

SEA ROGUE™

An International Quest For Sunken Treasure



MICROPLAY™
SOFTWARE

Sea Rogue™

Computer Simulation

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Printing History
First Printing 1992
Printing: 9 8 7 6 5 4 3 2 1

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AND GREENLAND

THE BRITISH ISLES, THE

NETHERLANDS AND FRANCE

SPAIN AND PORTUGAL

CREDITS

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1. INTRODUCTION

Sea Rogue allows you to experience the excitement of the underwater exploration of shipwrecks. Man has plied the oceans for thousands of years in boats of wood, metal and canvas. Hundreds of thousands of seafarers have found their rest on the ocean floor. With these men, women, children and ships has gone countless treasure. The ocean floor is littered with wreck sites, holding the key to the history of man through the ages of sea travel. Battles, faulty seamanship, weather and the sea herself have claimed these ships and these lives. Man has salvaged wrecked ships for hundreds of years, often recovering most of the treasure from rich wreck sites. In recent years, the discovery of historically significant ships like the *Titanic* and the *Bismarck*, as well as treasure troves such as the *Maravilla* and the *Atocha*, have sparked new interest in underwater treasure hunting. Dedicated wreck hunters have uncovered artifacts of great value to historians and millions of dollars worth of treasure. In *Sea Rogue*, you are given the opportunity to vicariously discover some of the treasures of the ages at the bottom of the sea.

Sea Rogue is an underwater treasure recovery simulation. *Sea Rogue* takes place in the Atlantic Ocean and adjacent bodies of water such as the Caribbean and the Gulf of Mexico.

Objective

Work your way up to captaining the super submarine *Sea Rogue*. Then you will be able to launch a remotely-operated probe into the depths of the ocean to explore modern wrecks like the *Andrea Doria*, *Lusitania* and *Titanic*.

Your Mission

For years, you've felt a pull toward the sea, a longing for adventure on the oceans of the world. In your search for excitement, you've tried deep-sea fishing, snorkeling, water-skiing. None of them have left you satisfied. Until now.

Manning your rusted sea trawler, you have found satisfaction at last in the search for sunken wrecks. But you have ambitions beyond captaining this trawler. A few months ago, you were flipping through one of your favorite diving magazines when you saw a photo of something you had only dreamed about. This is your dream: the high-tech, deep water submarine *Sea Rogue*. You know you must attain fame and wealth before you will be worthy of such a fine vessel, but you are thrilled at the challenge. For now, you have to start somewhere, so you tuck the magazine away in your quarters and dig out that clue you've been working on.

You'll explore dozens of shipwrecks strewn across the floor of the Atlantic Ocean, Gulf of Mexico and Caribbean Sea, searching for the remnants of pirate ships, the Spanish Armada, Spanish Treasure Fleets, Viking ships, famous warships and more. In addition, you will compete with other wreck hunters, including the ruthless Evil Eddy, to locate shipwrecks and improve your one-vessel navy.



Evil Eddy

Evil Eddy, as he is known by his competitors, is the wealthiest man in the world. He seems to have a fortune in gold, but no one knows where he gets it. Eddy's Enterprises has become the fad following of business groupies for the last few years (similar to the nation's infatuation with Donald Trump during the late 1980's). Eddy has systematically bought out major defense industries, assembly plants, and anything else that smacked of technology. The secret of his success, long shrouded in mystery, is simple. In 1990, one of his newly acquired companies in Naples, Italy, created a stealth technology for ships. The application was worthless for the large attack and missile ships of the world's military, however Eddy seized the opportunity to create a fleet of small, undetectable mini-subs and began to plunder sunken gold and silver ships throughout the Mediterranean.

You discover this horrifying fact only days after you dive your first wreck. Eddy's fleet has moved out slowly into the Atlantic looking for plunder. Eddy's ships have recently been seen plundering cargo and bullion ships. Eddy is overextended financially and is counting on his fleets to acquire new sources of income to support his empire.

NOTE: You will bump into Eddy while playing at the Intermediate and Professional levels of game play.

Opportunities During Game Play

Evil Eddy has developed a well-armed force of his super-secret "Big Ed" ships. The new fleet has begun to expand their area of operation into the Atlantic. Soon, Evil Eddy may be alerted to your presence and may begin to hunt you down. Competition for wrecks in the Atlantic could become fierce. If you come upon a wreck, search for Big Ed's "calling card", a large "E" placed somewhere in the wreck area.

2. TUTORIAL

YOUR FIRST WRECK

Sea Rogue offers three levels of game play: Novice, Intermediate and Professional. We recommend beginning at the Novice level, as you will be able to move up levels later in the game. For this tutorial, we will assume you are playing at the Novice level.

In this tutorial, you will locate and excavate your first wreck. You need not follow this tutorial to find the wreck, but doing so can help you rapidly understand the wreck hunting process. To learn the full functionality of the ship and the process of discovering and exploring wrecks, turn to Section 3 starting on page 23.

In addition, a step-by-step guide to combat appears at the end of this tutorial. As long as you are playing at the Novice level, you will have no combat encounters. However, you may want to refer to this section the first time you engage in combat.

Terminology

Controller refers to the pointing device used by your computer. This may be a mouse or cursor keys, depending on your hardware.

Selector refers to the mouse button, "Return", or "Enter", depending on your hardware setup.

Beginning Options

Create Crew: Choose "Create Crew" from the Options menu, or use the pre-generated characters provided. Following the instructions on the screen, generate one character in each of the six character classes available (Captain, Sensor Officer, etc.). This process is rather intuitive. However, if you need instructions, they are available in "Your Crew" starting on page 25. You may also want to refer to this section to read the effects of attributes and skill areas on the different character classes. When you have six crew members (one from each class), select the "Form Crew" option and choose your crew members. Choose the "Exit" option.

Start New Game: To begin a new game, select "Start New Game" from the Options menu and choose the Novice option.

Your First Clue: You will be able to read a brief history and will receive your first clue. Jot down the coordinates to your first wreck (don't worry if you don't make note of the coordinates here; you will be able to review them on board your ship).

Helpful Hints

Hire Researchers: Hire researchers in several ports. This is a sure way of getting reliable information on wreck sites. Although you can find information on wrecks by doing your own research at a maritime library, or buying information or a treasure map in a tavern, you receive the coordinates to these wrecks only if the skills of your crew members are high enough. In addition, you have to be in port to use these options and, in the case of library research, you must invest your crew's time in library research.

Use Your Magnetometer: In the dive screen for old wrecks, use the magnetometer to locate areas or squares with hidden deposits of metal and mark these squares with a flag (you can toggle this marker on and off by pressing "X" or the "Marker" icon). Then use other divers to dig up the buried treasure.

Combat: Don't fire upon friendly vessels unless you're ready to make a new enemy.

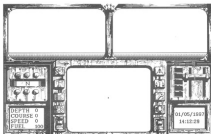
Pay Your Crew: Pay your crew on time. Unfortunately, you can only do this if you have a positive balance in your credit account. Keep this in mind when that new Wreck Identification Computer is finally available at Black Market Bob's, and payday is just a few days away.

Keep Track of Your Expenses: You will have to pay your crew members' salaries, purchase fuel, make repairs, hire researchers, etc. Any equipment you purchase will be an additional expense.

The Bridge and Officer Stations

The Bridge: The Bridge will be displayed first. The full functionality of the display is available in the section entitled "Your Navy" starting on page 29.

The Bridge



Two view ports fill the upper half of the screen, with various controls appearing on the bottom half of the screen. On the trawler and research vessel, a series of icons appears around the sonar display. On the *Sea Rogue*, these icons run horizontally across the center of the screen. Clicking on the icons or pressing "F1" - "F6" will take you to the appropriate officer's station. Clicking on the "Map" icon or pressing "F8" will take you to the manual plotting map.

Ship Controls: Several controls are available to you on the Bridge, including:

Speed: Use the mouse to click on the new percentage, or press "=" to increase the speed, "-" to decrease the speed, "+" to go to full speed, or "_" to come to a full stop.

Sonar: Click on the "Sonar on/off" button to toggle sonar graphics. On the *Sea Rogue*, the sonar display can be used for combat if primary combat equipment is damaged or destroyed.

Gun or Fire: Use the left (port) and right (starboard) "Gun" buttons to go to the combat screen on the trawler and research vessel. On the *Sea Rogue*, use the "Fire" buttons to fire a weapon or decoy from the Bridge.

Heading indicator: A heading indicator is provided within the sonar display. This white circle indicates which direction the vessel is facing relative to the course setting. If the heading indicator is shown at 0 degrees, you are facing North; at 90 degrees, you are facing East; at 180 degrees you are facing South; and at 270 degrees you are facing West.

Course (Trawler and Research Vessel): Change course by clicking on the left or right arrows in the navigational tracking ball or by pressing the left or right arrow keys on the numeric keypad. The trawler has a turning rate of up to 3 degrees per second (based upon the number of times you press the left or right arrow keys). The research vessel can turn at up to 6 degrees per second (based upon the number of times you press the left or right arrow keys). Pressing the opposite arrow key will reverse the course change. This method can be used to slow down, stop, or reverse the change. Press "Enter" or click on the space between the arrows to stop the course change.

Course (Sea Rogue): Change course by clicking on the left or right arrow indicators in the display on the left side of the screen or by pressing the left or right arrow keys on the numeric keypad. The *Sea Rogue* has a turning rate of up to 9 degrees per seconds (based upon the number of times you press the left or right arrow keys). The course will continue to change until you press "Enter" or click on the center of the course display. Pressing the opposite arrow key will reverse the course change. This method can be used to slow down, stop, or reverse the change.

Course Change Rate Table

If you press the left or right arrow key 1 time, you will turn at a rate of 1 degree per second

If you press the left or right arrow key 2 times, you will turn at a rate of 2 degrees per second

If you press the left or right arrow key 3 times, you will turn at a rate of 3 degrees per second

If you press the left or right arrow key 4 times, you will turn at a rate of 6 degrees per second

If you press the left or right arrow key 5 times, you will turn at a rate of 9 degree per second

Maximum left or right arrow clicks: trawler = 5; research vessel =4; *Sea Rogue* = 5

Depth: Change the depth (for the *Sea Rogue*) by clicking on the up or down arrow indicators in the display on the left side of the screen or by pressing the up or down arrow keys on the numeric keypad.

Date and Time: The game date and time are logged in the lower right corner.

Officers' Stations: You can move to the various officers' stations by clicking on the appropriate icon or by pressing the corresponding function key. In the officers' stations, the screen in the upper left corner displays graphics, the screen in the upper right corner displays options, and the screen at the bottom will display text, an inventory of equipment (the box symbol indicates that an item is active) or, in some instances, additional graphics. A series of icons runs across the middle of these displays as well.

At some point within the game, you may hear a hailing sound. This sound indicates that you have incoming messages. Go to the Communications Officer's station and choose Radio Traffic to read the messages.

Locating a Wreck

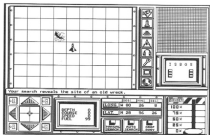
Wreck Coordinates: Now that we've got the initial details out of the way, let's find a wreck. Go to the Captain's station and choose the "Archive Information" option (click on the icon or press "3"). The longitude/latitude coordinates for your first wreck are listed here. If you didn't do so earlier, jot down the coordinates.

Plotting a Course: Go to the Navigation Officer's screen and choose the "Plot Course" option (click on the first icon on the left or press "1"). Press "L" to get the automatic plotting menu to appear. Enter the correct longitude/latitude coordinates in degrees and minutes and press "Enter". The course will be logged into the plotting computer. Press "Enter" again to move the ship to the coordinates.

Searching for the Wreck: You should now be in the area where the wreck is located. To determine the precise location of the wreck, go to the Sensor Officer's station (click on the "Sensor" icon or press "F3"). At the Sensor Officer's station, choose the "Search" option by clicking on the "Search" icon or by pressing "5" (the Search feature is described fully in the section entitled "Finding & Exploring a Wreck").

Click on the "Auto" icon at the bottom of the display, or press "A". The auto map in the upper right corner will show your progress. If you don't find a wreck on the first pass, press the "Auto" icon again. Once you find a wreck, an icon and text line will appear in the display at the left of the screen. Increase your speed to at least 25% if you haven't already and move your ship over the wreck graphic by pressing the appropriate numeric keypad arrow, or clicking on one of the eight squares adjacent to your vessel.

Search Screen



Diving a Wreck

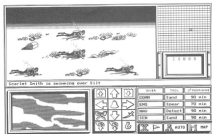
Assemble a Diving Team: Now you're ready to dive the wreck. Go to the Weapons/Diving Officer's station. Choose the "Select Diving Team" option by clicking on the icon or pressing "4". Select four crew members to send down to the wreck site. Then equip them (you will want at least one of the following: magnetometer, sand sucker and spear gun). When your diving team is assembled and saved, click on the "Dive the Wreck" icon or press "5". Your team will move to the sea floor.

Diving the Wreck: Diving a wreck is fairly complex, and you should read the section entitled "Finding & Exploring a Wreck" to understand all the options available.

In brief, you have four divers, and you can move from diver to diver by pressing 1-4 or clicking the mouse on the appropriate diver in the diver status display. Each diver has an allotted amount of oxygen (number of moves) available before he or she runs out of oxygen and loses 1 point of Endurance. A warning alarm will sound when your diver is running out of oxygen. Heed the alarm, or your character will suffer.

To search a square, press "S". There are five levels of silt, so to search one square completely, you will need to press "S" four times. In addition, if your diver is not at the bottom of the sea floor, you will need to click on the "Diver Down" icon or press the "+" key to move the diver to the sea floor. As a hint, try searching near the middle of the wreck site (see the auto map in the upper right corner to find your location in the wreck site). If you find any treasure, it will be displayed in the main map and in the display in the lower left corner. Press "G" to grab an item and "H" to hoist a cannon, or you can press "A" to automatically pick up all treasure. Press "D" to get an inventory or to drop an item. Press "M" or click on the "Map" icon to view the wreck site in a zoomed auto map mode. Use the magnetometer to locate areas or squares with hidden deposits of metal and mark these squares with a flag (you can toggle this marker on and off by pressing "X" or the "Marker" icon). Search the wreck site until the divers lack sufficient oxygen to continue, then press "ESC" or select the "Diving Bell" icon to return the diving team to the ship. (You can also send up your divers one at a time by pressing "-" or clicking on the "Diver Up" icon until you are prompted to return the crew member

Diving Screen



to the ship.) After your first dive, you will be prompted to select a treasure recovery method. Rapid Recovery and Moderate will provide automatic recovery of the treasure at a cost of lost and damaged treasure. Painstaking recovery is time consuming, but allows you control over what items you recover. If you select Painstaking, you can send your divers back down by going to the Weapons/Diving Officer's station and selecting the "Dive the Wreck" option once again. Continue to dive the wreck until you're comfortable with the amount of treasure you've picked up.

Inspecting Your Treasure Find

Cargo Manifest: Back aboard the ship, go to the Captain's station. Choose the "Cargo Manifest" icon or press "3" to see what treasure you have recovered. You will at least want to have some cannons or chests of gold and silver. In many instances you may find some kind of special item (jewelry, encrusted item).

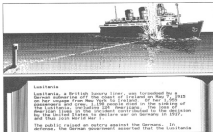
Encrusted Items: If you have any encrusted items, go to the Engineering Officer's station. Choose the "Treasure Separator" option (click on the icon or press "5"). The item will be revealed in an animated display.

Evaluating Treasure: Go to the Communications Officer's station and choose the "Evaluate Treasure" option (click on the icon or press "5"). You can evaluate coins, cannons, or special items (any encrusted items must be separated by the Engineer as described above before they can be evaluated). Note the dates of cannons and coins and the identity of any special items. You will need this information to identify the wreck.

Identifying the Wreck: Pull out your copy of the Historical Wreck Manual and look under the section in which Florida wrecks are located (you will always want to be aware of what part of the world the wreck site is located). For each area, the wrecks are listed with the oldest wrecks first and the most recent wrecks last. Skim the pages until you find a wreck or wrecks with the same date as that of the cannons and/or coins you have recovered. If more than one wreck is listed, check to see whether you have any special items that can help you pinpoint the identity of the wreck (porcelain, gold money chain, gems, etc.). When you think you've determined the correct identity of the wreck, choose the "Identify Wreck" option (click on the icon or press "4") in the Communications Officers station). Select "Manual" from the options and type in the name of the wreck exactly as it appears in the Historical Wreck Manual (exception: do not type in an "" if one appears after the name).

Once you have attempted to identify the wreck using one of the methods above, you will be informed of the wisdom of your choice. If you have chosen correctly, you will get full value for the treasure recovered. If your choice was incorrect, you will receive half value for all treasure recovered

Wreck History Screen



from the wreck. Treasure is not worth as much to collectors and museums if they do not know which ship the treasure and artifacts came from. In either case, a wreck history screen will appear, including a graphic of the wreck, the wreck history and manifest, and an old nautical tune.

Appraising Treasure: As one of the Captain's skills, this option allows you to determine the value of the items you recover. You need to appraise special items before you can sell them. Select each item to appraise from the list provided. Go to the Captain's station and choose "Appraise Treasure". If the Captain's skills are good enough, she will accurately appraise the item and the full value will be displayed.

Going into Port

You have now completed the wreck hunting process. The only thing left to do is go to port and sell your treasure, see if you can purchase a *hint* to another wreck or buy some new equipment.

Plotting a Course Using the Manual Map: Click on the "Map" icon or press "F8" from the Bridge. The main map will appear. You can zoom into the area in which the ship is located by pressing:

- z = toggle between zoom/unzoom view
- 1 = world map (zoom back out)
- 2 = Africa
- 3 = Canada
- 4 = West Caribbean
- 5 = England
- 6 = East U.S.
- 7 = Spain
- 8 = E. Caribbean

In this map, pressing "W" (the "Where's my ship?" key) will move the mouse icon over your ship. Pressing "L" will let you toggle on and off a ship location display.

Ports are marked by red dots. To enter a port, use the *Controller* to drive the ship to the port of interest. Angle the ship over the dot until the prompt to enter port appears. Choose "yes".

Different ports offer different facilities. The types of facilities available in ports are listed below:

Banks: deposit funds

Nautical Neds: purchase standard and advanced wreck hunting and diving equipment, as well as fuel

Black Market Bob's: acquire weapons and specialized equipment

Museums: sell special items that you recover from wrecks, or receive a commission

Libraries: use their resources

Training Centers: get advanced training for your crew members, or hire new crew members

Repair Shop: keep the ship in top working order

Seafarer's Research Center: hire a researcher to locate wrecks for you, or purchase information on one wreck at a time

Collectors: sell special items that you recover from wrecks, or receive a commission

Taverns: talk with the barkeep or patrons (who may be willing to sell you a treasure map), or listen in on conversations

Leave Port: return to the ship.

All the port options are detailed in "Bankers, Tavernkeepers & Other Landlubbers" starting on page 60.

COMBAT

The following tutorial is provided to familiarize you with combat. Note that at the Novice level of game play, there is no combat.

For the Trawler and the Research Vessel

Targets will be visible as dots on the sonar display on the Bridge. You will be able to see the number and approximate bearing of targets on the sonar display.

To go to combat, click on the left (port) "Gun" icon or right (starboard) "Gun" icon on the Bridge, or select the "Combat" option from the Weapons Officer's station. The display will change to a combat screen. You will see your mounted gun, the side of your ship and the target (at a distance). When the target is in the gunsight, fire the gun by pressing "Spacebar" or clicking the left mouse button. Aim near the center of the enemy ship to inflict damage; an explosion indicates a hit. You may turn the ship by pressing the left and right arrow keys.

To leave the combat screen, press "ESC" or click on the right mouse button.

NOTE: You cannot leave the combat mode while you are actively engaged in combat.

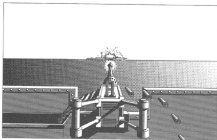
For the Sea Rogue

The following hints may be helpful in developing a combat strategy using the *Sea Rogue*.

Detection: Combat occurs in two phases: detection and engagement. When another vessel detects your ship, it will not necessarily engage you in combat. However, if the vessel belongs to a navy whose government is currently hostile towards you, you may have to fight your way out of the encounter. For the most part, though, combat is best left against vessels belonging to Evil Eddy. Taking on a warship pits your crew against a professional crew of trained specialists, and will likely end in severe damage to or loss of your ship. In addition, you will have to pay reparations for damage you inflict on foreign navies. To leave combat without engaging the other vessel(s), press "ESC" and confirm the choice. If you are detected by one of Evil Eddy's vessels, you can fight to the end or attempt to run away. You cannot, however, disengage combat until you have done one or the other.

Engaging a Vessel: If you are unable to avoid a conflict, or wish to engage one of Eddy's ships, you can continue the encounter to engage the other vessel(s). To optimize your chances for a successful engagement, load your torpedo tubes as soon as possible (preferably, even before having an encounter). You will have no weapons aboard the ship when you first begin the game, so it is imperative that you quickly acquire enough money to purchase the weapons you need. After loading

Trawler/Research Vessel Combat



both of your torpedo tubes, "hook" the targeted vessel with the *Controller* until a hook box appears around it. This now signifies that the target's position, course and speed have been fed into the fire control computer aboard the ship. Information about that target will be updated automatically to any torpedoes loaded into the tubes. The torpedoes have a run-time of approximately 100 seconds. Firing distances should be within 1-2 miles. This prevents a target from having enough distance to outrun the torpedo. Once the torpedo tube indicator light shows "armed", the torpedo can be fired. Once the torpedo is fired, you should quickly reload the tube. Tube reload time will depend on the skills of your Weapons/Driving Officer. The reload time will decrease as the Officer's Ordnance Handling skill increases.

