000.00	\$ 3,350,000
	<b>Tide Runner Marine - Launch Services</b>			
	Day Rate	25	\$ 3,335.00	\$ 83,725.00
	<b>MAVIS Personnel Subsistence</b>			
	Day Rate	25	\$ 120.00	10 \$ 30,000.00
	<b>Hydro Flex - U/W Lighting</b>			
	Day Rate	25	\$ 1,985.00	\$ 49,625.00
<b>Demobilization</b>				
	Lump Sum	1	\$ 180,000.00	\$ 180,000.00
			<b>TOTAL</b>	\$ 3,873,000.00

**7.2.2 Additional Expenses**

**Customs Clearances -DSV / Supply Vessel / personnel transfers** - Customs clearances for personnel and materials coming to and from the selected DSV and shore will likely be required. Costs associated with the clearances have not been ascertained at this time and will reportedly vary depending upon the port of embarkation.

**8.0 Terms and Conditions:**

1. LoFO has not included labor or costs associated with establishing any necessary permits or for any travel that may be necessary prior to mobilization. Any labor or expenses will be billed for at normal tariff rates.
2. DSV costs are quoted as approximate market and subject to availability. In order to avoid delays it is incumbent upon LoFO to contract for the services at the earliest opportunity.

3. A escrow account will be established and funded sufficient to cover the operating daily rate for 30 days of operations on scene. The fund will be created prior to commencement of the work.
4. Daily log forms detailing labor, expenses and associated costs above and beyond the daily rate will be prepared by the LoFO Project Manager and presented to a cost controller on a daily basis. The daily log forms will be reviewed and signed for on a daily basis. These forms will serve as backup for project invoices.
6. Project daily rate and expenses will be invoiced and payable weekly.
7. Travel and lodging expenses are not included in the estimates above. These charges will be invoiced at cost plus 15%.
8. Crew launch and support vessel services of Tide Runner Marine / Sea Tow Service are quoted at cost plus a markup of 15% to cover handling and are provided as an example only. LoFO may source another contractor.
9. Survey crew and equipment have been quoted inclusive of the DSV day rate and base on market pricing. The costs for these services, here, have been marked up to cover handling. LoFO may source another contractor or contract for these services directly.
10. LoFO acknowledges they have full control and custody of any and all recovered materials and are solely responsible for the development of a security protocol and provision of the personnel and equipment necessary to address handling and security of the materials. Prior to commencing operations LoFO will ensure the security protocol does not adversely impact operational considerations.
11. LoFO will work to minimize publication of project plans beyond the necessary scope of LoFO personnel, regulatory agencies, investors and third party vendors.

Respectfully Submitted,  
LORDS OF FORTUNE OFFSHORE

TBN  
Project Manager

**NOTE**

**This Recovery Plan is dynamic and subject to change as a result of market conditions, on site survey and changes in conditions.**



# TIDE RUNNER MARINE INC.

3201 Bay Shore Ave, Brigantine, NJ 08203 (ph) 609-266-1984 (fax) 609-266-7613  
seatowac@msn.com

**\*\*\*\*\*THIS VESSEL IS READY FOR HIRE, PLEASE CALL FOR RENTAL RATES\*\*\*\*\***



### DIMENSIONS

Length Overall:	48.8 ft. / 14.9 m
Beam Molded Amidships:	16.2 ft. / 4.93 m
Clear Deck Space	15 ft. X .24 ft
Draft (Maximum):	4.5.ft. / 1.35 m
Tonnage (Gross):	27 GRT
Tonnage (Net):	22 NRT
Deck Cargo Capacity	18,000 lbs 9 tons

### CONSTRUCTION

All Aluminum with molded rub rail

### PROPULSION & STEERING

Main Engines:	(2) CAT 3408 600 hp each with a 2:1 reduction
Shafts:	3 inch x 16 feet Stainless Steel
Steering Stations:	(2) Pilothouse and Aft Station All Hydraulic

### PERFORMANCE

Range (at cruise)	700 Nm
Speed (Free Route):	25 knots
Speed (Cruising):	22 knots

### AUXILIARY MACHINERY

Generators:	(1) 15 kw
Electrical Power:	110/220 volt

### CAPACITIES

Fuel Oil:	1,000 USG
Lube Oil:	30 USG

### ACCOMMODATIONS

Total Personnel Capacity:	43
Passenger Seating:	24
Air Conditioning/Heating:	2 ½ ton central
Cooler:	Reach-In
Freezer:	Reach-In
Sanitation:	Holding Tank
Microwave	1200 w

### FIRE FIGHTING

On-Ship:	(1) 2 inch Gas Pump @ 180 gpm
Extinguishers:	Full Compliment

### REGISTRATION

Flag:	USA
Home Port:	Atlantic City, New Jersey
Official Number:	991365
Hull Number:	337
Builder:	Neuville
Year Built:	1993

### NAVIGATION & COMMUNICATION

VHF Radio	3
Radar	48 nm
Color LCD Sounder	600 w
GPS Chart Plotter	w/Differential
Loud Hailer	2 speakers

### CLASSIFICATION

United States Coast Guard  
• Certificate of Inspection (Small Passenger Vessel)