Maneuvering: The superior speed of the *Sea Roamer* gives you a distinct advantage when you are engaged in combat. Torpedoes run at a fixed speed and can only turn so quickly. You should be able to gauge a turn that will keep you from contacting any torpedoes while simultaneously maintaining a close proximity to the vehicle which launched the weapon(s). This technique does have a drawback,

however. While you are "circling" your target, the torpedoes will continue to track and hound you. If you launch a torpedo at a target, there is a strong chance that the torpedoes chasing you will run into the weapon you just launched. The best time to launch a torpedo when using this high-speed turn technique is after the pursuing torpedoes have run out of fuel.

Equipment: The proper use of your equipment is crucial to success in combat. Use the resources available to you to prevent making costly mistakes. For example, when firing a torpedo, make sure that the target you've hooked is really a target and not a decoy or torpedo. You have a variety of sensor arrays to help you identify a target. Using these sensors can give you a more detailed picture of the combat arena and show you opportunities for either escaping, if necessary, or capitalizing on mistakes made by your adversary.

Modern Naval Warfare Tactics

Under most conditions, a ship that has been detected by a warship or other ship is living on borrowed time. Modern weapons can be launched from great distances and with precision accuracy to destroy a ship. Conversely, an undetected ship is a grave threat to any vessel considered as prey. Sea Rogue is not meant to be a combat simulator game and, accordingly, the tactics used in it are simple compared to the true complex nature of modern naval combat. Since combat is considered a minor part of the game, you need only understand that the transfer, research vessel and even the Sea Rogue were not designed to take on the "Red Banner Fleet", nor mix it up with modern-day warships, but simply to explore. A ship's best weapon is stealth. You can improve your survivability in several ways, including:

- 1. Purchase sonar-absorptive paint to make the Sea Rogue less susceptible to detection.*
- 2. Purchase as many decoys as possible.*
- 3. Avoid torpedoes.*
- 4. Avoid provoking a warship.*
- 5. If you are detected and fired upon by a hostile warship, other than an Evil Eddy vessel, run away. You can minimize reparation payments by avoiding combat with foreign ships.*
- 6. If you cannot run away because of engine damage, or low fuel state, use your ammunition or torpedoes sparingly. Try to only disable, not sink, ships.*
- 7. When confronting an Evil Eddy vessel, caution is advised.*
- 8. Keep your ship in top working order by repairing damage promptly so maximum speed is available to you when you need it. Have your Engineer check Damage Control frequently so you know what condition the ship is in.*

Engaging in Combat

The combat screen for the *Sea Rogue* is shown below.

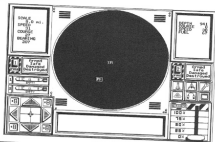
Loading a Torpedo: The first step in combat is loading your torpedo.

1. Select the "Load Weapon" option in the Weapons/Diving Officer's screen.
2. Select which tube (port or starboard) to load.
3. Select which weapon or decoy to load into the selected tube.

4. The Weapons/Diving Officer will begin loading the tube. The total time required before the torpedo is ready for firing will depend on the Officer's skill in Ordnance Handling.

Selecting a Target: In the combat screen, use the *Controller* to select the two-letter target identifier (refer to the section entitled "Encounters/Combat" starting on page 70 for a list of the target identifiers). If you are using the keyboard, press "T" to select a target. To cycle through the targets, continue to press "T" until the desired target is boxed. When the target has been "hooked", a box will appear around it. You may now evaluate this target through the use of your sensors, or fire a torpedo at it.

Sea Rogue Combat Screen



Identifying a Target: Equipment is available to improve your ability to identify a target.

If you have purchased the Signal Processing Computer, you can hook a target and then go to the Sensor Officer's station to analyze the target's signal. The appearance of the signal during Passive sonar operations is toggled by selecting the "Perform Signal Analysis" option. Press "+" and "-" to change the scale of the signal.

Your Sensor Officer can also use Active or Passive sonar to help identify a target. Passive sonar offers audio (and, if you've purchased the Signal Processing Computer, visual) information about the target that can help you identify it. You can also hook a target from the list of possible targets that appears when you use sonar.

If you have purchased *James' Warbook*, you have access to tactical information on a hooked target. Choose the "Determine Target Information" option in the Weapons/Diving Officer's station to access the *Warbook*.

Scaling the Scope: Use the number keys "1" - "9" to determine the miles across the scope. The number "1" indicates a .25 mile scale, while "9" indicates 64 miles.

Firing a Torpedo: Use the *Controller* to select the torpedo tube number found on the left and right hand sides of the screen. From the keyboard, press "P" to fire from the port side torpedo tube and "S" to fire from the starboard side torpedo tube. The torpedo will only be launched if the "Armed" window is lit green and a target is boxed.

3. OPERATING INSTRUCTIONS

GETTING STARTED

The initial game options are described below.

Selecting Options

Sea Rogue has many options. To make a choice, move the *Controller* (mouse, arrow keys) up and down to highlight the option, then press the *Selector* (mouse button, "Enter").

Options Menu

After the opening screen, an Options menu will be displayed. Your initial game options are:

Return to Title Screen: Choosing this option will return you to the title screen of the game.

Start New Game: This option allows you to select a new game (you can have a total of five saved games at one time). A sixth game is saved as the current game and is updated automatically when you dive a wreck or quit the game. When you first begin *Sea Rogue*, all the game slots are marked as "Empty". New games are saved under the name of the Captain leading the expedition. Three levels of game play are available: Novice, Intermediate and Professional. The player can move up in levels throughout the game, or can begin at the highest level, Professional.

Novice: This is the best level for a beginning player. At the Novice level, you will have no combat encounters. The objectives at this level are locating and attempting to identify as many shipwrecks as possible and earning enough money to upgrade from a trawler (possibly even to the *Sea Rogue*). After you and your competitors locate 30 shipwrecks, you will have the option of retiring or moving to the next level of game play.

Intermediate: At this level, limited combat encounters (including Evil Eddy) will be available to you. The objectives at this level are locating and attempting to identify as many shipwrecks as possible, upgrading to the *Sea Rogue* (if you began at the Novice level and have not yet acquired the submarine), locating and exploring some modern wrecks and surviving combat. After you and your competitors locate a total of 100 shipwrecks, you will have the option of retiring or moving to the next level of game play.

Professional: At this level, you will be up against a full-range of opponents, including more extensive combat with Evil Eddy. You will face tough combat, increased competition for wreck sites and special dilemmas. The objectives at this level are to lead the competition in locating and, if possible, identifying an additional 100 shipwrecks (or 200 total), exploring many modern wrecks and beating Evil Eddy in combat and at the wreck sites. After you and your competitors locate a total of 200 shipwrecks, you can retire in glory.

Create Crew: Choosing this option allows you to create, review or delete crew members and to form a crew.

Restore Saved Game: Use this option to restore any one of the five possible saved games, as well as the current game saved as game six.

Exit to DOS: Choosing this option will exit you from the game and return you to the DOS prompt.

Saving the Game

Your current game will be saved automatically before you dive a wreck, or when you quit the game. Enter "Shift-S" at the Bridge or officer's stations if you want to save a game before diving a wreck, entering a port, etc. This will allow you to select one of five slots in which to save the game. A sixth slot is provided for the automatically saved game.

NOTE: To quit the game, enter "ALT-Q".

Your Crew

The crew of the Big G Navy consists of you, the captain, and five other crew members who will assist you in your quest. To operate the ship, you will need one character from each class:

1. Captain: The Captain issues orders to the other officers and is the expedition's leader. The captain handles all decisions for purchasing new equipment and supplies; keeps financial log of all transactions, payments and purchases; and is responsible for cracking safes, appraising treasure and hiring researchers to search through archives for records of sunken ships.

2. Weapons/Diving Officer: The Weapons/Diving Officer supervises all underwater exploration of old wreck sites. Other duties include the control of all weapons and defensive systems on board the ship.

3. Sensor Officer: The Sensor Officer relays tactical information from sensors in combat, and when searching for wrecks. Such information includes magnetometer data, other vessels (surface and submerged), mine detection and mineral deposits.

4. Navigation Officer: The Navigation Officer controls all movement of the ship, deciphers treasure maps, and logs all areas searched, ports visited, encounters, and wrecks identified.

5. Communications Officer: The Communications Officer is responsible for decoding all message traffic, evaluating treasure and assisting the Captain in identifying wrecks.

6. Engineering Officer: The Engineering Officer supervises ship operations. This includes repairing damaged equipment, controlling the probe (in the *Sea Rogue*), and conducting damage control if the ship is hit by gunfire, torpedoes or mines. This Officer also separates treasure.

Your characters may be either male or female. Although a crew of pre-generated characters is provided, you may want to create a crew before you play the game. You can replace officers by hiring them through the appropriate training center or when you meet them in taverns.



Sextants

Sextants first came into use in the 18th Century, replacing the astrolabe and the quadrant for measuring altitude above the horizon. The sextant, which has the shape of a sixth of a circle, is utilized primarily in navigation to measure the altitude of the sun or a star to assess one's location.

Building a Crew

If you decide to create your own crew, you will need to generate characters and form a crew. At the Options menu, choose "Create Crew". Generate at least six characters (one from each class).

Generate A Character: Choose "Generate A Character" from the list of options.

Gender: Determine whether you want the character to be female or male.

Character class: Determine in which class you want him or her to be.

ID Photo: Next, choose a photo for the character's ID card.

Statistics: Initial statistics (ranging from 8-20) will be displayed next. With few exceptions, there is no definitive formula for determining which attributes a character needs for a given class. However, all character classes should have high Loyalty statistics. If a character's loyalty falls to 10 or less (characters lose 1 Loyalty point each time you fail to pay their monthly salaries), he or she will be tempted to jump ship the next time the ship docks in port. Your best bet is to have well-rounded characters with above-average statistics.

The officer attributes are as follows:

Dexterity: used in underwater combat

Wisdom: a high Wisdom provides a 5% bonus to experience points

Intelligence: determines the number of Training points a character receives

Charisma: used by the Captain when talking with bartenders

Loyalty: determines whether a character will "jump ship"

Endurance: determines how long a diver can dive a wreck

Regenerate the character's statistics until you are satisfied with them.

Name: If you want to save the character, you will be asked to name him or her. There is a 31-character limit to the name.

Skills: Pick some skills you would like to increase for your characters (refer to "Skills" in the section entitled "Bankers, Tavernkeepers & Other Landlubbers" starting on page 66 for descriptions of each skill). The number of Skill points left will be displayed. The base number of Skill points for the initial training and each advancement is 10 points. Characters begin picking up Skill bonuses with Intelligence statistics of 15 or more. For example, with an Intelligence of 20, a character will have a total of 40 Skill points per advancement. Skills are increased in increments of 5%, with each percentage point equating to one Skill point. For example, if you want to increase the Captain's Diving skill by 10%, it would cost you 10 skill points. Select the skills you want to improve until you are out of skill points. A "Redo" option is available if you need to reassign the skill points.

Generate crew members until you have at least one character in each class.

Form Crew

Choose the "Form Crew" option. To form a crew, you must have at least one character in each class. The current crew assignments, including crew member assignment and name, will be displayed. Select crew members from the list of eligible characters until all the crew positions are filled. Select "Done" when you are finished forming a crew. The crew is saved under the Captain's name.

View A Character: This options allows you to view a crew member's Security Card. Select a crew member from the list of names to view her Security Card or choose "Cancel" to leave this option.

Delete A Character: Use this option to permanently delete a crew member. Select the crew member from the list of names to delete a character, or choose "Cancel" to leave this option.

Exit: Choose this option when you are ready to leave the character generator.

Experience Points

One of the most important facets of the game is the ability to increase your crew members' skill levels through advancements and training. To advance, your crew members must earn experience points. This is done by finding wrecks, recovering treasure, correctly identifying wrecks, performing duties effectively, etc. You will be informed when a member of your crew advances to a new level. When your crew members advance, take them to the closest appropriate training facility. How and where to train your crew members is described in "Training" in the section entitled "Bankers, Tavernkeepers & Other Landlubbers".



Coins and Ingots

Coins and ingots were minted extensively in the New World by the Spanish and were then transported to Europe via flota or fleet. Unfortunately for the Spanish, many of the ships in these fleets were lost at sea. The coins, ingots and bars of silver and gold that remain on the ocean floor, both from Spanish and other wrecks, are usually the primary interest of treasure hunters. Aside from their monetary value, these items can be essential in the correct identification of a wreck's date of loss and nationality. The coins and ingots bear forging dates and marks that assist the wreck hunter in learning more about a wreck.

Monthly Rates of Pay

The table below lists the monthly salaries of each crew member at each level. As an example, your five-member crew will need to be paid a total of \$12,500 per month as long as all the crew members remain at Level 1.

LEVEL	PAY
1	2,500
2	3,000
3	3,800
4	4,000
5	5,000
6	6,000
7	7,000
8	8,000
9	9,000
10	10,000

NOTE: The Captain is not paid a salary.

Replace A Character

Crew members can be permanently maimed through shark attacks and exploding mines. These crew members will be hospitalized for the remainder of the game. Crew members injured during underwater combat with other divers will be able to recover over a period of days or weeks (depending upon the extent of the injuries). Through training centers and taverns in port, you can replace a character. To hire a new character from a training center, go to that center and choose the "Hire new crew member" option. To hire a crew member through a tavern, wait until a patron offers to join your crew.

YOUR NAVY

Your navy is a force of one. You will scout the ocean floor looking for wreck sites (preferably ones with lots of treasure).

Trawler Specifications

Height: 25 ft.

Maximum Range: 1500 miles

Width: 20 ft.

Maximum Depth: N/A

Length: 60 ft.

Maximum Fuel Capacity: 300 energy units

Displacement in Tons: 75 T (unloaded)

Maximum Cargo Capacity: 10 T (base)/20 T (w/cargo bay extensions)

Research Vessel Specifications

Height: 30 ft.

Maximum Range: 2500 miles

Width: 25 ft.

Maximum Depth: N/A

Length: 75 ft.

Maximum Fuel Capacity: 500 energy units

Displacement in Tons: 125 T (unloaded)

Maximum Cargo Capacity: 15 T (base)/30 T (w/cargo bay extensions)

Sea Rogue Specifications

Height: 35 ft. (keel to bubble)

Maximum Range: 1 fuel point per day

Width: 42 ft.

Maximum Depth: 12,550 ft.

Length: 72 ft.

Maximum Fuel Capacity: 2500 energy units

Displacement in Tons: 240 T (unloaded)

Maximum Cargo Capacity: 30 T (base)/50 T (w/cargo bay extensions)

Ship's Equipment (at game start)

Standard SQQ-51 Bow Sonar: the standard bow sonar used for the sonar equipment at the Bridge.

QX-5 Communications Console: the standard communication equipment for the ship.

Navigation Computer: allows the Navigator to plot courses using the longitude/latitude coordinates.

MK I Magnetometer: the standard magnetometer used when searching for wrecks.

Towed Sensor Array: increases detection in passive sonar mode.

Treasure Separator: used to separate and clean special treasure items.

Treasure Analysis Computer: assists in the analysis of treasure recovered from wrecks.

Target-Tracking Computer: tracks targets and updates other combat equipment of changes to hooked target.

Guns: hold and fire ammunition. Guns are available on the trawler and the research vessel.

Side-Scan Sonar: provides an image of the sea floor when searching for wrecks.

Sonar Contact Identification Computer: assists the Sensor Officer in identifying sonar contacts.

Fuel: used to fuel the ship.

Other Ship and Wreck Hunting Equipment (Available Through Nautical Ned's)

Mark V Magnetometer: provides increased accuracy and range in metal detection while searching for a wreck.

U.S. Geological Survey Mineral Detector: detects mineral and oil deposits on the sea floor.

Cargo Bay Extensions: increase the amount of cargo you can carry in your cargo hold.

Deepwater "Safekeeper" Probe: is required for diving a modern wreck. This probe can only be launched from the *Sea Rogue*.

Hull-Cutter Torch Bars: used in modern wrecks to cut through safes.

Hull Reinforcement Supports: lessen the damage the vessel takes when hit by guns, torpedoes, or from foul weather.

Fuel Efficiency Device: cuts fuel consumption in half.

Enhanced Side-Scan Sonar: provides dual array imaging with side-scan sonar. This will double the efficiency of your search when you are in the Search screen, looking for a wreck.

ESM Intercept Antennae: provides a sophisticated means of receiving radio traffic while submerged.

Other Ship Devices (Available Through Black Market Bob's)

Wreck Identification Computer: provides for the accurate identification of wrecks.

Communications Decoding Module: deciphers encoded messages.

X-ray Safecracking Device: increases the Captain's ability to crack safes on modern wrecks.

Map-Deciphering Computer: provides for the automatic deciphering of treasure maps.

Sonar Signature Processing Computer: analyzes a target's signal.

Sonar-Absorptive Paint: decreases the chances that the ship will be detected.

James' Warbook Volume 1: provides tactical information on hooked warships.

James' Warbook Volume 2: provides tactical information on hooked Evil Eddy vessels.

Torpedoes (Available Through Black Market Bob's)

NOTE: only the *Sea Rogue* is equipped to fire the torpedoes.

Torpedo Tube (forward): holds any of the torpedoes available in the game. You can have two. The *Sea Rogue* is the only ship equipped with torpedo tubes.

MK 50 ADCAP Torpedo: the best torpedo available against ships.

Tigershark Anti-Ship Torpedo: a good torpedo against ships.

ASW Torpedo: an effective offensive torpedo.

MK 60 Decoy Torpedo: the better of the decoy torpedoes.

MK 30 Decoy Torpedo: an effective defensive torpedo.

Upgrading Ships

You can upgrade your ship when you have saved enough money to purchase a newer vessel. A trade-in value is applied to all upgrades. You can purchase the research vessel through Nautical Ned's in port. The *Sea Rogue* is available through a special arrangement that will be revealed to you during game play. The trade-in values and purchase prices of the vessels are listed below:

Ship Type	Trade-in Value	Purchase Price
Trawler	\$100,000	N/A
Research Vessel	\$125 million	\$250 million
<i>Sea Rogue</i>	N/A	\$1 billion

Cargo

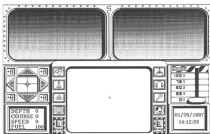
All the treasure items you recover from a wreck site are stored in your cargo bay. To avoid losing valuable items, carry treasure from only one wreck at a time. Sell all items recovered from one wreck before picking up items from a different wreck.

Swords



Swords served as symbols of rank, or importance, ceremonial objects, gifts of honor and rewards for valor. Up to the 16th Century, the handguards designed for the hilt left the index finger unprotected from oncoming blades. Thus, a semicircle was added to wrap around the cross guard. A bar was implemented to sweep from the cross guard toward the pommel as a protection for the knuckles. The second half of the 16th Century saw more complex hilts. The blade itself was altered and developed into the rapier, a fine thrusting sword. Towards the end of the 1600's, the rapier became smaller and evolved into the smallsword, or court sword, becoming the standard civilian sword of the 18th Century.

Bridge Controls



Bridge Controls

Speed: You can change the speed of the ship using the speed indicator. Use the mouse to click on the new percentage, or press "=" to increase the speed, "-" to decrease the speed, "+" to go to full speed, or "_" to go to full stop. The speed change is updated in the mini-computer display in the lower left corner of the screen.

Sonar Display: Click on the "Sonar on/off" button to toggle sonar graphics. For the *Sea Rogue*, the sonar display can be used for combat if primary combat equipment is damaged or destroyed. The ship and any targets will be shown as dots on the sonar display. The fire buttons allow you to fire a weapon or decoy from the Bridge. The use of this display for combat is described in the "Encounters/Combat" section.

Heading indicator: A heading indicator is provided within the sonar display. This white circle indicates which direction the vessel is facing relative to the course setting. If the heading indicator is shown at 0 degrees, you are facing North; at 90 degrees, you are facing East; at 180 degrees you are facing South; and at 270 degrees you are facing West.

Course (Trawler and Research Vessel): Change course by clicking on the left or right arrows in the navigational tracking ball or by pressing the left or right arrow keys on the numeric keypad. The trawler has a turning rate of up to 3 degrees per second (based upon the number of times you press the left or right arrow keys). The research vessel can turn at up to 6 degrees per second (based upon the number of times you press the left or right arrow keys). Pressing the opposite arrow key will reverse the course change. This method can be used to slow down, stop, or reverse the change. Press "Enter" or click on the space between the arrows to stop the course change.

Moving Around the Ship:



or "F1" will take you to the Captain's station



or "F2" will take you to the Weapons/Driving Officer's station



or "F3" will take you to the Sensor Officer's station



or "F4" will take you to the Navigator's station



or "F5" will take you to the Communications Officer's station



or "F6" will take you to the Engineer's station



or "F8" will take you to the Map

Course (Sea Rogue): Change course by clicking on the left or right arrow indicators in the display on the left side of the screen or by pressing the left or right arrow keys on the numeric keypad. The Sea Rogue has a turning rate of up to 9 degrees per seconds (based upon the number of times you press the left or right arrow keys). The course will continue to change until you press "Enter" or click on the center (cross hairs) of the course display.. Pressing the opposite arrow key will reverse the course change. This method can be used to slow down, stop, or reverse the change.

Course Change Rate Table

If you press the left or right arrow key 1 time, you will turn at a rate of 1 degree per second

If you press the left or right arrow key 2 times, you will turn at a rate of 2 degrees per second

If you press the left or right arrow key 3 times, you will turn at a rate of 3 degrees per second

If you press the left or right arrow key 4 times, you will turn at a rate of 6 degrees per second

If you press the left or right arrow key 5 times, you will turn at a rate of 9 degree per second

Maximum left or right arrow clicks: trawler = 3; research vessel =4; *Sea Rogue* = 5

Depth: Change the depth (of the *Sea Rogue*) by clicking on the up or down arrow indicators in the display on the left side of the screen or by pressing the up or down arrow keys on the numeric keypad.

Date and Time: The game date and time are logged in the lower right corner.

Sound Effects and Music: Enter "ALT-S" to toggle sound effects and music on and off. This command works throughout the game.

Officers' Stations: You can move to the various officers' stations by clicking on the appropriate icon or by pressing the corresponding function key.

In the officers' stations, the screen in the upper left corner displays graphics, the screen in the upper right corner displays options, and the screen at the bottom will display text, an inventory of equipment (the box symbol indicates that an item is active) or, in some instances, additional graphics. The series of icons runs across the middle of these displays as well. Select an option by clicking on the appropriate icon or by pressing the number "1" through "6" for the options, numbering them from left to right.

NOTE: At some point in the game, you may hear a hailing sound. This sound indicates that you have incoming messages. Go to the Communications Officer's station and choose "Radio Traffic" to read the messages.



Gold Money Chain

Gold money chain was worn around the waist by dignitaries and people of wealth. Links could be detached and used in place of gold coin in trade, taxes, etc. Locating gold money chain at a wreck site indicates that a wealthy or important passenger might have been aboard the ship at the time of the sinking.

Captain's Station

Captain's Safe: Personal finances, medals, salvage contracts, International Ratings and competition status are stored in the Captain's safe.

Medals: Medals are awarded to the Captain for excellence in underwater archaeology from the International Underwater Archaeological Society throughout the course of the game. Callous acts of plundering historically important wrecks can lead to the revocation of these medals. The medals are displayed when you select this option.

Personal Finances: This option lists the amount of money you currently have on hand, as well as the amount you have recovered so far. This option differs from the amounts displayed under the competition status, which counts only treasure recovered (not including contracts, commissions, etc.)

Salvage Contracts: This option details all salvage contracts available to you. Use the *Selector* to cycle through the contracts.

I-Ratings: The I-Ratings (International Ratings) with each country are listed here. International Ratings reflect the relationship the ship, and you as Captain, have with individual countries. If your I-Rating with a country falls to Enemy, that country will send its warships after you. I-Ratings are affected by whether you have fired on a country's vessels or plundered its wrecks through the blasting of wreck sites.

Competition: This option displays a status screen showing your ranking and the ranking of your competitors in the search for wrecks.

Exit: This option closes the Captain's Safe.

Captain's Log: You can enter or review notes in the Captain's Log.

Add Log Entry: This option allows you to type in a new entry. Each log entry is automatically dated. Type up to ten lines of text in an entry. When you are done with the entry, press "Enter" twice.

Review Captain's Log: This option lets you review each entry in the log. Use the Selector to cycle through the entries.

Leave Captain's Log: This option lets you leave the Captain's Log.

Archive Information: This option allows you to review the clues and coordinates of wrecks that the researchers have provided or that you and your crew have found in library research or in taverns. It also displays whether or not the wreck has been found.

Appraise Treasure: As one of the Captain's skills, this option allows you to determine the value of items you recover. Note that you need to appraise special items before you can sell them. Select each item to appraise from the list provided. If the Captain's skills are good enough, she will successfully appraise the item and the value will be displayed. If the Captain fails to accurately appraise the item, he or she will be able to sell it for a lower value than its true worth.

Cargo Manifest: This option lists all the treasure stored in the cargo bay. The cargo bay can hold a base amount of treasure. The amount can be increased with the addition of Cargo Bay Extensions (available from Nautical Ned's in port). You will be informed if the cargo bay becomes full, at which point you will need to sell some of the treasure before you can pick up any more items. In addition, you should only carry treasure from one wreck at a time. Sell all items recovered from one wreck before picking up items from a different wreck, or you may lose valuable cargo.

Personal Statistics: This option displays the Captain's Security Card.

Weapons/Diving Officer's Station

Load/Unload Weapons: This option allows you to select a torpedo tube to either load or unload and then to choose from available weapons.

Target Information: This option calls up *James' Warbook*, which gives you in-depth information about a hooked target. You need to purchase *James' Warbook* before you can use this feature.

Combat: This option takes you to the combat screen. Combat is described in detail in the section entitled "Encounters/Combat".

Dive Team: This option allows you to select and equip a diving team. Refer to the section entitled "Finding & Exploring a Wreck" for more information on this feature.

Dive Wreck: This option allows you to dive a wreck once you have located it. Refer to the "Finding & Exploring a Wreck" section for more information on this feature.

Personal Statistics: This option displays the Weapons/Diving Officer's Security Card.

Sensor Officer's Station

Active Sonar: For *Sea Rogue* only. This option lists all targets (by bearing) during combat and allows you to "hook" a target from the list. Based upon your Sensor Officer's Signal Recognition skill, a picture of the hooked vessel will appear as well. Note that the "Signal Analysis" option must be toggled off for the pictures to appear.

Passive Sonar: For *Sea Rogue* only. This option lists all targets (by bearing) during combat and allows you to "hook" a target from the list. In addition, you will hear a representation of the type of ship, sub or weapon you are up against. If you have purchased the Signal Analysis equipment, you will also get a visual representation of the target's signal when you "hook" it.

Side-Scan Sonar: This option gives you a picture of the side-scan image of a wreck. When your ship is over a wreck, you can see the side-scan image of the wreck using this feature.

Signal Analysis: For *Sea Rogue* only. This option is a toggle (default off) for the visual representation of a hooked target's signal. You must purchase the Signal Analysis equipment before this feature will function.

NOTE: The list of items installed at this station will not appear in the lower window when this feature is toggled on.

Search: This option is used to search for a wreck. Refer to the section entitled "Finding & Exploring a Wreck" for more information on this feature.

Personal Statistics: This option displays the Sensor Officer's Security Card.

Navigator's Station

Plot Course: This option allows you to plot an automatic course change. When you select this option, you will move to the plotting map. To automate the plotting procedure, press "L" to enter the longitude and latitude coordinates. The course direction, time to reach destination and the longitude/latitude of the target destination will be displayed in the lower right corner of the screen. You can also press one of the eight arrow keys on the numeric keypad followed by "Spacebar" to get the information. When you're ready to lock in a course, press the right mouse button or press "Enter". Press any key or button to continue after you have chosen a course change. You can press "ESC" to leave the map at any time.

NOTE: You can also access this feature in the main plotting map by pressing "P".

Ship's Log: This option lists ports visited, wrecks identified, and encounters.

Review Ports of Call: lists, by date, all ports visited.

Review Wrecks Identified: lists, by date, all wrecks identified.

Review Naval Battles: lists, by date, all naval battles.

Review Entire Ship's Log: lists, by date, all ports visited, wrecks identified, and naval battles.
Leave Ship's Log: lets you leave the Ship's Log.

Current Location: This option displays your location in longitude/latitude coordinates. It also gives you the date and time, as well as the amount of game time that has elapsed.

Area Maps: This option allows you to view any of the eight area maps. Select the map you want to view. Use the *Selector* to leave this option.

Treasure Maps: This option lets you cycle through any treasure maps that you have purchased in taverns. The coordinates to the wreck will be displayed if the Navigator is able to decipher the treasure map (this is determined automatically when you purchase the map) or if you have purchased the Map-Deciphering equipment. Use the *Selector* to leave "Treasure Maps". Note that once you identify a wreck, the treasure map will be deleted.

Personal Statistics: This option displays the Navigator's Security Card.

Communications Officer's Station

Radio Traffic: This option allows you to read clear incoming messages. When you hear a single burst of the hailing sound, you have received an incoming message. The number of clear and coded messages will appear in the upper right display. Choose "Radio Traffic" to read clear messages. When you hear a double burst of the hailing sound, you have received an incoming message intercepted from one of Evil Eddy's vessels, or a special message. These messages are encoded, and you must decode them before you can read them. Messages announcing character advancement also are encoded, however they are accompanied by one hailing burst.

Automatically Decode Messages: This option allows you to automatically decode an intercepted message. You must buy the Communications Decoding Module before you can use this feature.

Manually Decode Messages: This option allows you to manually decode an intercepted message. Both the letters and the numbers will be encoded. The Communications Officer will attempt to decode the message manually. However, if he fails, you can try to decode the message yourself. Once you find the pattern for a message, it should be easy to decode.

Identify Wreck: This option lets you attempt to identify a wreck. If you think you know the identity of a wreck, use this feature to type in the name of the wreck. See "Finding & Exploring a Wreck" for further details on this feature. You will have three ways to identify the ship:

Manual Identification: Type in the name of what you believe is the correct wreck. (Refer to the Historical Wreck Manual for the exact spelling of the ship's name. Do not type in an asterisk ("*") if one appears after the ship's name, however).

Computer Identification: If you have purchased the Wreck Identification Computer, selecting this option will cause the wreck to be identified automatically.

Communications Officer's Identify: If you choose this option, the Communications Officer will suggest an identification of the wreck. If you agree, press "Enter" or click on the mouse.

Cancel: Allows you to leave this option.

Evaluate Treasure: This option tells you what you've recovered, including the dates of cannons and coins. This information helps in the identification process.

Coins: the date and nationality of the coins will be displayed.

Cannons: the date of the cannons will be displayed.

Gems/Jewelry/Artifacts: the item will be identified.

Personal Statistics: This option displays the Communications Officer's Security Card.

Engineer's Station

Damage Control: This option displays the ship and her major systems. After completing combat, you will want to check "Damage Control" to see how the ship fared. A schematic of the ship will appear, with color blocks indicating the status of different systems as follows:

Light green: the system is OK.

Green: the system has taken light damage

Yellow: the system has taken moderate damage

Red: the system has taken extensive damage

Dark gray: the system has been destroyed

Repair Damaged Systems: This option allows you to select an area of the ship to repair. Select "... " to see the entire list of areas to repair.

Engine Report: This option gives you a status report on the engine.

Launch Probe: This option, only available from the *Sea Rogue*, allows you to send your probe into a modern wreck site. You have to locate a modern wreck before you can use this feature. Refer to the "Finding & Exploring a Wreck" section for details.

Treasure Separator: This option lets you separate and clean encrusted items.

Personal Statistics: This option displays the Engineer's Security Card.

Weather

You will want to pay attention to any weather reports you receive if you are on the trawler or research vessel. (Weather does not affect the *Sea Rogue*.) Weather varies as sunny, cloudy, windy, rainy, stormy, gale or hurricane. The ship may take minor damage if the weather progresses to windy or rainy and above. If the ship is threatened, the local Coast Guard will notify the ship of the danger. If you receive a hurricane warning and are in the area of the hurricane, take the ship to the

nearest port until the storm is over. A hurricane icon will be displayed on the navigational and main maps when a hurricane is in progress. If you keep your ship out in the area of a hurricane, it will sustain damage to the upper structure of the ship (Bridge, Communication, Sensor and Navigation stations). The ship will continue to take damage every hour you stay out in a hurricane area, so keep out of the path of hurricanes. You may want to avoid the Caribbean altogether during the months of November and December.

Ship Movement

From the Navigator's Station: This feature allows for automatic plotting and ship movement. You just set a new course, and the ship does the rest. To plot an automatic course, go the Navigator's station and choose the "Plot New Course" option. You will go to a plotting map.

Move the cross hairs to your desired location and press "Spacebar" or the left mouse button to set a course plot. The course, direction, time to reach destination and the longitude/latitude of the target destination are displayed in the mini-computer display in the lower right corner of the screen. When you're ready to lock in the course, press the right mouse button or press "Enter". A red line will appear on the map, showing your course plot. Press any key or mouse button to travel to your selected destination. You can press "ESC" to leave the map at any time.

Manual Plotting: Click on the "Map" icon or press "F8" from the Bridge. The main map will appear. Press "P" to access the Navigator's "Plot Course" option. Follow the instructions above ("From the Navigator's Station") if you choose this option.



Muskets

The musket was a long shoulder gun that was used from the 16th to 18th Centuries. Muskets are sometimes found on wrecks, especially on wrecks of warships. Muskets tend to be of interest to collectors, museums and specialists, who can help the wreck hunter determine the nationality and approximate date of loss of the ship on which the musket was found.

You can use the numeric keypad to steer the ship until you reach your desired destination. In this map, pressing "W" (the "Where's my ship?" key) will move the mouse icon over your ship. Pressing "L" will let you toggle on and off a ship location display. You can zoom into the current map area by pressing "Z" for zoom. Press "1" to return to the world map.

You can move the ship one movement at a time by clicking the left mouse button. A toggled auto pilot feature is available by pressing "A". If you are using the mouse, click on the left mouse button when the cursor is in a position, relative to the ship, that you want to go. Using the keyboard controls, press one of the eight arrow keys on the numeric keypad to choose a direction. The ship will travel in that direction until you choose a new direction. Click the right mouse button or "Spacebar" to stop the ship or wait until it crashes into land. The automatic feature will also pause when you enter a new map in the zoomed-in mode. Click the left mouse button or press an arrow key to resume your automated journey.

Ports are marked by a red dot. If you want to enter a port, move the ship to the port of interest. Angle the ship over the dot until the prompt to enter port appears. Choose "yes" to enter the port. For more information about ports, refer to the section entitled "Bankers, Tavernkeepers & Other Landlubbers".



Gems

Up to the 15th Century, gems were cut to take the shape of a round, polished dome. Gems, set in brooches, pendants, or rings, particularly when engraved with appropriate symbols, were thought to have special powers, for example, sapphires burned away the evil eye. Through the 18th Century, diamonds were heavily used for jewelry, especially by the Spanish. More colorful stones were used around the diamonds to enhance the appearance of the stones.

By Longitude and Latitude: At the Navigation Officer's screen, select the "Plot New Course" option. At the plotting map, press "L" to get the automatic plotting menu to appear. Enter the correct longitude/latitude coordinates in degrees and minutes and press "Enter". The course will be logged into the plotting computer. Press "Enter" again to move the ship to the coordinates.

NOTE: Plotting a course using the Longitude/Latitude approach is the best way to move to the coordinates of a known shipwreck.

FINDING & EXPLORING A WRECK

The most adventurous means of acquiring treasure is through locating and exploring wreck sites. Dozens of historical and treasure-laden shipwrecks are described in the Historical Wreck Manual. Discovering, identifying and salvaging these wrecks is at the heart of *Sea Rogue*. It is also the most lucrative use of your ship and crew. The stages of wreck hunting are described below.

Gathering Information

The first step to locating a wreck is research. You can either do this by hiring a researcher to search records for you, spending the time yourself searching for wreck information in libraries, talking with knowledgeable people (like fishermen in taverns), or blindly searching the ocean in hope of stumbling over a wreck. Each shipwreck has from one to three clues associated with it. Before you will receive the coordinates to a wreck, you must have located all the clues for that wreck. All the clues for one wreck will be available through the same source (all the clues for the *Titanic* are available through the "Library" option, for example). However, the clues will be given out randomly, so you may get a clue for the *Savna Maria* one week and a clue for the *Lusitania* the next week. All the clues are stored under "Archive Information" at the Captain's station and are grouped, with clues from one ship appearing together. When you have located all the clues for a wreck, you will receive the coordinates and will then be able to locate and explore that wreck.

NOTE: Clues for different ships are available through different sources. You will need to gather clues from all of the sources to be successful in the game. If you can't find information on a particular wreck in the research center, try learning about the wreck through the library or tavern.

Libraries: You and your crew can spend one week at a time in a library searching texts and records for clues on possible wreck sites. Libraries are located in the following ports:

Southampton, England: British Maritime Library
Boston, USA: Massachusetts Seafaring Library
Bermuda: Maritime Library - Bermuda

Rota, Spain: Extension Library - Archives of the Indies
La Coruna, Spain: Historic Maritime Library of Spain
Nassau, Bahamas: Maritime Library - Bahamas

In these ports, select the "Library" option. Then select the "Conduct Wreck Research" option. You and your crew will spend one week in deep study. Depending upon the skill levels of your crew members in wreck research, you will have gathered enough information to receive a clue for one ship.

NOTE: You usually will need to locate two clues per ship when you perform your own research at the library.

Researchers: These resources offer recorded data on sunken ships from the Viking Age to the present. You can hire research teams in different ports to perform research. You can also purchase information on one wreck at a time, if the information is available. The coordinates for researched wrecks are available through the "Archive Information" icon at the Captain's station.

Hire a researcher: to provide frequent research for you. If you hire a researcher, she will send information on wreck sites directly to the Captain's Archive Information journal several times a year.

Visit your researcher: to find out whether she has any new information for you.

Purchase information: to buy information on one wreck.

Leave research facility: to leave this option.

NOTE: You will be provided with one complete clue when you get your research done through the research center.

Taverns: Sea taverns have always been a good place for stiff drinks, courageous sailors and terrific sea stories. Sometimes, though, they are a source of valuable local information on sunken or buried treasure. It never hurts to talk with patrons who may know of local treasures. In a tavern, select the "Talk With Patrons" option. If you are offered information or a treasure map, you might want to purchase it. If you purchase a treasure map, the map will be stored in the "Treasure Map" option at the Navigation Officer's station. The coordinates for the wreck will be displayed only if your Navigator's skills are honed enough to decipher the map (or if you have purchased the Map-Deciphering equipment). Any clues you purchase will be stored in the "Archive Information" option through the Captain's station.

NOTE: You will need two to three clues per ship when you perform research at the tavern.

Searching for a Wreck

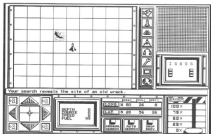
Once you have traveled to the wreck site, go to the Sensor Officer's station and choose the "Search" option. You will enter the Search screen.

Set the speed for your search by clicking on a percentage on the speed indicator or by pressing "=" to increase speed, "-" to decrease speed, "+" to go to full power, or "." to go to full stop. Your speed sets the movement rate and accuracy of the search (the faster your speed, the faster and less effective your search).

NOTE: If your speed is 0, you are searching the square your ship is in. Also, you can't search if your engines are at 100% or above.

An auto search feature is available by clicking on the "Auto Search" icon or by pressing "A". Game time will pass at the same rate as it would under Manual Search, but real time spent searching for a wreck is cut dramatically. To return to Manual Search mode, click on the "Manual Search" icon or press "M".

Search Screen



NOTE: You can purchase an Enhanced Side-Scan Sonar device at Nautical Ned's in port. This will double the efficiency of your search.

To choose the direction of your manual search, press the eight arrow keys on the numeric keypad or click in any of the eight squares adjacent to the ship. The ship always stays in the center of the Search screen. Watch the auto map in the upper right corner to see your movement and progress. You can drop a buoy (click on the "Buoy" icon or press "B") to mark a place you want to come back in. The number of times you cover each square appears in the auto map as follows:

Light blue = 1st pass

Dark green = 2nd pass

Light green = 3rd pass

Blue = 4th pass

Dark blue = 5th pass

Light purple = 6th pass

Purple = 7th pass

Black = buoy

Yellow = wreck

Your longitude/latitude position is displayed. In the Search mode, only the seconds change. The magnetometer is provided to help you in your search. It will fluctuate when your ship is over iron and/or steel. A strong signal by the magnetometer will indicate the presence of large amounts of metal. Such an indication is made when the magnetometer passes directly over ferrous material, metals of any kind (no depth limit). The magnetometer array is a highly recommended device to carry because it covers a broader area and is more accurate than the Standard MK I Magnetometer.

If a wreck graphic appears on the Search screen (and a yellow square appears in the auto map), you've found a wreck. A line of text will also appear below the Search screen, telling you what you've found.

Using the Sensor Officer's side-scan sonar sends a multi-frequency ping into the water; the return echo gives an image of a vessel resting on the ocean floor. The ping covers an area to either side of the vessel. The enhanced version can ping from both sides of the vessel simultaneously. This feature is available through the Sensor Officer's station. You must be over a wreck to see an image. Test information about the wreck site is also displayed when a side-scan sonar ping is successfully completed.

Once you locate a wreck you want to explore, position the ship over the graphic. The ship has to be on the square that signifies the wreck site on the Search screen in order to dive the wreck or send in your probe (from the *Sea Rogue*).

NOTE: *Sea Rogue* saves the coordinates of the last wreck that you have located. If you leave the wreck site and return later (without searching for another wreck), you can return to the site by choosing the "Dive a Wreck" option at the Weapons/Diving Officer's station.

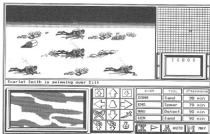
Diving an Old Wreck

Once you have successfully located a wreck using the Search mode, you can dive the wreck.

NOTE: If you dive a wreck site and see nothing but an "E" on the wreck site, Evil Eddy beat you to the wreck. There will be nothing of value left for you to salvage.

Assemble Dive Team: At the Weapons/Diving Officer's station, choose the "Dive Team" option (if you haven't assembled a dive team yet). Choose "Select diving team" and choose four divers from your crew members (a high Endurance is important here). The names, Dexterity, Endurance, Diving skill and Combat skill of each crew member are listed in this window. An asterisk ("*") behind a team member's names indicates that that diver is selected. To equip the divers, choose "Equip diving team" from the menu. Equip each diver with either a spear gun (maximum of two spear guns in a dive team), knife, magnetometer, sand sucker or trowel. A diver equipped with a spear gun can fire at and drive away an attacking shark or an enemy diver. A diver equipped with a magnetometer will have access to information on metals on the sea floor. A diver equipped with a sand sucker will be able to uncover twice as much sand, silt, treasure, etc. as the other divers. Save the team when you are satisfied with your choices.

Diving Screen



Dive the Wreck: Once you've assembled a dive team, select the "Dive the Wreck" option. You will now be diving the wreck.

You have four divers, who are equipped with magnetometers, spear guns, etc. You control each diver separately, and the divers are differentiated by colored diving belts. The divers' colors are:

Diver 1 = red

Diver 2 = green

Diver 3 = light blue

Diver 4 = yellow

Press the numbers "1" through "4" to move from diver to diver, or select them from the diver status display. You can move the divers in eight directions using the arrow keys or mouse (click on the four arrow icons on the screen).

The diver status table in the lower right corner of the screen tells you which divers are on the team, how they are equipped and how much oxygen they have remaining.

NOTE: Your divers have a limited supply of Endurance and oxygen. If they run out of oxygen, they lose one point of Endurance. To safeguard your divers' health, pay attention to the amount of oxygen remaining. When they have 10 minutes of oxygen left, an alarm will sound. You can send a diver back to the ship by pressing the "-" key or clicking on the "Diver Up" icon until you are asked whether you want him or her to return to the ship. You can recall all your divers at one time by pressing "ESC" or clicking on the "Diving Bell" icon.

To change a diver's depth, press the "Diver Up" and "Diver Down" icons on the top row of the icon grid.

Begin searching by pressing "S". You can search each square down to five levels of depth, uncovering cannons, coins, treasure chests, ocean floor, etc. The images of what your divers uncover are constantly updated in the dive grid, as well as in the helmet camera box in the lower left corner.

Pressing "G" will allow you to get or pick up items. You can also click on the icon in the lower left corner of the icon display.

Pressing "H" will allow you to hoist a cannon.

Pressing "A" will allow you to automatically pick up all treasure items. This is a toggle, so press "A" again if you want to turn off the auto pick-up feature.

Pressing "D" will let you drop an item. An inventory of the items picked up will appear. You can also click on the lower center icon in the icon display to activate this feature.

Pressing "M" will display a map of the wreck site. This map gives the player an idea of the layout of the ship and shows items currently revealed at the site. On the grid, the divers are represented with yellow, green, blue and red boxes. The depth levels are color coded on the grid as well. Icons of all the items that can be found at the site are displayed along the right side of the window, and the icons representing the items currently revealed are displayed in the grid. A series of four toggle buttons is also available in this map. Clicking "Flag" or pressing the "F" key acts as a toggle between showing and not showing the flag markers. Clicking "Depth" or pressing the "D" key acts as a toggle between showing and not showing the level breakdown. Clicking "Items" or pressing the "I" key acts as a toggle between displaying or not displaying the items in the grid. Clicking "On/Off" or pressing the "O" or "ESC" key acts as a toggle to turn the map feature off.

If a diver is equipped with a magnetometer, the magnetometer display on the right side of the screen fluctuates when he or she is over gold, silver, bronze, steel or iron. Use the magnetometer to locate areas or squares with hidden deposits of metal and mark these squares with a flag (you can toggle this marker on and off by pressing "X" or the "Marker" icon).

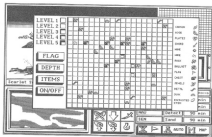
The auto map in the upper right corner shows you which squares you have searched, as well as to what detail. Colors represent the level of search for each square:

- Light blue = 1st level
- Dark green = 2nd level
- Light green = 3rd level
- Blue = 4th level
- Dark blue = 5th level

Once you have reached the fifth level (dark blue) for any square, it is time to move on to the next square.

NOTE: After you recall your divers, they will be returned to the same positions on the map if they return to the wreck site.

Map Screen



Choosing a Treasure Recovery Strategy: You can dive any wreck one time before choosing a treasure recovery strategy. This first dive should serve as a reconnaissance dive, letting you evaluate whether the wreck is one you want to blast or to painstakingly search. After this first dive, you will be prompted to select a strategy for recovering the treasure from the wreck. Three levels of treasure recovery are available to you: Rapid Recovery (blasting), Moderate (vacuuming), or Painstaking (searching square-by-square). The more valuable the wreck, the more careful you are going to want to be in recovering the treasure.

Rapid Recovery: This strategy involves blasting the wreck off the bottom and removing approximately half of the gold and silver (the rest of the treasure is lost in the blast). This technique is the fastest way to recover treasure, but you lose all the artifacts and infuriate the International Underwater Archaeology Society (IUAS). Continued use of this method will cause the navies of angered countries to begin hunting you down as a menace to national treasures. Check on your International Ratings (through the Captain's Safe) to determine your ranking with different countries. In addition, without the use of the artifacts, it will be very difficult for you to correctly identify the wreck (lowering the value of the treasure and further angering the IUAS).

Moderate: This strategy involves vacuuming the wreck off the sea floor. This technique takes longer than the Rapid Recovery approach and less time than the Painstaking option. Most of the artifacts will be damaged or destroyed, but some may survive. If any of the artifacts survive, you have a chance of correctly identifying the wreck. In addition, you will be able to recover about three-quarters of the gold and silver.

Painstaking: This method of recovery involves sending your divers down to search square-by-square. All the treasure and artifacts at the wreck site are available to you. If you select this option, you will be given an additional clue to assist in correctly identifying the wreck. You can repair your relationship (and International Rating) with a country by selecting the Painstaking option for at least three wrecks from that country.

NOTE: If you select either the Rapid or Moderate Recovery option, the cargo hold is automatically filled. In some cases, you will uncover more treasure from the wreck than you can carry in one trip. To determine whether any additional treasure remains at the wreck site, select the "Dive the Wreck" option. If additional treasure remains, but the cargo hold is full, you will be informed. Sell the treasure that you have recovered and return to the wreck site. Select the "Dive the Wreck" option again, and you will be prompted to either fill the cargo hold or to cancel. Continue to fill your hold and then sell your treasure until you have recovered all the treasure from the wreck site. By continuing to select the "Dive the Wreck" option, you will be informed when all the treasure has been removed. Be sure to sell all the treasure (emptying out your cargo bay) before moving on to the next wreck.

Combat: Your divers may be harassed by sharks or by other divers. Combat with sharks is automatic, and is best left to a diver with a spear gun. (You will want at least one of your divers to be equipped with a spear gun.) If you are attacked by other divers, click on the "Knife" icon, or press the "K" key. This action will fire a spear (if the diver is equipped with a spear gun), or stab with a knife. You can continue to fire or stab by clicking the icon or pressing the key. If the spear hits a target, or a knife blow strikes, the enemy diver has been hit. Your divers will automatically attempt to block a blow. The divers' Dexterity and Diving skill combine to determine the chance of blocking. Each hit your divers sustain will take off one point of either Dexterity or Endurance. If either Endurance or Dexterity reaches 0, the diver is returned to the vessel. He or she will regenerate one point per day until the maximum Endurance and Dexterity is recovered.

Mines: Your divers may find mines in the wreck site. If one of your divers uncovers a mine, do not try to dig past it or to pick it up. If the mine explodes (through being touched by a diver), the diver will be permanently injured and will be hospitalized for the remainder of the game. As a note, mines are placed at the outskirts of the wreck site. They can help you see how the wreck lies, and they indicate that you are outside a known treasure area on the wreck site.

Determine the Wreck Pattern: Every wreck in the game lies on one of four axes: horizontal, vertical, diagonal with a slant toward the right, or diagonal with a slant toward the left. In addition, the wrecks may be shifted to one side of the excavation area; they will not all be aligned with the center of the wreck area. Cannons, treasure and debris litter the wreck site, but you can find a pattern in this chaos by knowing which areas of the sunken vessel are most likely to hold certain items. For example, gems, artifacts, gold and silver were stored in the officers' quarters at the stern of the ship. Therefore, if you find gems, you are in the aft, or back, section of the ship. The types of items you will probably find in a given area are listed below.

Outside Edges at the Ship's Widest Part: cannons (not bronze), wood beams.

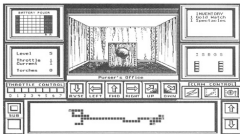
Front (or Fore) Section: wood beams, ballast stones.

Center Section: treasure chests, wood beams, ballast stones, empty treasure chests.

Back (or Aft) Section: artifacts, bronze cannons, treasure chests, gems, empty treasure chests.

You can use this information to determine what section of the ship you are in, and to help you "outline" the wreck site. Use the "Map" feature to view the layout of the wreck.

Modern Wreck Screen



Diving a Modern Wreck

In the Engineer's station, select the "Launch Probe" option. You will now be sending your probe into the wreck. A menu will be displayed asking where you would like the probe to begin its search (for example, the Bridge, passengers quarters, engineering, etc.). Choose a sector, and the probe will move to the first room in the chosen sector.

Use the arrow keys or mouse to move the probe through the wreck. Press "U" or "D" to go up or down ladders.

An inventory display is provided in the upper right corner of the screen.

The level of the ship, the throttle ("0" - "7", with "7" being the fastest you can go), the current ("0" - "6", with "6" being a strong current), and the number of torches available are listed on the left side of the screen.

The display in the upper left corner of the screen indicates remaining battery power for the probe. A strong current will drain your battery power. When the display is completely gray, the battery will be dead and you will not be able to move the probe.

NOTE: If the battery runs out of power, you can leave the wreck site by pressing "ESC".

To open safes, you can either use a torch (if you purchased one) or the Captain's safecracking ability (based upon his or her percentage chance to successfully open the safe). If the Captain fails his safecracking attempt, he can try to open the safe again. However, there will be a significant power drain on the probe for repeated attempts to open a safe.

An "Auto Map" feature appears at the bottom of the screen. Icons representing stairs, crates, etc., are displayed in the auto map. These icons are as follows:

Stairs: yellow stairs

Crates: orange-red boxes

Safes: gray with a \$

Ship's bell: yellow bell

Ammunition: gray bullet

Doors/Walls/Cave-ins: black lines

Vault: tiny safe

Pressing the "Up" or "Down" arrow icons in the map display, or pressing the ">" and "<" icons, will move you through the maps for the different levels of the ship.

Press "R" to toggle text on and off. The default is on.

Cave-ins can present an obstacle in modern wrecks. Cave-ins can block doors and passageways, although a cave-in near a stairway will not block your access up and down the stairs.

NOTE: On the Bridge of the wreck, you will be able to find the ship's bell. Although some of the letters will be missing, this bell can be an important clue in identifying a modern wreck.

Press "ESC" or click on the "Sub" icon to leave the modern wreck site.

Separate Treasure

If you discovered any encrusted items (check the cargo manifest in the Captain's station), you can clean them in the treasure separator. Go to the Engineer's station and choose "Treasure Separator". The item will be revealed in an animated display.

Evaluate Treasure

At the Communications Officer's station, choose "Evaluate Treasure". Treasure items include coins, cannons, and gems/jewelry/artifacts. Careful study can reveal the dates of coins and cannons. Special items also will be listed. This step of uncovering clues is important for determining the correct identification of any wreck. The dates of coins and cannons will help you pinpoint the year in which the wreck was lost, and you can match special items (gems, artifacts, etc.) to items in the manifests in the Historical Wreck Manual. When you correctly identify a wreck, you get full value for all treasure recovered. If you do not succeed in identifying the wreck correctly, you will only get half value for the treasure.

Appraise Treasure

The Captain must successfully appraise special items in order to sell them at full value. Go to the Captain's station and select the "Appraise Treasure" option. Choose the item(s) you want to appraise. If the appraisal is unsuccessful, you will be able to sell the item at a discounted value.

Identify Wreck

These are treasures that can help you identify a ship.

Bronze cannons: look for date and amount

Gold bars, coins, ingots: look for date and amount

Silver bars, coins, ingots: look for date and amount

Gems: match gems in manifest

Finding any of the following special items can help you narrow down the identity of a wreck, as their presence varies from ship to ship.

Art objects

Artifacts (gold and silver, historical, navigational, religious, etc.)

Jewelry

Gold money chain

Muskets

Porcelain

Silverware

Swords

Mercury

Special Items (These items are unique to a certain ship, such as the Glade Gun from the *Tobermory Galleon*.)

Without the Wreck Identification Computer, the identification process is simply that of elimination. The recovery of some items may instantly identify the ship, so consult the Historical Wreck Manual and review the manifests for eye-catching items. If no distinguishing artifacts are recovered, you can at least determine the year of the wreck by evaluating cannons and coins.

NOTE: Ships marked with an asterisk ("*") are considered to be of special historical significance. You may be able to receive commissions from museums and collectors to discover historic wrecks. Any treasure, artifacts or relics you claim will be snapped up by museums and collectors.

Once you evaluate and appraise your treasure haul, you should be able to identify the wreck. Go to the Communications Officer's station and select the "Identify Wreck" option. You will have three ways to identify the ship:

Manual Identification: Type in the name of what you believe is the correct wreck. Refer to the Historical Wreck Manual for the exact spelling of the ship's name. Do not type in an "*" if one appears after the ship's name, however.

Identify Wreck Screen



Lusitania

Lusitania, a British luxury liner, was torpedoed by a German submarine off the coast of Ireland on May 7, 1915 on her voyage from New York to Ireland. Of her 1,959 passengers and crew, 1,198 people died in the sinking of the Lusitania, including 128 Americans. The loss of American lives in the incident contributed to the decision by the United States to declare war on Germany in 1917, and thus join World War I.

The public raised an outcry against the Germans. In defense, the German government asserted that the Lusitania

Computer Identification: If you have purchased the Wreck Identification Computer, selecting this option will cause the wreck to be identified automatically.

Communications Officer's Identify: If you choose this option, the Communications Officer will suggest an identification of the wreck. If you agree, select "Yes".

NOTE: If you misspell the ship's name, you will be prompted to try again. However, if you select an incorrect name, you will not be able to identify the wreck again.

Cancel: Allows you to leave this option.

Once you have attempted to identify the wreck using one of the methods above, you will be informed of the wisdom of your choice. If you have chosen correctly, you will get full value for the treasure recovered. If your choice was incorrect, you will receive half value for all treasure recovered from the wreck. (Treasure is not worth as much to collectors and museums if they do not know which ship the treasure and artifacts came from.) In either case, a wreck history screen will display a graphic of the wreck, the wreck history and manifest, and a nautical tune will play.

The Competition

You have up to five competitors (including Evil Eddy) in your search for wrecks. At each level of game play, you will be competing to locate wrecks and to recover treasure from them. When a competitor locates a wreck, a newspaper article will be displayed letting you know which wreck was recovered. You may want to check that wreck off the Historical Wreck Manual so you do not confuse it with another wreck. You can check your status at any time by going to the Captain's Safe and viewing the "Competition" option. The competition, including you, will be ranked according to the number of wrecks found (100 points/wreck), wrecks identified (1,000 points/wreck) and the amount of treasure recovered (in millions). Note that when you both locate and identify a wreck, you receive 1,100 points.

Pierre Labotte

Pierre is a first class underwater archaeologist. He's been active in the field for nearly ten years. He was turned on to underwater archeology by a professor at Harvard. When Pierre returned to his native France to finish schooling, he was determined to pursue his newly found interest.



Until recently, Pierre has been diving wrecks in the Mediterranean with his students, trying to learn more about ancient civilizations. Of course, Pierre has had his share of trouble with Eddy. The infamous pirate ruined many class sessions for Pierre.

Now, with several of his students, Pierre is embarking on his most ambitious undertaking: exploring the early trade routes to the Americas by the Spanish, British, French, Dutch and Portuguese and scouring wreck sites along the way.



Myria Topaz

Myria began her trade along the sandy beaches of the Bahamas. After large storms or hurricanes, she would find gold and silver coins scattered in the sand. Myria knew as a teenager that there was more treasure hidden under the sea. Myria left the Bahamas when she was 19 and continued her studies in California.

Myria later turned her study into work. The sea became her love, and shipwrecks became her passion. She dove many historical wreck sites along the California and Mexico coasts. Collecting special items from the ships, she earned a name as a repumble collector, as well as a skilled wreck hunter.

After a 15-year absence from the Caribbean, Myria is back, living in the Bahamas. Her interests are on any wreck she researches. Myria has a crew of well trained people. Her crew is as skilled as any band of divers, researchers and technicians. Their loyalty to their boss is strong as her dedication to the sea.

Burr Hopefield

If Evil Eddy wanted a protege, Burr Hopefield would be a likely candidate. Although the young man has no ambition to create a military unit, he does desire fame. Fortune is already his.

Burr was born into wealth. His notoriety happened by accident. One day he and his mates were bored, so Burr chartered the family yacht to Australia. It was off the Australian coast that Burr learned (poorly) to dive wrecks. Burr's name hit the Australian papers several times. Because of Burr's "explosive" diving techniques, he was not well liked by underwater archaeologists. Burr left Australia, hearing of an underwater graveyard in the Atlantic and Caribbean.



Burr will, without a doubt, wreak havoc at his new destination. His lack of care in retrieving treasure will continue to leave archaeologists and historians with huge questions about early sea travel.



Delgado Cruz

Nobody really knows how old Delgado Cruz is. Regardless of his age, though, Delgado is searching the seas actively. The Spaniard has made a name for himself salvaging wrecks in the South China Sea. An aggressive collector, he doesn't hesitate to throw aside proper salvaging procedures to get what he wants. Sometimes, though, he becomes too anxious, destroying the vessel entirely. Delgado operates with no specific style. Some days he tears a wreck to pieces, and other days is as careful as he can be.

His interest in the Atlantic and Caribbean has been generated by his nephew. The young man did some research into the old flotas that used to sail from the "New World". Delgado has decided to pursue the riches in these waters. Only the sea knows what will happen and, with Delgado Cruz searching the ocean floor, the outcome truly is unpredictable.

BANKERS, TAVERNKEEPS & OTHER LANDLUBBERS

The options available within ports are listed below.

Ports

Ports are marked by red dots on the map. To enter a port, use the *Controller* to drive the ship to the port of interest. Angle the ship over the dot until the prompt to enter port appears. Choose "yes".

The ports are:

United States

Boston, Massachusetts
New York, New York
Miami, Florida

Atlantic

Bermuda
Reykjavik, Iceland

Caribbean/Gulf of Mexico

Nassau, Bahamas
Panama
Havana, Cuba
San Juan, Puerto Rico

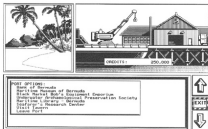
British Isles

Dublin, Ireland
Southampton, England
Edinburgh, Scotland

Europe/Africa

Brest, France
Casablanca, Africa
Dakar, Senegal
Rota, Spain
Lisbon, Portugal
La Coruna, Spain

Port Screen



Different ports offer different facilities. The facilities available in ports are listed below.

Banks

These are banks that will deposit funds for you and transfer funds from one bank to another.

1. Bank of England
2. Bank of Portugal
3. Bank of Spain
4. Bank of Scotland
5. Bank of New York
6. Bank of Miami
7. Bank of France

Make a deposit: All gold, silver and gems in your cargo holds will be exchanged for credits (which is what you will use to purchase items).

Leave bank: This option will take you out of the bank.

Nautical Ned's

At Nautical Ned's, you can purchase standard and advanced wreck hunting and diving equipment, as well as fuel. The following equipment is available through Nautical Ned's:

Ship Equipment

Navigation Computer
Cargo Bay Extensions
Hull Reinforcement Supports
Fuel
U.S. Geological Survey Mineral Detector
QX-5 Communication Console
ESM Intercept Antenna
Fuel Efficiency Device
Standard SQQ 51 Bow Sonar

NOTE: If you already own an item, an asterisk ("*") will appear next to that item in Nautical Ned's inventory.

Wreck Hunting Equipment

Hull-Cutter Torch Bars
Side-Scan Sonar
MK I Magnetometer
Treasure Analysis Computer
Treasure Separator
Enhanced Side-Scan Sonar
Deepwater 'Safekeeper' Probe
MK V Magnetometer



Cannon

Early cannon were built of bronze. These bronze cannon were developed into ornate guns that can still be found on wrecks. Bronze cannon are less vulnerable to corrosion than their iron counterparts, and can be a valuable aid in the identification of a wreck. A cannon in good condition may still display its forging mark, as well as intricate designs along the length of the gun. Cannon also changed much depending upon the nationality and time period of the forging. The number of cannon a vessel carried helps to classify its type as warship, galleon, merchantman, etc.

Black Market Bob's

You can acquire weapons and specialized equipment through Black Market Bob's. His wares are as follows:

High Technology Equipment

Sonar-Absorptive Paint
 Target-Tracking Computer
 Map-Deciphering Computer
 Sonar Signature Processing Computer
 Towed Sensor Array
 Sonar Contact Identification Computer
 Mine Detector Sensor Package
 Wreck Identification Computer
 Communications Decoding Module
 X-ray Safecracking Device
James' Warbook Volume 1
James' Warbook Volume 2

Weapons and Decoys

Torpedo Tubes (forward)
 MK 50 ADCAP Torpedo
 Tigershark Anti-Ship Torpedo
 ASW Torpedo
 MK 60 Decoy Torpedo
 MK 30 Decoy Torpedo

NOTE: If you already own an item, an asterisk ("*") will appear next to that item in Black Market Bob's inventory.

Museums

You can sell special items to museums that you recover from wrecks.

Sell items: Museums will purchase special items after the Captain has appraised them.

Receive commission: You may be offered a commission from the museum.

Leave museum: Select this option to leave the museum.

Libraries

You and your crew can spend one week at a time in a library searching texts and records for clues on possible wreck sites.

Choose the "Conduct Wreck Research" option. You and your crew will spend one week in deep study. Depending upon the skill levels of your crew members in wreck research, you will have gathered enough information at the end of the week to log a new wreck clue in the Captain's Archive Information.

Training Centers

Training is key to character performance. Training is available through specialized organizations and associations for each of the character classes. You can also replace crew members through the training centers. Each organization has training facilities scattered throughout the countries along the Atlantic Ocean. Select "Train" to train your crew members. If they have advanced, you will be able to select skills for each officer to improve. The training facilities are:

Old Salt's Association: The Old Salt's Association provides all training for Captain skills. This association has branches in Southampton, England; Lisbon, Portugal; Norfolk, Virginia, USA; and Miami, Florida, USA.

Organization for Tactical Commanders: This organization provides training for Sensor Officers. Equipped with the latest computers, sensors and electronic gadgetry, the Organization for Tactical Commanders conducts detailed courses in rudimentary and advanced tactical machinery. Branches are located in Nassau, Bahamas; Reykjavik, Iceland; Southampton, England; and La Coruna, Spain.

League of the Four Compass Points: Navigators can receive valuable training and instruction through the League of the Four Compass Points. Being one of the oldest of maritime crafts, navigation is difficult to master, but many excellent teachers are available. The League of the Four Compass Points reflects this wealth of knowledge by operating branches in Southampton, England; Reykjavik, Iceland; Miami, Florida, USA; Norfolk, Virginia, USA; Edinburgh, Scotland; and Lisbon, Portugal.

Alliance of Seafaring Communications: The Alliance of Seafaring Communications provides in-depth training for Communications Officers whose jobs are performed on the world's oceans. Branches can be found in Reykjavik, Iceland; Miami, Florida, USA; Edinburgh, Scotland; and La Coruna, Spain.

Hammer-and-Wrench Association: Engineers learn to ply their trade through courses offered by the Hammer-and-Wrench Association. Good Engineers are in short supply and high demand, so the association can only offer courses in three cities: Southampton, England; Edinburgh, Scotland; and Norfolk, Virginia, USA.

Sharp-Shooters Guild: The Sharp-Shooters Guild offers tactical and ordnance handling training, as well as diving operations, for Weapons/Diving Officers. Branches are located in Lisbon, Portugal; La Coruna, Spain; Norfolk, Virginia, USA; Miami, Florida, USA; and Nassau, Bahamas.

Repair Shop

Having the ship worked on at the repair shop is more expensive than having your Engineer do the work. However, the repair shop will do good work for you.

Estimate repair cost/time: This option provides you with an estimate of the cost and time required to repair the ship.

Repair Ship: Selecting this option will authorize the shop to repair the ship.

Leave repair shop: Choosing this option will take you out of the repair shop.

Seafarer's Research Center

At the Seafarer's Research Center, you can hire a researcher to locate wrecks for you, or purchase information on one wreck at a time.

Hire a researcher: If you hire a researcher, she will send information on wreck sites directly to the Captain's Archive Information journal several times a year.

Visit your researcher: Selecting this option lets you know whether your researcher has any new information for you.

Purchase information: This options allows you to purchase information on one wreck.

Leave research facility: This option takes you out of the research center.

Collectors

Collectors will purchase special items you have recovered from wrecks.

Sell items: Collectors will purchase special items after the Captain has appraised them.

Receive commission: You may be offered a commission from collectors.

Leave collector: Select this option to leave the collector.

Taverns

In taverns, talk with the barkeep or patrons (who may be willing to sell you a treasure map), or listen in on conversations.

Buy a drink: The barkeep is happiest when you buy a drink.

Talk with barkeep: You may be able to pick up some tips by talking with the barkeep.

Talk with patrons: Sometimes a fellow patron will offer to sell you information or a treasure map, so it is always a good idea to talk with the patrons.

Listen to conversations: You may be able to overhear some interesting conversations.

Leave tavern: This options lets you leave the tavern.

Leave Port

Choose this option when you are ready to return to the ship.



Coins and Ingots

Coins and ingots were minted extensively in the New World by the Spanish and were then transported to Europe via flota or fleet. Unfortunately for the Spanish, many of the ships in these fleets were lost at sea. The coins, ingots and bars of gold and silver that remain on the ocean floor, both from Spanish and other wrecks, are usually the primary interest of treasure hunters. Aside from their monetary value, these items can be essential in the correct identification of a wreck's date of loss and nationality. The coins and ingots bear forging dates and marks that assist the wreck hunter in learning more about a wreck.

SKILLS

The training skills available from each training facility are listed below. Skill levels range from 0 to over 100 percent in each area. With each advancement, crew members will have the opportunity to train in two to eight areas, depending upon the crew members' intelligence. For several skills, equipment is available that increases the chance of successfully completing the specific functions. The effects of not completing a function are lost opportunities, inaccurate data, etc.

All Crew Members

Diving: Increasing this skill gives the diver an oxygen bonus.

Wreck Research: Enhancing this skill increases the crew member's ability to successfully locate wreck information during library research in port.

Underwater Combat: Enhancing this skill increases the crew member's ability to drive off an attacking shark while diving an old wreck. It is only used by the diver team member who is equipped with a spear gun or knife.

Captain

Safecracking: This skill improves the Captain's ability to open safes on modern wrecks.

Diplomacy: This skill determines the Captain's ability to acquire new salvage contracts.

Treasure Appraisal: Increasing this skill improves the Captain's ability to determine the value of special items.

Archaeology: This skill influences the number of commissions the Captain will receive from a museum. These commissions are for finding historically significant wrecks.

Navigator

Cartography: This skill reflects the Navigator's familiarity with maps. This skill is combined with the Treasure Maps skill to determine whether or not the Navigator successfully deciphers treasure maps.

Treasure Maps: This skill reflects the Navigator's ability to figure out treasure maps. This skill is combined with the Cartography skill to determine whether or not the Navigator successfully deciphers treasure maps.

Sensor Officer

Signature Recognition: This skill affects how well the Sensor Officer can correctly identify an acoustic signature.

Mineral Detection: This skill is used to detect mineral finds while the ship is maneuvering through the ocean.

Weapons/Diving Officer

Ordnance Handling: Improving this skill increases the speed with which the Weapons/Diving Officer can reload a torpedo tube.

Evasion: Expertise in this skill decreases the distance required for the ship to run before you can disengage from combat. When you are in the trawler or research vessel, this skill is useful for evading following or shadowing vessels. If you fail to evade the following vessel, your divers will probably run into combat with other divers at the next wreck site.

Naval Combat: For *Sea Rogue* only. Training in this skill increases the damage to enemy vessels inflicted by torpedo hits.

Diving Operations: This skill controls how efficient the Diving Officer is in deploying the dive team.

Communications Officer

Message Decoding: This skill allows the Communications Officer to decode a message accurately.

Wreck Identification: Enhancing this skill increases the likelihood that the Communications Officer's suggested wreck identification will be correct.

Engineer

Damage Control: Training in this skill reduces the amount of damage that is inflicted by a torpedo strike.

Repair Damage: This skill affects the Engineer's ability to quickly repair equipment.

Engine Operations: Increasing this skill slows the rate of engine degradation, and decreases damage taken to the engine compartment.

Jewelry

During the 12th to 15th Centuries, jewelry, which could be pawned, broken up, or melted down, was used as a form of currency at a time when bank credit was just beginning. During the Renaissance period, princes and merchants displayed their prosperity by wearing all types of removeable jewelry, as well as buttons, hat badges and other jewels sewn onto clothing. Pendants also are representative of the period. English jewelry included chains of office and jeweled armorial badges, presented as tokens of royal favor. The portrait of Elizabeth I appears in cameo pendants and on Armada jewels, medals celebrating the defeat of the Spanish fleet. The Spanish loved to lavish their gold jewelry with a display of precious stones of all colors, but especially liked diamonds. During the 18th Century, diamonds were surrounded by emeralds, garnets, rubies, amethysts and topazes in natural-looking floral designs.



ENCOUNTERS/COMBAT

During game play, you may encounter a variety of seagoing traffic. At the Novice level, you will have no combat encounters. At the Intermediate level, you will have limited combat. At the Professional level, you will have full combat. Some of the vessels you may encounter are detailed below.

Military craft: of every type operate freely throughout the North Atlantic. You'll want to concern yourself with determining whether military vessels are hunting you. Military vessels are probably best avoided altogether.

Pirate ships: are after the same thing you are: gold and treasure. They are usually heavily armed and dangerous. Your best bet may be to remain undetected unless you feel up to fighting for another pirate's treasure. Whatever you have, they'd like to have. Weigh the costs carefully.

Drug smugglers: are aggressive in protecting their "territories". They will attack if they feel threatened by your presence. They are equipped only for surface combat.

NOTE: You cannot leave combat if you are under attack or if you have bumped into one of Evil Eddy's vessels. Also, you cannot leave or save the game if you are engaged in combat.

You will encounter frigates, destroyers and ships from various countries, drug smugglers' vessels, and ships and submarines owned by your enemy Evil Eddy.

For the Trawler and the Research Vessel

As if combative drug smugglers aren't enough, you may find yourself being followed by other wreck hunters. You can attempt to evade these shadowing vessels once per day, or you can challenge them to combat. If you fail to either evade or destroy them, you will probably face their divers in underwater combat at your next wreck site.

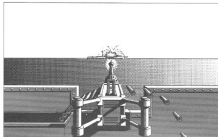
In combat situations, targets will be visible as dots on the sonar display on the Bridge. You will be able to see the number and approximate bearing of targets on the sonar display.

To go to combat, click on the left (port) "Gun" icon or right (starboard) "Gun" icon on the Bridge, or select the "Combat" option from the Weapons Officer's station. The display will change to a combat screen. You will see your mounted gun, the side of your ship and the target (at a distance). When the target is in the gunsight, fire the gun by pressing "Spacebar" or clicking the left mouse button. Aim near the center of the enemy ship to inflict damage; an explosion indicates a hit. You may turn the ship by pressing the left and right arrow keys.

To leave the combat screen, press "ESC" or click on the right mouse button.

NOTE: You cannot leave the combat mode while you are actively engaged in combat.

Trawler Combat Screen



For the Sea Rogue

A tactical display appears in the middle of the combat screen. Icons representing your ship and any other vessel, torpedoes and decoys appear in this display. The vessel icons are made up of two symbols. The first symbol indicates the country of origin; the second, the class of vessel. These symbols are as follows:

SR = Sea Rogue

U = U.S. vessel

B = British vessel

F = French vessel

S = Spanish vessel

P = Portuguese vessel

E = Evil Eddy vessel

F = Frigate

D = Destroyer

S = Submarine

Y = Yacht

For example, the symbol BF would indicate that you are up against a British frigate. If your I-Rating with Britain is anything other than "Enemy", you would be advised to disengage combat.

When you have a combat event, you will go automatically to the combat screen. If you determine that the contact is "friendly", you can disengage immediately by pressing "ESC". You will be asked if you want to leave combat; choose "yes". You cannot automatically disengage from combat if you encounter a vessel owned by Evil Eddy or by a country with whom you have an I-Rating of Enemy.

Weapons also appear as icons on the tactical display. The weapon icons are made up of two symbols. The first symbol indicates the type of weapon. The second symbol, a number from either "1" to "8" or "1" to "2", indicates the deadliness of the weapon. The higher the number, the deadlier or faster the weapon. These symbols are as follows:

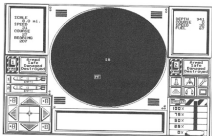
T = torpedo ("1"-"8")

D = decoy ("1"-"2")

TF = friendly torpedo

The scale of the tactical display is listed in the computer box in the top left corner of the screen. Changing the scale changes the range shown on the tactical display. Pressing the numbers "1" through "9" on the keyboard decreases and increases the scale shown. For example, if you are in a combat event and the enemy doesn't appear on the scope, press a higher number to increase the range

The Sea Rogue Combat Screen



shown. Or, if the icons are too close together, press a lower number to tighten the scale. The speed, course and bearing of a hooked target appear in this box as well. The time remaining before torpedoes will be loaded is also displayed here.

The depth, course, speed and fuel of your ship are displayed in the upper right box in the screen. You can hook a target by clicking on it with the mouse. If you are using the keyboard, press "T" to select a target. To cycle through the targets, continue to press "T" until the desired target is boxed.

When a target is hooked, a box will appear around the symbol. You must hook a target before you can fire upon it.

NOTE: You can fire upon and destroy the torpedoes of the enemy.

If you do bump into one of Eddy's vessels, decide whether you want to run or fight.

Disengaging from Combat

There are three ways to disengage combat against an enemy:

- 1. run away (your evasion skill will determine the distance required)*
- 2. destroy all the enemy targets or torpedoes*
- 3. be destroyed.*

If you decide to fight, go to the Weapons Officer's station to load weapons.

1. Select the "Load Weapon" option in the Weapons/Diving Officer's screen.
2. Select which tube (port or starboard) to load.
3. Select which weapon or decoy to load into the selected tube.
4. The Weapons/Diving Officer will begin loading the tube. The total time required before the torpedo is ready for firing will depend on the Officer's skill in Ordnance Handling.
5. Press the "Combat" icon to return to combat.

NOTE: Torpedoes track their targets. Decoys do not.

Back at the combat screen, notice the torpedo tube displays on the left side of the screen. You have two tubes. If the tube indicators are red, no weapon is loaded. If the tube indicators are yellow, the weapons are loading. If the tube indicators are green, the weapons are loaded and can be fired. Press the appropriate "Fire" button to fire a torpedo or decoy (after hooking the target). From the keyboard, press "P" to fire from the port torpedo tube and "S" to fire from the starboard. Again, the torpedo will only be launched when the Torpedo Tube reads "Armed" and a target has been hooked.

Next to the fire buttons, you will find a torpedo status display. Torpedoes are armed (red), safe (green if empty; yellow if loading), damaged or destroyed.

If you have purchased the Signal Processing Computer, you can hook a target and then go to the Senior Officer's station to analyze the target's signal. The appearance of the signal is toggled by clicking on the "Perform signal analysis" button or by pressing "4". Press "+" and "-" to change the scale of the signal.

You may also want to purchase *James Warbook Volumes I and II*, which provides tactical information about a hooked target.

Continuing Combat with Damaged Combat Equipment **(Sea Rogue Only)**

If your main combat equipment is destroyed, you can continue combat through the Bridge and the use of the Sensor Officer's "Active Sonar" and "Passive Sonar" options. To use this alternative during combat, go to the Bridge. The sonar screen will show the *Sea Rogue* as a light green dot at the center of the display. Other targets will appear on the display (yellow dots for another vessel, red dots for enemy torpedoes and green dots for *Sea Rogue* torpedoes). The range on the Bridge sonar display is approximately 3 miles.

To hook a target, go to the Sensor Officer's station and use either Active or Passive sonar. Passive sonar offers audio (and, if you've purchased signal processing equipment, visual) information about the target that can help you identify it. Choose one of the targets from the list to hook it.

You can fire your torpedoes from the Bridge (using the "Fire 1" and "Fire 2" buttons) once the weapons are loaded. From the keyboard, press "P" to fire from the port torpedo tube and "S" to fire from the starboard. Again, the torpedo will only be launched when the Torpedo Tube reads "Armed" and a target has been boxed.

The Weapons Officer's Ordnance Handling skill determines the weapon reload time. You can watch the clock display at the Bridge to determine when a weapon is loaded and ready to fire.

Damage Control and Repairs

After completing combat, go to the Engineer's station and then to "Damage Control" to see how the ship fared. A schematic of the ship will appear, with color blocks indicating the status of different systems as follows:

Light green = OK

Green = light damage

Yellow = moderate damage

Red = extensive damage

Dark gray = destroyed

You can get an estimate on how long repairs will take, etc. If a system is destroyed, you must replace it at the Repairs Shop in port (usually an expensive undertaking).

4. FINANCIAL RESOURCES

EARNING MONEY

You will discover many ways to earn the money you need to purchase new equipment, upgrade your ship and pay bills. The following is a survey of some ways you can earn money.

Locate Mineral Deposits/Oil

From time to time, your trained Sensor Officer may detect mineral deposits on the sea floor. Government contracts are available for information relating to the location of caches of minerals or oil finds.

Before you can find mineral or oil deposits, you will need to equip the ship with a U.S. Geological Survey Mineral Detector. You can improve your chances of locating deposits by training your Sensor Officer in mineral detection. Once you have installed the equipment, your Sensor Officer will notify you if you drive over any deposits that he can detect.

Historical Wreck Research

Certain wrecks, those with two asterisks ("**") after their names in the Historical Wreck Manual, are considered to be of special historical significance. If you are commissioned to locate such a wreck and succeed in locating and identifying it, you will receive a bonus payment for the discovery.

Other Commissions

You may receive commissions from collectors or museums who want treasure or items from a particular wreck. They will also be willing to pay you a bonus for discovering and correctly identifying the wreck.

Government Salvage Contracts

Governments offer salvage contracts on occasion. If you complete the terms of the salvage contract, you will receive a payment for your work.



Artifacts

Artifacts are items of special interest on a wreck. Artifacts include navigational relics, such as an astrolabe, and religious items, such as a cross. Chalice, plates, medallions and jewelry are all artifacts that sometimes can be traced to a manifest to help a wreck hunter identify a wreck. Unlike the numerous coins usually found in treasure-laden wreck sites, artifacts tend to be unique and priceless items of history.

5. WRECK HUNTING

ARCHAEOLOGY versus "TREASURE HUNTING"

A debate has been raging for decades over the impact treasure hunters are having on the historical preservation of artifacts from wrecks, as well as of the wreck sites themselves. Supporters of treasure hunting argue that the treasure hunters are recovering pieces of history, things that can be preserved and enjoyed by our own and future generations. Detractors argue that the wreck sites and artifacts should remain on the ocean floor until professional underwater archaeologists are able to explore them.

The number of wreck sites throughout the world is staggering. In some places, wrecks are stacked upon wrecks, their artifacts mingled together on the ocean floor. Anyone wanting to thoroughly survey and excavate a wreck site has to be willing to invest a large amount of time in the project. The excavation of a wreck can, and usually does, last several years. Just locating a wreck can take that long. Unfortunately, there are not currently enough professionally-trained underwater archaeologists, or the requisite funding necessary, to excavate these sites. Many people are not willing to wait for the time when there are enough professional underwater archaeologists and funding to excavate each site in the thorough manner archaeologists recommend. Many countries have supported the view of the archaeologist and have passed laws to protect wreck sites. Even where amateur divers are allowed to excavate wreck sites, permission from the appropriate government is usually required. Anyone interested in pursuing treasure hunting under the sea would be well advised to research the legal requirements and implications of recovering artifacts from a wreck site.

In *Sea Rogue*, we have eliminated the time and legal constraints of the real world. You will be able to locate and excavate wrecks within a week or two. In addition, you won't be thrown in jail or

spend years in a court room battling over ownership rights. *Sea Rogue* offers a simulation of the process of finding and excavating wrecks, and, for better or worse, emphasizes the point of view of the treasure hunter.

The following steps to successfully excavating a wreck site are the same for archaeologist and treasure hunter as for professional and amateur divers:

1. Finding out about a wreck site, either through research or "blind luck".
2. Locating the wreck.
3. Surveying and inspecting the wreck site, including mapping the area and noting likely treasures or artifacts.
4. Determining whether the wreck is worth an investment in time and money (if it is not, it's back to the library or the seas).
5. Excavating and diving the wreck site.
6. Identifying the wreck.
7. Preserving artifacts and treasure.

Step 1. Research

Wreck hunters use one of two methods to find wreck sites: search for sunken ships in likely wreck areas or perform research on a specific wreck. Some people, often amateur divers who literally stumble onto a wreck site, find a wreck first, and worry about identifying it later. Others have a particular wreck in mind and dig through records until they find enough information and clues to begin an "educated" search. It is a testimony to the number of wrecks on the ocean floor that many people, in their search for a particular wreck, have found an entirely different wreck in the same area as the wreck they sought.

We will explain the wreck hunting process from this research-oriented viewpoint since it is the one most professional archaeologists and other wreck hunters take. Most wreck hunters spend hours in research before they even take to the seas. They read manifests, newspaper accounts of the incident and survivors' accounts, reports, insurance records (especially for modern wrecks), journals, salvage attempts and any other creditable source of information concerning a possible wreck. They also interview fishermen, divers, beachcombers or other locals who may have information about the wreck site or any treasure that may have been recovered or washed ashore in storms, etc. In addition, shipwreck research facilities and databases are available that can save the wreck hunter time and money. They also tend to have access to information that the average wreck hunters does not. The end result of research should reveal (as much as possible) the name of the wreck, the date and circumstances of her loss, her nationality, her manifest, and the most likely location of the ship.

Step 2. The Search

Armed with the knowledge research provides, the wreck hunter is now ready to invest some time and money into the search for the wreck site. Several methods for searching are available. These include aerial searches, looking with the naked eye from a boat, using a magnetometer to detect unusual deposits of metals, employing side-scan sonar to locate wrecks with some debris or treasure on the sea floor, and snorkeling once the wreck hunter has narrowed the search. Signs of a possible wreck site include cannons, ballast, timber, artifacts, or treasure. Any such lead must be explored before the wreck hunter brings out a salvage team. However, finding a clue to a wreck site is often enough to warrant undertaking the next step.

Step 3. Survey and Inspection

Once the wreck hunter has found a wreck site, the next step is to obtain the necessary permits and rights and to meet any other legal requirements necessary to begin working on the wreck. The professional wreck hunter will spend many days surveying and inspecting the wreck site, mapping the area, and noting visible as well as suspected artifacts and pockets of treasure. At the end of this process, the wreck hunter has an idea of the extent and condition of the site (including size of the site, weather and diving conditions, and the likely locations of artifacts and treasure), and she can determine the equipment and techniques required to successfully salvage the wreck. For example, a water jet is an effective tool for loosening coral or deep layers of mud, while an air lift works wonders on surface layers of dirt, silt, rocks, and other small debris. This knowledge is essential before successful salvage work can be done on a large scale.

Some wreck sites are scattered over several miles. A hull torn along a jagged reef or battered and broken in a violent storm could spew cannons, ballast and cargo over a wide area. Also, in an attempt to "lighten the load" of a sinking ship, crews sometimes throw these heavy items over the side. These scattered items can make surveying and identifying a wreck difficult, as divers and archaeologists must scrupulously examine all evidence and items to determine whether a wreck site is holding artifacts from another ship.

Step 4. Determining the Potential Worth

Now it is time for the wreck hunter to ask some tough questions. Are the treasure items or artifacts scattered over too wide an area, or encrusted in deep layers of coral or mud? How expensive will salvage efforts be, and what are the expected results of these efforts? If it is going to cost the professional salvager more money to excavate a wreck than he is likely to recover in treasure, he

probably will not want to salvage the wreck. Of course wrecks of significant historical or archaeological importance cannot be judged on this basis. However, it costs money to excavate a wreck, whether for profit or enlightenment, and the payoff in gold or knowledge should be worth the cost.

Step 5. Excavation

If the professional wreck hunter or archaeologist reaches this step, he probably thinks he has found a valuable wreck. Salvaging wrecks is expensive. Expenses include renting or purchasing a boat and necessary equipment, hiring a crew, and paying the necessary legal and permit fees. Without the proper in-depth surveying and mapping of a wreck site, the wreck hunter may find himself ill-equipped to bring up any treasure that he is lucky enough to stumble upon. However, the wreck hunter who does his homework and brings the correct equipment and crew can begin bringing up treasure on the first day of diving. Salvage can only be done in the proper seasons, according to the weather conditions in each area. Storms and chilly water make diving difficult and dangerous. In addition, storms may alternately cover and uncover a wreck site. Many wrecks have been located after a storm, and just as many visible wreck sites have been buried in sand.

Thoroughly and carefully salvaging a wreck site is a time-consuming process of sifting for and locating items, updating the site map, bringing items to the surface, and searching again. It also can be dangerous. The risk of shark attacks and diving accidents are real, even if they are uncommon among well-trained and safety-conscious divers. In modern wrecks other risks include unstable wrecks, with the chance of a crushing collapse, and unexploded shells or other explosives. The men and women who work these wrecks need strong nerves and excellent skills.

Step 6. Identification

Identifying a wreck is referred to as being like solving a mystery or piecing together a puzzle with some of the pieces missing. In some cases pieces of another puzzle mixed in with your wreck. Mixed treasure presents a problem in several ways. First, even on a "clean" wreck, divers may find coins from over a period of years — with sometimes as much as a 50-year spread. This makes pinpointing the exact year of a wreck based on coins difficult if not impossible. Second, coins on one wreck might come from several nations due to trade or other circumstances. Fortunately, most wrecks yield a wide variety of items: pins, buttons, pipes, cooking utensils, navigational equipment, and the miscellaneous goods required to provide for the needs of a crew over several months at sea. In some instances, personal items such as inscribed jewelry or plate can be used to identify the captain or other officer of a lost ship. Wreck hunters look for anything that may bear a mark to help identify a wreck.

Manifests, when available, are invaluable tools in identifying a wreck. A word of caution: smuggled treasure and items not listed on the manifest can make a wreck look deceiving. Last, the wreck hunter has to take that scampered treasure effect into account when comparing a wreck site to a manifest. Pirate ships can confuse these issues even further with their mixing of treasure and cannons, coin type and ship type. The professional wreck hunter cannot assume anything; she must go on the clues provided by the wreck, her research and the knowledge of other treasure specialists.

Step 7. Preservation

The last step in the wreck hunting process is the preservation and display of the artifacts and treasure recovered from the site. Whether items are displayed in a museum, sold to collectors and shops, or held in a private collection, they must be preserved to sustain their beauty and condition. Preservation is a delicate combination of art and science. Different treatments are available to stop corrosion, to restore luster, and to protect items from oxidation, chemicals, pollutants, etc. Pottery is pieced together. Coins, plates and other objects of gold and silver are chemically treated and cleaned. When preservation is complete, the wreck hunter and the world are able to see artifacts and treasure in as close to their original state and beauty as possible.

Treasure hunters have gained and lost fortunes in the search for sunken wrecks. The search for treasure wrecks is a calculated risk and a high one at that, with the constant dream of a high payoff. Mel Fisher was able to make the dream come true for himself and his investors, and made history in the process, with his discovery and excavation of the treasure-laden galleons *Atocha* and *Santa Margarita*. Since the time of Sir William Phips and his discovery of the *Concepcion* in 1686, and before, treasure hunters have recovered chests of jewels and gems, gold and silver coins, and one-of-a-kind artifacts from the sites of sunken wrecks. Some of the fabulous treasures brought up from the seas includes the 100+-carat gems recovered from the *Maravilla* by Herbert Humphreys' group; The Gløde Gun, a spectacular cannon raised from the site of the Spanish Armada wreck *Tabernero* galleon; the ruby-inlaid winged salamander from Spanish Armada wreck *Girona*; the emerald-studded Bishop's Cross found on the *Santa Margarita*; and the bell of the British ship *La Lutine*, now displayed by Lloyds of London. Reports of new treasure finds spur on other treasure hunters to be the entrepreneur to discover the next *Atocha*, *Titanic* or *Republic*. And no one knows for certain what other treasures wait on the ocean floor for some lucky treasure hunter to discover them.

If you want to pursue treasure or wreck hunting, you can begin by learning more about SCUBA diving and gaining a deeper knowledge of ship types and sizes, known sailing and trading routes, cannons and coins. Refer to the resources listed in the Bibliography for a start. Diving clubs are available in many coastal communities and can offer the training and support you need to get started on a new hobby or, if you're lucky, maybe even a career.

6. HISTORICAL WRECK MANUAL

THE CARIBBEAN AND THE GULF OF MEXICO

The Spanish Influence

After Columbus' discovery of the New World in 1492, Spain took control of the shipping industry to this area. In addition, Spain successfully mined silver and gold in Mexico, Peru, Chile, and Colombia. This mining was important to European merchants as well, for Europe did not have this fortune in precious metals. Over the next few centuries, Spain ferried home over four billion dollars in treasure (mostly silver). And this amount was only the "registered" treasure, or treasure that

Disclaimer

We have taken much effort to assure a representative picture of shipwrecks in the Atlantic Ocean. We spent hundreds of hours in researching the shipwrecks referred to in this game. However, we make no claim as to the accuracy of shipwreck locations, manifests, dates of sinking, etc. We found the history of shipwrecks to be sketchy in many places, and many historians have spent years in research and still cannot accurately predict where a shipwreck will be located. In addition, we have listed manifests for the ships as they were when they sank, not taking salvage efforts into account. Actual treasures that are currently at wreck sites will run the gamut from nonexistent to untouched. As a note, the Spanish kept extensive records that are still available today, yet many of these are undervalued due to extensive smuggling efforts by the captains and crews.

was recorded in books and available for taxation, primarily by the King's Royal Fifth. Simply put, the King of Spain took one-fifth the value of all cargo aboard returning ships for the Royal Court. This high rate of taxation led to smuggling by crew members aboard ships bound for Spain. An estimated two billion pesos' worth of treasure was shipped to Spain as un-registered treasure. However, not all treasure made it to Spain. The sea took its toll on many of the wooden vessels, and a vast fortune in treasure was lost to the ocean floor.

New World treasure was a Spanish venture, one which they fostered for over two centuries. Seville was the first established port of Spain. As ships grew in size, navigators found it difficult to guide their vessels up the Guadalquivir River where the Port of Seville was situated. So, while the majority of the merchants remained up the river in Seville, the primary ports became Cadiz and Sanlúcar, both situated on the Atlantic. Of the two new ports, Cadiz was the more accessible, due to the shifting sands of the Sanlúcar bar.

Early in the Sixteenth Century, several organizations were formed to fully develop the system of trade to and from the New World. The most notable of these were the House of Trade in Seville and the Council of the Indies. The House of Trade was founded by Queen Joanna in 1503. Its primary goals were to collect taxes on all cargoes, regulate trade with the New World and check to see that the Royal orders were followed.

The Council of the Indies was founded in 1519 by Charles I of Spain. It was formed to keep the King advised on all New World affairs. Governors of the New World and commanders of the flotas (fleets) were appointed by the Council. These positions were not always received on the basis of political or nautical expertise. This process of appointment hurt the Spanish in later years.

The first Spanish treasure fleet sailed in 1537. Although the fleets had protection from escorting warships, the heavily laden galleons were vulnerable to attacks. In 1564, to alleviate the burden of a single fleet loaded to the maximum capacity, the concept of the dual flota was introduced. In spring, the New Spain Flota would set its sails for the New World. In late summer the Tierra Firme Flota would embark on its journey to the West. This dual rotation worked well until 1591, when a third flota was christened; the Tierra Firme Armada. Spain began to fear intensified English aggression on the high seas after the defeat of the Spanish Armada in 1588. The Tierra Firme Armada, it was hoped, would lessen the chance of English attacks.

However, Spanish trade in the New World declined in the late 1600's. Faulty seamanship and the depletion of supplies of silver in the New World took their toll on Spain's ability to continue the treasure fleets. In addition, by 1700 New World colonists were buying most of their products from the Dutch, English and French. Seventy-five years later, the flotas disappeared when free trade in the American colonies was declared by Spain.

French

French pirates and privateers in the New World during the 1500's and 1600's made a living by raiding and plundering treasure from Spanish ships and settlements. They also established settlements of their own.

Dutch

The Dutch developed trade routes in the Caribbean in the late 1500's and their colonies flourished in this area by the late 1600's.

British

The early British attempts at trading with Spanish settlers were thwarted by the stranglehold the Spanish had on the colonies. British privateers turned to pirating to earn their keep in the New World. In 1655 the English raided and took Jamaica from their Spanish competitors. In the year 1670 Spain officially granted Jamaica, now the trade center in the Caribbean for England, to the British.

The Atlantic, Caribbean & Gulf of Mexico



This map of the Atlantic Ocean, Gulf of Mexico and Caribbean Sea is provided to give you an idea of the locations of the wreck sites in *Sea Rogue*. The major countries, cities and islands referred to in the game and in the Historical Wreck Manual are included.

THE BAHAMAS

16th Century 4706

*Santiago** 2043

In the mid-1550's, the galleon *Santiago* was wrecked in a storm off the Bahamas. As a violent surf poured over the decks, the crew struggled to keep the ship afloat. Their efforts were to no avail. The *Santiago* was lost to the sea. Only a small portion of its treasure was recovered.

Manifest

500,000 pesos in gold coins

250,000 pesos in silver bars

250,000 pesos in gems

* Denotes a wreck with an unknown name, a ship that is a composite of several ships, or a ship that is indicative of a type (such as the Viking ships). We have assigned names for all unknown wrecks to speed up identification of individual ships.

** Denotes a wreck of historical value.

17th Century

*Espiritu el Valle**

Espiritu el Valle was lost with one other Spanish galleon carrying much silver for Spain in the early 1600's. Despite efforts to save the ships, both galleons, laden with silver for Spain, settled on the sea floor off Grand Bahama Island.

Manifest

750,000 pesos in silver bars

*Santo Domingo** 4793

Santo Domingo was lost with one other Spanish galleon carrying much silver for Spain in the early 1600's. Despite efforts to save the ships, both galleons, laden with silver for Spain, settled on the sea floor off Grand Bahama Island.

Manifest

750,000 pesos in silver bars

La Primavera

The Spanish treasure galleon *La Primavera* was lost off Grand Bahamas Island in the year 1640. *La Primavera* was blown off course by a hurricane and wrecked several miles from land. The burdened galleon carried over 5 million pesos in treasure.

Manifest

300,000 pesos in gold bars, coins

4 million pesos in silver bars, coins

250,000 pesos in gems

Gold and silver artifacts

277 30
277 24
26 17

Lucayan Silver Wreck*

The *Lucayan Silver Wreck* is the site of an unknown wreck from which thousands of Spanish silver coins have been recovered. The ship sank off Grand Bahama Island, probably in the mid-1600's. For several decades she has been a popular wreck for divers in search of adventure and treasure.

Manifest

100,000 pesos in gold bars, coins
500,000 pesos in silver coins

469 3.2
28 4.7

Nuestra Senora de la Concepcion

Nuestra Senora de la Concepcion (Our Lady of the Conception), a Spanish treasure galleon, was wrecked on November 2, 1641 off Hispaniola. The *Concepcion* was the flagship of Admiral Villavicencio and she carried half of the treasure accumulated over a two-year period from Mexico. King Charles of Spain so urgently needed money that he took the unusual risk of overburdening the ship with treasure. Struck by a hurricane in the Bahama Passage, the already leaking *Concepcion* sustained crippling damage. She struggled on toward San Juan before sinking off Hispaniola. Of her 358-man crew, 324 men were lost with the galleon. The wreck of the *Concepcion* was discovered in 1686 by Sir William Phips.

Manifest

16,000 pesos in gold coins
30 million pesos in silver bars, coins
Ming Dynasty porcelain

Nuestra Senora de la Maravilla

On the night of January 4, 1656, the Spanish treasure galleon *Nuestra Senora de la Maravilla* (Our Lady of Wonder) sank in the Little Bahamas Bank. All but 50 members of the crew, as well as all the treasure, were lost in the *Maravilla's* sinking. The *Maravilla* was the lead galleon in a flota of 17 ships traveling from Havana for Spain, and she carried dignitaries of the Spanish ruling class and Catholic Church. She also carried gold, silver and jewels valued at \$1.6 billion. Serving as the lead ship, the *Maravilla* strayed into shallow waters off the Bahamas and signaled that she was reversing course. The *Maravilla* collided with another ship in the flota, was badly damaged and sank in about 30 feet of water. The loss of the *Maravilla* weakened the Spanish economy, and salvage attempts were futile. Capt. Herbert Humphreys, Jr. discovered and began excavating the site of the *Maravilla* in 1986.

Manifest

500,000 pesos in gold bars, coins
40 million pesos in silver bars, coins
100 carat emerald
43 small emeralds
100 carat amethyst
Ming Dynasty porcelain

478 0
26 4

Jufran Gertrud

A Dutch merchantman, the *Jufran Gertrud* was wrecked off the Bahamas in 1694. Her treasure of approximately 70,000 pieces of eight was recovered soon after the wreck.

Manifest

60,000 pesos in silver coins

W76 45
20 55
18th Century

San Juan Evangelista

The Spanish galleon *San Juan Evangelista* (Saint John Evangelist) was lost in a storm off Grand Bahama Island in 1714. She carried 300,000 pesos in treasure, which was recovered.

Manifest

10,000 pesos in gold bars

290,000 pesos in silver bars

W77 3
26 31
Nuestra Senora de la Justicia*

The Spanish galleon *Nuestra Senora de la Justicia* (Our Lady of Justice) wrecked off the Bahamas in the mid-1700's. She was said to carry great treasure.

Manifest

150,000 pesos in gold coins

2 million pesos in silver bars, coins

200 gems of good quality

50 feet of gold money chain

FLORIDA

W81 34
N 30 6
16th Century

Nuestra Senora de la Esperanza*

Nuestra Senora de la Esperanza (Our Lady of Hope), which carried approximately 1.5 million pesos in gold, silver and gems, was wrecked off Cape Canaveral, Florida in the mid-1500's. Indians recovered much of the treasure.

Manifest

200,000 pesos in gold bars, coins

1 million pesos in silver bars, coins

150,000 pesos in gems

Jewelry

W80 28
29 56
El Mulato

The pirate ship *El Mulato* was wrecked in the mid-1500's off the Florida coast. The ship carried gold, silver and jewelry, much of which was recovered by the Indians.

Manifest

1 million pesos in gold bars, coins

2 million pesos in silver bars, coins

300,000 pesos in gems

Jewelry

1381 11
30 30
La Madalena

La Madalena, a Spanish treasure galleon, sank in a hurricane off the coast of Florida in the year 1563. Most of her crew and her enormous treasure of silver, gold and jewelry was lost with her.

Manifest

Bronze cannons

2 million pesos in gold bars

6 million pesos in silver ingots, coins

Jewelry

1380 23
25 76
Almiranta

One of a convoy of approximately 100 Spanish ships, the *Almiranta* of the Flota de Nueva Espana sailed from Havana in September 1589. A hurricane struck the convoy, and the *Almiranta* began to leak. The treasure-laden ship sank in the Bahama Channel off Florida.

Manifest

100,000 pesos in gold coins

1.8 million pesos in silver bars, coins

300,000 pesos in gems

Santa Margarita

In 1595 the Spanish treasure galleon *Santa Margarita* was wrecked off the coast of Florida. She carried silver and gold worth about \$3 million.

Manifest

20,000 pesos in gold coins

80,000 pesos in silver coins

1381 0
25 16
17th Century

Nuestra Senora de Atocha

The treasure galleon *Nuestra Senora de Atocha* (Our Lady of Atocha) was one ship in a convoy sailing from Havana for Spain in 1622. She sank in a hurricane off the Marquesas Islands near Key West, Florida. The loss of the *Atocha's* treasure, weighing in at 40 tons and worth \$400 million, almost bankrupted the Spanish Court. In 1985 Mel Fisher and his Treasure Salvors organization discovered the first silver bars of an amazing treasure that they were to uncover. Among the items recovered by Treasure Salvors are world class emeralds of up to 77 carats in size, priceless jewelry, and gold money chain and coin.

Manifest

Bronze cannons

\$50,000 pesos in gold bars, coins

4 million pesos in silver bars, coins

77-plus carat emerald

40 carat emerald

80 world-class stones

500 stones of excellent quality

2,500 emeralds of lesser value

Gold cross studded with enormous emeralds

Garble of gold links and priceless gems

300 feet of gold money chain

W81 D
25 16
Santa Margarita

The Spanish treasure galleon *Santa Margarita* sank near her sister ship, the galleon *Atocha*, in a hurricane off the Marquesas Islands near Key West, Florida in 1622. Traveling with the Armada de Tierra Firme and the Tierra Firme Flota, the *Santa Margarita* carried treasure from the New World for Spain. Her manifest lists over 500,000 pesos in silver (the gold was smuggled aboard by members of the crew), much of which was recovered at the time of the wreck.

Manifest

300,000 pesos in gold bars
550,000 pesos in silver bars, coins

W81 D
25 3
Espiritu Santa el Mayor

The Spanish treasure galleon *Espiritu Santa el Mayor* (Greatest Holy Spirit) sailed from Havana for Spain in the Tierra Firme Flota in the year 1623. She sank in the Bahama Channel in a violent storm. All of the 1 million pesos in treasure she carried (the gold was smuggled aboard by members of the crew), as well as 250 members of the crew, was lost.

Manifest

500,000 pesos in gold bars
1 million pesos in silver bars, coins

W81 34
29 55
San Ignacio*

The Spanish galleon *San Ignacio* wrecked in the mid-1600's off the coast of Florida. Indians and Spanish officials recovered some of the ship's treasure of bullion and specie.

Manifest

300,000 pesos in gold bars, coins
800,000 pesos in silver bars, coins

18th Century

W80 26
29 36
Urca de Lima

The *Urca de Lima* was one ship in a fleet of Spanish treasure galleons lost in a hurricane off the coast of Florida in July of 1715. The fleet carried three years' worth of treasure with an estimated value of 7 million pesos, which the Spanish had accumulated during the war between Spain and England. Over 1,000 people lost their lives in the storm. The *Urca de Lima* carried no royal treasure, but she held a general cargo and silver worth about 300,000 pesos (the gold and additional silver was smuggled aboard by the crew). Kip Wagner discovered eight of the 1715 treasure fleet galleons between 1958 and 1964.

Manifest

Bronze cannons
400,000 pesos in gold coins
325,000 pesos in silver bars, coins
Silver artifacts

WFO 26
ST 56

Hampton Court

The lead ship in the 1715 fleet of Spanish treasure galleons, the *Hampton Court* was lost in a hurricane off the coast of Florida. The 1715 fleet carried three years' worth of treasure with an estimated value of over 7 million pesos, which the Spanish had accumulated during the war between Spain and England. Over 1,000 people, including the entire crew of the *Hampton Court*, lost their lives in the storm. The *Hampton Court* carried about 4 million pesos in treasure of silver specie, gold and jewelry (additional treasure was smuggled aboard by members of the crew). Kip Wagner discovered eight of the 1715 treasure fleet galleons between 1958 and 1964.

Manifest

1 million pesos in gold bars, coins
4 million pesos in silver bars, coins
Pearls
Jewelry
Chinese porcelain

WFO 26
ST 56

Nuestra Senora de Carmen y San Antonio

Nuestra Senora de Carmen y San Antonio was one ship in a fleet of Spanish treasure galleons lost in a hurricane off the coast of Florida in 1715. The fleet carried three years' worth of treasure with an estimated value of over 7 million pesos, which the Spanish had accumulated during the war between Spain and England. Over 1,000 people lost their lives

in the storm. The *Nuestra Senora de Carmen y San Antonio* held a cargo of silver specie and silverware valued at about 3 million pesos (additional treasure was smuggled aboard by members of the crew). Kip Wagner discovered eight of the 1715 treasure fleet galleons between 1958 and 1964.

Manifest

300,000 pesos in gold coins
4 million pesos in silver bars, coins
A large quantity of silverware

WFO 26
ST 56

Patache

The *Patache*, a small ship in the 1715 Spanish treasure fleet, was lost in a hurricane off the coast of Florida. Although she carried no royal treasure, she did carry silver and gold valued at about 300,000 pesos. Over 1,000 people lost their lives in the storm. Kip Wagner discovered eight of the 1715 treasure fleet galleons between 1958 and 1964.

Manifest

250,000 pesos in gold bars, coins
50,000 pesos in silver coins

El Rubi Segundo

The flagship of the 1733 Spanish treasure fleet, *El Rubi Segundo* (The Second Ruby) carried a treasure worth an estimated 6 million pesos. The fleet was struck by a hurricane off the Florida Keys, and on July 15, all but one of the 22 ships grounded on the Keys. A massive



Scuba

This underwater air-breathing system was invented in 1943, and permits a diver to stay underwater for extended periods of time without needing to resurface for breathing. The more popular of the two types of systems available is the demand-type open circuit. It is comprised of a tank of compressed air, which delivers air to the diver on demand or if he inhales through a tube attached to the tank. The used air is expelled into the water.

salvage effort allowed the Spanish to recover almost all of the fleet's treasure. In fact, due to the smuggling of treasure by the crews, the Spanish recovered more treasure than appeared on the manifests.

Manifest

Bronze cannons
2 million pesos in gold bars, coins
8 million pesos in silver bars, coins
Gold and silver artifacts

Almiranta Nuestra Señora de Balvaneda

Almiranta Nuestra Señora de Balvaneda, a galleon of the 1733 Spanish treasure fleet, carried approximately 5 million pesos in treasure of gold and silver coin and specie. The 1733 fleet was struck by a hurricane off the Florida Keys, and on July 15, all but one of the

22 ships grounded on the Keys. A massive salvage effort allowed the Spanish to recover almost all of the fleet's treasure. In fact, due to the smuggling of treasure by the crews, the Spanish recovered more treasure than appeared on the manifests.

Manifest

Bronze cannons
3 million pesos in gold bars, coins
7 million pesos in silver bars, coins
Gold and silver artifacts

El Infante

El Infante, a galleon of the 1733 Spanish treasure fleet, carried approximately 600,000 pesos in silver coin and specie (the gold and additional treasure was smuggled aboard by crew members). The 1733 fleet was struck by

W 78 56
35 53

a hurricane off the Florida Keys, and on July 15, all but one of the 22 ships grounded on the Keys. A massive salvage effort allowed the Spanish to recover almost all of the fleet's treasure. In fact, due to the smuggling of treasure by the crews, the Spanish recovered more treasure than appeared on the manifests.

Manifest

500,000 pesos in gold bars, coins
750,000 pesos in silver bars, coins
A large number of eating utensils

El Santiago El Grande

El Santiago El Grande, a Spanish treasure galleon, sank in a hurricane in the year 1765 in the Straits of Florida. Little of her rich treasure was recovered.

Manifest

Bronze cannons
300,000 pesos in gold bars, coins
1.3 million pesos in silver bars, coins
Gold and silver artifacts
Gold money chain

El Expeditivo*

One of five Spanish galleons in a fleet, the *El Expeditivo* (The Expeditious) wrecked off the Florida coast on its journey from the New World for Spain in 1766. These galleons were struck by a hurricane, and their sizable treasure of gold and silver was lost.

Manifest

Bronze cannons
500,000 pesos in gold bars, coins
4 million pesos in silver bars, coins
Large quantities of silverware

W 77 35
30 19

El Rosario*

One of five Spanish galleons in a fleet, the *El Rosario* (The Rosary) wrecked off the Florida coast on its journey from the New World for Spain in 1766. These galleons were struck by a hurricane, and their sizable treasure of gold and silver was lost.

Manifest

Bronze cannons
1 million pesos in gold coins
2 million pesos in silver bars, coins
Jewelry

W 77 35
30 19

Nuestra Senora de la Felicidad*

One of five Spanish galleons in a fleet, the *Nuestra Senora de la Felicidad* (Our Lady of Good Fortune) wrecked off the Florida coast on its journey from the New World for Spain in 1766. These galleons were struck by a hurricane, and their sizable treasure of gold and silver was lost.

Manifest

1 million pesos in silver bars, coins
Gold and silver artifacts

W 77 35
30 19

San Antonio*

One of five Spanish galleons in a fleet, the *San Antonio* wrecked off the Florida coast on its journey from the New World for Spain in 1766. These galleons were struck by a hurricane, and their sizable treasure of gold and silver was lost.

Manifest

2 million pesos in silver bars, coins
250,000 pesos in gems

477 35
30 18
San Pedro*

One of five Spanish galleons in a fleet, the *San Pedro* wrecked off the Florida coast on its journey from the New World for Spain in 1766. These galleons were struck by a hurricane, and their sizable treasure of gold and silver was lost.

Manifest

1 million pesos in gold coins
Silver artifacts

19th Century

482 8
27 7
Eagle*

The *Eagle* is reported to have sunk off the coast of Florida in the early 1800's. She carried \$2 million in silver bullion.

Manifest

2 million pesos in silver bullion

479 7
26 10
H.M.S. Fly

H.M.S. Fly, a British warship, was lost on Little Conch Reef, Florida in the year 1805. Her cargo was lost with the ship.

Manifest

Bronze cannons
Iron cannons
\$100,000 in gold bars, coins
\$200,000 in silver bars, coins
Sword
Muskets

479 50
28 56
Caroline*

The American merchantman *Caroline* sank off the coast of Florida in the year 1819. Her cargo of gold bars was lost with the ship.

Manifest

Iron cannons
\$250,000 in gold bars
Porcelain

481 37
27 7
Gasparilla

The *Gasparilla*, ship of the pirate Joe Gaspar, sank off the southwest coast of Gasparilla Island in the year 1821. She carried up to \$9 million in gold, silver and other treasure.

Manifest

Bronze cannons
\$250,000 in gold bars, coins
\$150,000 in silver bars, coins
\$50,000 in gems
Jewelry

TEXAS

16th Century

*San Pablo**

The Spanish treasure galleon *San Pablo* fell under attack by a band of pirates. The officers and crew of the *San Pablo* fought the pirates valiantly while the rest of the fleet escaped. However *San Pablo* sank off the coast of Texas in the year 1552, taking many of her men and treasure with her.

Manifest

Bronze cannons

150,000 pesos in gold bars, coins

400,000 pesos in silver bars, ingots

Gold and silver artifacts

Santa Maria de Yciar

In 1554 the *Santa Maria de Yciar* sailed from Mexico for Spain. She and three other ships in the Spanish fleet carried silver and gold for the Crown. In the Gulf of Mexico, the fleet was struck by a hurricane. Three of the ships, including the *Santa Maria de Yciar*, were wrecked on Padre Island, near the Texas coast. Most of the people who survived the wrecks died on their march to civilization. The wreck sites of the fleet of 1554 have been excavated by several organizations in this century.

Manifest

500,000 pesos in gold coins

2 million pesos in silver bars, coins

San Esteban

In 1554 the *San Esteban* sailed from Mexico for Spain. She and three other ships in the Spanish fleet carried silver and gold for the Crown. In the Gulf of Mexico, the fleet was struck by a hurricane. Three of the ships, including the *San Esteban*, were wrecked on Padre Island, near the Texas coast. Most of the people who survived the wrecks died on their march to civilization. The wreck sites of the fleet of 1554 have been excavated by several organizations in this century.

Manifest

2 million pesos in silver bars, coins

Gold and silver artifacts

Espiritu Santo

In 1554 the *Espiritu Santo* sailed from Mexico for Spain. She and three other ships in the Spanish fleet carried silver and gold for the Crown. In the Gulf of Mexico, the fleet was struck by a hurricane. Three of the ships, including the *Espiritu Santo*, were wrecked on Padre Island, near the Texas coast. Most of the people who survived the wrecks died on their march to civilization. The wreck sites of the fleet of 1554 have been excavated by several organizations in this century.

Manifest

2 million pesos in gold bars, coins

1 million pesos in silver bullion

499 26 14
✓ ***Santa María de Guadalupe***

This 16th Century Spanish treasure galleon wrecked off Padre Island, Texas.

Manifest

350,000 pesos in gold bars
3 million pesos in silver bars, coins
Gold artifacts

✓ ***Capitana***

493 53
This 16th Century Spanish treasure galleon wrecked off Padre Island, Texas.

Manifest

Bronze cannons
1 million pesos in gold coins
2 million pesos in silver bars, coins

San Crucifio de Burgos

This 16th Century Spanish treasure galleon wrecked off Padre Island, Texas.

Manifest

3 million pesos in silver bars, coins
Jewelry

18th Century

El Nuevo Constante

El Nuevo Constante sailed with the Spanish treasure fleet of 1766. The fleet was struck by a hurricane off the coast of Texas, and *El Nuevo Constante* was wrecked on Galveston Island. Much of the treasure was recovered.

Manifest

Bronze cannons
250,000 pesos in gold coins
2 million pesos in silver bars, coins

La Candela de la Noche*

This ship sailed with the Spanish treasure fleet of 1766. The fleet was struck by a hurricane off the coast of Texas, and *La Candela de la Noche* (The Candle of the Night) was wrecked on Galveston Island. Much of the treasure was recovered.

Manifest

400,000 pesos in gold coins
3 million pesos in silver bars, coins

19th Century

✓ ***San Pedro***

493 53
The Spanish warship *San Pedro* sailed with the Spanish treasure fleet of 1811. She carried half a million pesos in gold and silver. She was wrecked on Padre Island, Texas. Much of the treasure was recovered.

Manifest

50,000 pesos in gold coins
450,000 pesos in silver bars, coins

✓ ***Jean Lafitte's Wreck*** 4

499 53
In 1818 four ships owned by the pirate Jean Lafitte were caught in a hurricane. The ships wrecked off Padre Island, Texas, and were rumored to be carrying much treasure.

Manifest

\$3 million in gold bars
\$1 million in silver coins
Gold and silver artifacts

499 59
236 6
Jean Lafitte's Wreck II

In 1818 four ships owned by the pirate Jean Lafitte were caught in a hurricane. The ships wrecked off Padre Island, Texas, and were rumored to be carrying much treasure.

Manifest

\$1 million in silver bars, coins
Jewelry

499 59
266
Jean Lafitte's Wreck III

In 1818 four ships owned by the pirate Jean Lafitte were caught in a hurricane. The ships wrecked off Padre Island, Texas, and were rumored to be carrying much treasure.

Manifest

\$250,000 in gold coins
\$1.5 million in silver coins

499 59
2618
Jean Lafitte's Wreck IV

In 1818 four ships owned by the pirate Jean Lafitte were caught in a hurricane. The ships wrecked off Padre Island, Texas, and were rumored to be carrying much treasure.

Manifest

\$500,000 in gold coins

9948
266
Maria Theresa

The ship *Maria Theresa* sank off Padre Island, Texas in the year 1880. Her cargo of gold was lost with the ship.

Manifest

\$300,000 in gold bars, coins
Porcelain
Personal items

GULF OF MEXICO

694 43
240
16th Century

El Luis*

El Luis, a Spanish treasure galleon, was lost in the Gulf of Mexico in the year 1591. Her entire crew and treasure were lost with the ship.

Manifest

Bronze cannons
175,000 pesos in gold bars, coins
350,000 pesos in silver bars, coins
Gold and silver artifacts
Gold money chain

73410
2425
San Crucifijo de Burgos

The Spanish treasure galleon *San Crucifijo de Burgos* sank in the Gulf of Mexico in the year 1595. Her entire crew and treasure were lost with the ship.

Manifest

200,000 pesos in gold coins
400,000 pesos in silver bars, ingots
100,000 pesos in gems
Gold and silver artifacts

17th Century

W 93 24
24 13

San Jorge

The Spanish ship *San Jorge* sank in the Gulf of Mexico in the year 1625. Her crew and treasure were lost with the ship.

Manifest

50,000 pesos in gold coins

175,000 pesos in silver bars

50,000 pesos in gems

Jewelry

18th Century

W 90 35
25 29

Constante

Constante, a Spanish warship, was lost in the Gulf of Mexico in the year 1727. Her entire crew and treasure were lost with the ship.

Manifest

Brass cannons

300,000 pesos in silver bars, ingots and coins

Silver artifacts

Swords



Merchantman

The Northern merchantman was first called the knorr, and was broader and deeper-hulled than the long ships and the Northern ships. In the 14th Century, the knorr evolved into the standard merchant ship. Eventually, a rudder was fitted to the merchantman, and it moved up to three masts. In the 18th Century, brigs—two-masted vessels that were square-rigged on both masts—were operated extensively for trading purposes.

W919
2541
Cazador

The Spanish warship *Cazador* was lost in the Gulf of Mexico in the year 1784. Her entire crew and treasure were lost with the ship.

Manifest

Bronze cannons
100,000 pesos in gold bars, coins
250,000 pesos in silver bars, coins
Muskets
Swords

MEXICO

16th Century

W8712
2347
La Nicolasa

La Nicolasa, a Spanish ship, was wrecked off the coast of Mexico in the year 1527. *La Nicolasa* was rumored to carry a treasure of Mayan gold and other cargo.

Manifest

Bronze cannons
400,000 pesos in gold bars, coins
Jewelry
Gold artifacts

W962
1451
Nuestra Senora de las Nieves*

The Spanish ship *Nuestra Senora de las Nieves* sank in a storm in the year 1555 off the coast of Mexico. Her cargo and crew were lost with the wreck.

Manifest

75,000 pesos in gold coins
425,000 pesos in silver ingots, coins

W9216
2413
La Hermoso*

The Spanish ship *La Hermoso* wrecked in a storm off the coast of Mexico in the year 1581. Her treasure sank with the ship.

Manifest

Iron cannons
150,000 pesos in gold bars, coins
50,000 pesos in gems
Jewelry

W9616
2413
La Fidelidad*

The Spanish ship *La Fidelidad* wrecked in a storm off the coast of Mexico in the year 1581. Her treasure sank with the ship.

Manifest

Iron cannons
75,000 pesos in gold bars, coins
300,000 pesos in silver bars
Gold and silver artifacts

W9551
1752
Nuestra Senora de la Perseverancia

One of 16 ships lost in a hurricane off the coast of Mexico, Spanish treasure galleon *Nuestra Senora de la Perseverancia* sank in the year 1590. Many men lost their lives in the storm, and 4 million pesos in treasure sank with the ships.

Manifest

300,000 pesos in gold coins
1.5 million pesos in silver coins, bars
150,000 pesos in gems

17th Century ⁴⁷⁴³² ^{19 29}

*San Marcos**

This is one of 14 ships in the Flota de Nueva Espana of 1600 that wrecked in storms off the coast of Mexico. Up to 1,000 people died in the wrecks, and 7 million pesos in gold, silver and mercury were lost. Little of the treasure was recovered. The *San Marcos* carried about 4 million pesos in treasure (additional treasure was smuggled aboard by crew members).

Manifest

Bronze cannons

300,000 pesos in gold coins

1.3 million pesos in silver bars, coins

500,000 pesos in mercury

*Nuestra Senora de la Corona**

This is one of 14 ships in the Flota de Nueva Espana of 1600 that wrecked in storms off the coast of Mexico. Up to 1,000 people died in the wrecks, and 7 million pesos in gold, silver and mercury were lost. Little of the treasure was recovered. The *Nuestra Senora de la Corona* carried about 2 million pesos in treasure (additional treasure was smuggled aboard by crew members).

Manifest

Bronze cannons

250,000 pesos in gold coins

2.75 million pesos in silver bars, coins

*Nuestra Senora de Valencia**

⁴⁷²⁶
^{13 42}
This is one of 14 ships in the Flota de Nueva Espana of 1600 that wrecked in storms off the coast of Mexico. Up to 1,000 people died in the wrecks, and 7 million pesos in gold, silver and mercury were lost. Little of the treasure was recovered. The *Nuestra Senora de Valencia* carried about 1 million pesos in treasure.

Manifest

Bronze cannons

500,000 pesos in silver bars, coins

500,000 pesos in mercury

*Felicidad**

The *Felicidad*, a Spanish treasure galleon sailing with the fleet, was wrecked on the coast of Mexico in the year 1614. Her sizable treasure of gold and silver bars and coins was not recovered.

Manifest

Bronze cannons

400,000 pesos in gold coins, bars

1.5 million pesos in silver coins, bars

Swords

W 76 S
24 13

Nuestra Senora de Cadiz*

Nuestra Senora de Cadiz, a Spanish treasure galleon sailing with the fleet, was wrecked on the coast of Mexico in the year 1614. Her sizable treasure of gold and silver bars and coins, as well as jewelry, was not recovered.

Manifest

Bronze cannons

100,000 pesos in gold coins, bars

750,000 pesos in silver coins, bars

Jewelry

Gold money chain

El Gran*

El Gran, a Spanish treasure galleon sailing with the fleet, was wrecked on the coast of Mexico in the year 1614. Her sizable treasure of silver bars and coins, as well as gems, was not recovered.

Manifest

Bronze cannons

900,000 pesos in silver coins, bars

300,000 pesos in gems

Larga

W 76 S
14 56

The *Larga*, a Spanish ship, sank off the coast of Mexico in the year 1628. Though her cargo of silver was lost with the ship, some of the treasure was recovered later.

Manifest

Iron cannons

100,000 pesos in gold coins

475,000 pesos in silver bars, coins

Nuestra Senora del Juncal

Nuestra Senora del Juncal sank in a hurricane off the coast of Mexico. She and over a dozen other ships in the 1631 Spanish treasure fleet were lost in the storm. The *Nuestra Senora del Juncal* carried approximately 2 million pesos in gold and silver. Very few of her crew members survived, and none of the treasure was recovered.

Manifest

Bronze cannons

250,000 pesos in gold bars, coins

1.75 million pesos in silver bars, coins

Almiranta

W 76 S
23 47

The *Almiranta* of the 1631 Spanish treasure fleet sank in a hurricane off the coast of Mexico. She and over a dozen other ships in the fleet were lost in the storm. The *Almiranta* carried approximately 1.5 million pesos in gold and silver (additional treasure was smuggled aboard by crew members).

Manifest

Bronze cannons

300,000 pesos in gold bars, coins

1.2 million pesos in silver bars, coins

Gold and silver artifacts

El Vicente*

The *El Vicente* traveled with the 1631 Spanish treasure fleet and was lost in a hurricane off the coast of Mexico. Over a dozen

other ships also sank in the storm. The *El Vicente* carried 1 million pesos in silver, gold and gems.

Manifest

50,000 pesos in gold coins

750,000 pesos in silver bars, coins

200,000 pesos in gems

18th Century W 85 8

17 3

H.M.S. Leviathan

H.M.S. Leviathan, a British warship, sank off the coast of Mexico in the year 1799. She carried a treasure in gold, silver and gems that had recently been plundered from a Spanish port. The *Leviathan* was excavated in the late 1960's.

Manifest

Iron cannons

30,000 pesos in gold coins

100,000 pesos in silver coins

90,000 pesos in gems

Swords

Masks

19th Century W 86 58

24 0

H.M.S. Tay

The British warship *H.M.S. Tay* wrecked in the year 1816 off the coast of Mexico. She carried 2.2 million pesos in treasure.

Manifest

Bronze cannons

200,000 pesos in gold coins

2 million pesos in silver bars, coins

COLOMBIA

16th Century W 73 40

11 49

San Ignacio

San Ignacio, a Spanish treasure galleon, was lost in the year 1504 off the coast of Colombia. A treasure of gold nuggets and emeralds sank with her.

Manifest

Bronze cannons

800,000 pesos in gold ingots

300,000 pesos in emeralds

La Margarita W 73 52

12 4

One of three Spanish galleons lost outside the port of Cartagena, Colombia in 1542, *La Margarita* carried a treasure of gold and silver bars and coins. Salvage efforts at the time of the wrecks were unsuccessful.

Manifest

Bronze cannons

500,000 pesos in gold bars, coins

750,000 pesos in silver bars, coins

Gold and silver artifacts

W 73 27
11 49
El Real

One of three Spanish galleons lost outside the port of Cartagena, Colombia in 1542, *El Real* carried a treasure of gold and silver bars and coins and some gems. Salvage efforts at the time of the wrecks were unsuccessful.

Manifest

Bronze cannons

150,000 pesos in gold bars, coins

100,000 pesos in silver bars, coins

50,000 pesos in gems

La Paz

One of three Spanish galleons lost outside the port of Cartagena, Colombia in 1542, *La Paz* carried a treasure of silver bars and coins. Salvage efforts at the time of the wrecks were unsuccessful.

Manifest

Bronze cannons

500,000 pesos in silver bars, coins

W 71 49
11 49
Nuestra Señora del Sol**

A Spanish merchant ship, *Nuestra Señora del Sol*, sank off the coast of Colombia in the year 1544. She was transporting a Bishop to the New World. Nothing was recovered from the wreck.

Manifest

50 feet of gold money chain

Religious artifacts

Jewelry

W 74 3
11 35
De Todos los Dias

The Spanish treasure galleon *De Todos los Dias* was wrecked along the coast of Colombia in the year 1559. Only a small amount of her large treasure of silver, gold, gems and jewelry was recovered.

Manifest

Bronze cannons

200,000 pesos in gold bars, coins

725,000 pesos in silver bars, coins

100,000 pesos in gems

Jewelry

W 73 29
11 35
Juncal

The Spanish treasure galleon *Juncal* was wrecked on a reef off the coast of Colombia in the year 1564. She tumbled off the edge of the reef, spilling her treasure into the depths of the ocean as she sank.

Manifest

Bronze cannons

300,000 pesos in gold coins, ingots

800,000 pesos in silver bars, coins

200,000 pesos in excellent quality gems

Gold and silver artifacts

W 73 52
11 35
El Major de Madrid

The Spanish treasure galleon *El Major de Madrid* collided with another galleon and sank while at port in Colombia in the year 1575. *El Major de Madrid* was fully loaded with treasure at the time of the sinking.

Manifest

Bronze cannons
300,000 pesos in gold coins
1.5 million pesos in silver bars, coins
50,000 pesos in gems
Gold and silver artifacts

17th Century W 72 10
11 35

El Segundo

The Spanish merchant ship *El Segundo* wrecked off the coast of Colombia in the year 1600.

Manifest

300,000 pesos in pearls

W 74 14
11 35
Nuestra Senora de la Candelaria

The Spanish treasure galleon *Nuestra Senora de la Candelaria* wrecked off the coast of Colombia in the year 1626. She carried a large treasure from the New World for Spain. Much of this treasure was salvaged at the time of the wreck.

Manifest

Bronze cannons
100,000 pesos in gold coins
800,000 pesos in silver bars
Gold and silver artifacts

Querida de Jamul

Spanish merchant ship *Querida de Jamul* wrecked off the coast Colombia in the year 1632. Much of her treasure of pearls was salvaged at the time of the wreck.

Manifest

500,000 pesos in pearls

W 74 35
11 35
Santiago*

The Portuguese treasure galleon *Santiago* was wrecked with two other galleons off the coast of Colombia in the year 1640. The three ships were said to be carrying a treasure of gold, as well as diamonds and other precious stones, valued at up to five million pesos.

Manifest

Bronze cannons
2 million pesos in gold bars, coins
500,000 pesos in diamonds
350,000 pesos in high-quality gems

Nuestra Senora de Carmen*

The Portuguese treasure galleon *Nuestra Senora de Carmen* was wrecked with two other galleons off the coast of Colombia in the year 1640. The three ships were said to be carrying a treasure of gold, as well as diamonds and other precious stones, valued at up to five million pesos.

Manifest

Bronze cannons
500,000 pesos in gold ingots, coins
250,000 pesos in diamonds
50,000 pesos in high-quality gems

W 74 25
" 20

Santa Margarita*

The Portuguese treasure galleon *Santa Margarita* was wrecked with two other galleons off the coast of Colombia in the year 1640. The three ships were said to be carrying a treasure of gold, as well as diamonds and other precious stones, valued at up to five million pesos.

Manifest

Iron cannons

1 million pesos in gold bars, coins

250,000 pesos in diamonds

100,000 pesos in high-quality gems

Gold money chain

W 73 52
" 49

Santa Teresa

Santa Teresa was one of four Spanish ships wrecked off the coast of Colombia in the year 1681. The entire treasure of the four ships and most of the crew were lost.

Manifest

Bronte cannons

1 million pesos in gold bars, coins

3 million pesos in silver ingots, coins

W 73 70
" 49

Santiago

Santiago was one of four Spanish ships wrecked off the coast of Colombia in the year 1681. The entire treasure of the four ships and most of the crew were lost.

Manifest

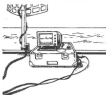
Bronte cannons

250,000 pesos in gold bars

750,000 pesos in silver coins

50,000 pesos in gems

Gold money chain



Magnetometer

A magnetometer traces magnetic fields. It compares the direction and intensity of these fields, and records any anomalies. The size of the concentration of metal is determined by the size of the anomalies. The magnetometer is key in locating treasure-rich wrecks.

W7 ± 40
11 49
San Fernando

San Fernando was one of four Spanish ships wrecked off the coast of Colombia in the year 1681. The entire treasure of the four ships and most of the crew were lost.

Manifest

Bronze cannons

1.5 million pesos in gold bars, coins

750,000 pesos in silver bars

Jewelry

Gold and silver artifacts

W73 52
11 49
El Viejo

El Viejo was one of four Spanish ships wrecked off the coast of Colombia in the year 1681. The entire treasure of the four ships and most of the crew were lost.

Manifest

Bronze cannons

250,000 pesos in gold bars, coins

700,000 pesos in silver bars, coins

90,000 pesos in gems

Markets

W74 3
11 35
18th Century

San Jose

The *San Jose*, a galleon of the 1708 Spanish treasure fleet, was the richest Spanish galleon ever lost. She carried over 11 million pesos in treasure, which had accumulated for six years during the War of Spanish Succession. As the fleet traveled toward Cartagena, Colombia, it was attacked by English warships. The *San Jose* was hit and sank off Cartagena. All of her treasure and most of her crew were lost.

Manifest

Bronze cannons

1 million pesos in gold bars, coins

50 million pesos in silver bars, coins

120 world-class precious gem-stones

1000 precious gem-stones of excellent quality

Gold and silver artifacts

Jewelry

W81 23 W81 11
24 31 24 37

CUBA

W81 34
24 38

Havana Harbor

Over a period of approximately 250 years, several ships sank or were destroyed in Havana Harbor, leaving their treasure on the harbor floor. As one example, one Spanish galleon scattered treasure worth \$120 million today throughout the harbor when the ship exploded.

Combined Manifests

Bronze cannons

8 million pesos in silver coins, bars

2 million pesos in gold

3 million pesos in gems

Jewelry

Gold and silver artifacts

16th Century

W81 0
24 37

Santa Catalina

The Spanish treasure galleon *Santa Catalina* wrecked off Cuba in a hurricane in the year 1537. The *Santa Catalina's* treasure included silver, gold and several artifacts smuggled aboard by members of the crew.

Manifest

50,000 pesos in gold coins

750,000 pesos in silver bars

Gold artifacts

W80 38
24 38

Santa María de Veracruz

The Spanish treasure galleon *Santa María de Veracruz* wrecked in a violent storm off the coast of Cuba in the year 1555. She carried a wealth in treasure from the New World, including gold ingots and coins, silver bullion and gold and silver artifacts.

Manifest

1.5 million pesos in gold ingots, coins

4 million pesos in silver bullion

Gold and silver artifacts

W81 34
23 7

San Juan Bautista

Treasure galleon and lead ship in a Spanish flota, the *San Juan Bautista* was wrecked off the coast of Cuba in the year 1563. Six other ships were also wrecked with the *San Juan Bautista*, which carried a large amount of mercury and the treasure of an Archbishop. The Archbishop's treasure was never recovered.

Manifest

Bronze cannons

100,000 pesos in mercury

200,000 pesos in gems

Jewelry

20 feet of gold money chain

Religious artifacts

17th Century

Los Peligros

Spanish treasure galleon *Los Peligros* was engulfed in flames, burned down to the waterline and sank in the harbor of Havana, Cuba in the year 1613. She carried treasure including gold, silver, gems and jewelry worth over 3 million pesos.

Manifest

1.75 million pesos in silver bars
250,000 pesos in gold bars, coins
600,000 pesos in gems
Jewelry

La Marsopa

The Spanish ship *La Marsopa* (the Porpoise) sailed with the 1638 fleet. Off the coast of Cuba, the fleet was attacked by a Dutch pirate. The fleet lost only a few ships in the attack, including *La Marsopa*. *La Marsopa's* cargo of gold and silver was lost with the ship.

Manifest

Iron cannons
100,000 pesos in gold bars
250,000 pesos in silver bars, coins
Silver artifacts

La Gesta

The Spanish ship *La Gesta* (the Feat) sailed with the 1638 fleet. Off the coast of Cuba, the fleet was attacked by a Dutch pirate. The fleet lost only a few ships in the attack, including *La Gesta*. *La Gesta's* cargo of gold and silver was lost with the ship.

Manifest

Bronze cannons
150,000 pesos in gold coins
200,000 pesos in silver bars
25,000 pesos in gems

Nuestra Senora de Guadalupe

Nuestra Senora de Guadalupe, a Spanish treasure galleon, was wrecked in a hurricane on the coast of Cuba in the year 1641. Several other ships in the fleet were also lost in the hurricane, with a large loss of life. *Nuestra Senora de Guadalupe* carried a treasure of silver.

Manifest

Bronze cannons
400,000 pesos in silver bars, coins
50,000 pesos in gems
Gold and silver artifacts

W 81 34
24 34

San Josef y San Francisco de Paula

The treasure-laden Spanish galleon *San Josef y San Francisco de Paula* wrecked outside Havana Harbor, Cuba in the year 1647. It is unknown whether her treasure was recovered at the time of the wreck.

Manifest

Bronze cannons

250,000 pesos in gold bars, coins

600,000 pesos in silver bars, coins

75,000 pesos in gems

Jewelry

Gold money chain

W 82 8
23 9

18th Century

*The Millard***

The English pirate ship *The Millard* was wrecked off the coast of Cuba in the year 1700. She carried much treasure pirated from galleons and ships in the Caribbean and Gulf of Mexico.

Manifest

Bronze cannons

200,000 pesos in gold coins

1 million pesos in silver coins, bullion

20 world-class gems

Jewelry

Silver and gold artifacts



Galleon

Making its debut in the 14th Century, these vessels had numerous sails and large cannon. Over time, the rigging was enhanced with a topsail installed on a small mast at the end of the bowsprit. A square sail was also raised up above the lateen. The forecastles and sterncastles were modified to help stabilize the ship on the seas, and the sheer, or the angle of the sides, of the vessel became straighter and came to be adorned with ornate carving, painting and gildwork. Galleons tended to carry large amounts of treasure and were capable of holding many tons of cargo. These are the ships that carried most of the treasure from the New World to Europe.

W 81 57
24 38
Santisima Trinidad

The Spanish treasure galleon *Santisima Trinidad* was lost in a storm in 1711 off the coast of Cuba along with several other ships. The *Santisima Trinidad* carried a treasure of silver, gold, emeralds and relics with a total value of 1.2 million pesos. Much of her treasure was salvaged soon after the wreck.

Manifest

100,000 pesos in gold coins
700,000 pesos in silver bars, coins
250,000 pesos in emeralds
Relics and artifacts

HISPANIOLA

16th Century

W 66 32
21 37
El Dorado**

Over 25 Spanish ships, including the flagship *El Dorado*, were lost in a violent storm in 1502 off the coast of Hispaniola. The fleet sailed despite a warning of an imminent hurricane by Columbus, who was in port at the time of the fleet's sailing. Over 500 men and much gold and other treasure were lost in the ships' sinkings.

Manifest

Bronze cannons
750,000 pesos in gold bars, ingots
300,000 pesos in pearls
Solid gold table

La Santa Rosa

As many as 25 Spanish ships, including *La Santa Rosa*, were lost in a hurricane in the year 1502 off the coast of Hispaniola. *La Santa Rosa* carried treasure from the New World for Spain. Many men and much gold and other treasure were lost in the ships' sinkings.

Manifest

Bronze cannons
1.2 million pesos in gold bars, ingots and coins
300,000 pesos in silver bars
Small chest of gems

El Julio

As many as 25 Spanish ships, including *El Julio*, were lost in a hurricane in the year 1502 off the coast of Hispaniola. *El Julio* carried treasure from the New World for Spain. Many men and much gold and other treasure were lost in the ships' sinkings.

Manifest

Bronze cannons
750,000 pesos in gold ingots, coins
200,000 pesos in rare gems
Art objects

WLG 51
19 10

El Prestigio

As many as 25 Spanish ships, including *El Prestigio*, were lost in a hurricane in the year 1502 off the coast of Hispaniola. *El Prestigio* carried treasure from the New World for Spain. Many men and much gold and other treasure were lost in the ships' sinkings.

Manifest

Bronze cannons
900,000 pesos in gold ingots, bars
Gold and silver artifacts

San Miguel

WLG 10
21 50

The *San Miguel*, a Spanish ship, sank off Hispaniola in the year 1542. Her treasure of gold and silver bars and coins was lost with her.

Manifest

Bronze cannons
300,000 pesos in gold bars, coins
1.2 million pesos in silver bars, coins
Gold and silver artifacts

San Miguel

WLG 21
23 0

The Spanish treasure galleon *San Miguel* was wrecked in a storm off Hispaniola in the year 1551. She carried a large amount of gold and silver bars and coins. No one lost his life in the sinking, and all the treasure was eventually recovered.

Manifest

Bronze cannons
400,000 pesos in gold bars, coins
1.3 million pesos in silver bars, coins

La Salvadora

La Salvadora, a Spanish treasure galleon, was wrecked in a storm off the coast of Hispaniola in the year 1553. Her large cargo of gold and silver was eventually recovered.

Manifest

350,000 pesos in gold bars, coins
1.5 million pesos in silver bars, coins
50,000 pesos in gems
Jewelry

17th Century

WLG 28

Oxford

19 23

The *Oxford*, an English pirate ship, sank in the year 1669 off the coast of Hispaniola. She carried much stolen treasure at the time of her sinking. Many of the crew members were killed and all of the treasure was lost.

Manifest

Bronze cannons
250,000 pesos in gold coins
1 million pesos in silver bars, coins
300,000 pesos in gems
Jewelry

W68 2
19 37
El Opulento

El Opulento, a Spanish merchant ship, sank in a hurricane in the year 1680 in the Hispaniola port of Santo Domingo. She was loaded with treasure at the time of her sinking. Her entire crew and treasure were lost in the storm. Many other ships at anchor were also lost in the storm.

Manifest

Bronze cannons
400,000 pesos in gold coins
300,000 pesos in gems
75 feet of gold money chain
Jewelry
Gold and silver artifacts

W68 2
19 23
La Promesa de Theresa

La Promesa de Theresa, a Spanish merchant ship, sank in a hurricane in the year 1680 in the Hispaniola port of Santo Domingo. She was loaded with treasure at the time of her sinking. Her entire crew and treasure were lost in the storm. Many other ships at anchor were also lost in the storm.

Manifest

Bronze cannons
300,000 pesos in silver bars
25 feet of gold money chain
Art objects
Jewelry

W67 17
20 31
18th Century

Nuestra Senora de Guadalupe

The Spanish treasure galleon *Nuestra Senora de Guadalupe* was lost in a hurricane in the year 1724 off the coast of Hispaniola. She carried a treasure valued at 3 million pesos.

Manifest

Bronze cannons
250,000 pesos in gold coins
2 million pesos in silver bars, coins
300,000 pesos in rare gems
30 feet of gold money chain
Jewelry
Gold and silver artifacts

HAITI

17th Century

Jamaica Merchant

Jamaica Merchant, an English pirate ship, was wrecked off Haiti in the year 1673. She carried a large cargo of stolen treasure at the time of her sinking.

Manifest

Bronze cannons
270,000 pesos in gold bars, coins
1 million pesos in silver bars, coins
400,000 pesos in gems
Jewelry
Swords
Muskets

JAMAICA

17th Century

Nuestra Senora de Maria y Jesus

The Spanish treasure galleon *Nuestra Senora de Maria y Jesus* was lost in the year 1691 off the coast of Jamaica. She carried treasure from the New World for Spain, including silver and gold coins and gems. Much of the treasure was recovered soon after the wreck.

Manifest

Bronze cannons

50,000 pesos in gold coins

300,000 pesos in silver coins, bars

200,000 pesos in gems

Nuestra Senora del Carmen

The Spanish treasure galleon *Nuestra Senora del Carmen* was lost in the year 1691 off the coast of Jamaica. She carried treasure from the New World for Spain, including silver coins and a small chest of jewelry. Much of the treasure was recovered soon after the wreck.

Manifest

Bronze cannons

500,000 pesos in silver coins, bars

Jewelry

Nuestra Senora de la Concepcion

The Spanish treasure galleon *Nuestra Senora de la Concepcion* was lost in the year 1691 off the coast of Jamaica. She carried treasure from the New World for Spain, including silver bars, art objects and artifacts. Much of the treasure was recovered soon after the wreck.

Manifest

Bronze cannons

230,000 pesos in silver bars

Art objects

Gold and silver artifacts

18th Century

Genovesa

The Spanish treasure galleon *Genovesa* sank in the year 1730 off the coast of Jamaica. Many of the crew members and passengers were lost, along with half of the 3.75 million pesos in treasure the *Genovesa* carried.

Manifest

150,000 pesos in gold bars, coins

1 million pesos in silver bars, coins

400,000 pesos in rare gems

35 feet of gold money chain

Jewelry

PUERTO RICO

16th Century

W65 2
19 23

Santa María de Jesús

The Spanish treasure galleon *Santa María de Jesús* sank in the year 1550 off the coast of Puerto Rico. She carried a great treasure of silver, gold, gems and worked items in gold and silver. Her total treasure was valued at 6 million pesos.

Manifest

Bronze cannons

300,000 pesos in gold coins

4.5 million pesos in silver coins, bars

500,000 pesos in gems

Gold and silver artifacts

THE VIRGIN ISLANDS

17th Century

Defiance

W63 43
19 10

The British pirate ship *Defiance* was wrecked in 1652 off the Island of Anegada in the British Virgin Islands. She carried looted treasure worth 3 million pesos in gold, silver and gems.

Manifest

Iron cannons

1.5 million pesos in gold coins

1 million pesos in silver bars

400,000 pesos in gems

La Trompeuse

W64 16
19 42

La Trompeuse, a French pirate ship, sank in the Virgin Islands in the year 1683 after being pounded by an attacking British ship.

Manifest

Bronze cannons

300,000 pesos in gold bars, coins

950,000 pesos in silver bars, coins

18th Century

Nuestra Señora de Loreto

W63 43
19 10

Spanish treasure galleon *Nuestra Señora de Loreto* wrecked in the year 1730 off the Island of Anegada in the British Virgin Islands. She carried a treasure of silver coins and bars worth 1 million pesos (the gold and the additional silver were smuggled aboard by members of the crew).

Manifest

200,000 pesos in gold bars

1.75 million pesos in silver coins, bars

El Militante

W62 43
19 10

The Spanish galleon *El Militante* wrecked in 1731 off the Island of Anegada in the British Virgin Islands. She carried mercury, which was used to separate gold and silver from ore in the plentiful mines of Mexico and Peru.

Manifest

300,000 pesos in mercury

La Victoria

La Victoria, a Spanish warship, sank off the Island of Anegada in the British Virgin Islands in the year 1738. She carried gold and silver for Spain, which was lost with the ship.

Manifest

Bronze cannons
200,000 pesos in gold bars
500,000 pesos in silver bars
Swords
Muskets

San Ignacio

The Spanish galleon *San Ignacio* was wrecked off the Island of Anegada in the British Virgin Islands in the year 1742. She carried a small amount of gold coins and a chest filled with diamonds.

Manifest

100,000 pesos in gold coins
Chest filled with diamonds

San Felipe

The Spanish ship *San Felipe* was lost off the Island of Anegada in the British Virgin Islands in the year 1750. She carried treasure salvaged from the Spanish treasure galleon *Nuestra Señora de Soledad*, which wrecked earlier that year off the coast of North Carolina.

Manifest

500,000 pesos in gold coins
1 million pesos in silver bars

LESSER ANTILLES

16th Century

San Juan

San Juan, a Spanish treasure galleon in the fleet of 1567, was one of six ships wrecked in a storm off Dominica in the Lesser Antilles. There is no record of the ship's valuable treasure having been recovered. However, the Carib Indians claimed to have salvaged the treasure.

Manifest

Bronze cannons
50,000 pesos in gold bars, coins
200,000 pesos in silver bars, coins
Jewelry

Santa Barbola

Santa Barbola, a Spanish treasure galleon in the fleet of 1567, was one of six ships wrecked in a storm off Dominica in the Lesser Antilles. There is no record of the ship's valuable treasure having been recovered. However, the Carib Indians claimed to have salvaged the treasure.

Manifest

50,000 pesos in gold bars, coins
450,000 pesos in silver bars, coins
Gold money chain

W 6 2 24
17 6

San Felipe

San Felipe, a Spanish treasure galleon in the fleet of 1567, was one of six ships wrecked in a storm off Dominica in the Lesser Antilles. There is no record of the ship's valuable treasure having been recovered. However, the Carib Indians claimed to have salvaged the treasure.

Manifest

Bronze cannons
250,000 pesos in gold bars, coins
1.2 million pesos in silver bars, coins
100,000 pesos in gems

W 6 2 24
17 6

El Espiritu Santo

El Espiritu Santo, a Spanish ship in the fleet of 1567, was one of six ships wrecked in a storm off Dominica in the Lesser Antilles. There is no record of the ship's valuable treasure having been recovered. However, the Carib Indians claimed to have salvaged the treasure.

Manifest

Bronze cannons
100,000 pesos in gold bars, coins
150,000 pesos in silver bars, coins
Gold and silver artifacts

W 6 2 24
17 6

San Martin*

San Martin, a Spanish ship in the fleet of 1567, was one of six ships wrecked in a storm off Dominica in the Lesser Antilles. There is no record of the ship's valuable treasure having been recovered. However, the Carib Indians claimed to have salvaged the treasure.

Manifest

Bronze cannons
150,000 pesos in silver bars
Swords
Gold and silver artifacts

W 6 2 24
17 6

Mariposa*

Mariposa, a Spanish ship in the fleet of 1567, was one of six ships wrecked in a storm off Dominica in the Lesser Antilles. There is no record of the ship's valuable treasure having been recovered. However, the Carib Indians claimed to have salvaged the treasure.

Manifest

Bronze cannons
300,000 pesos in silver bars, coins
100,000 pesos in gems



Metal Detector

The metal detector works much like the magnetometer, only on a smaller scale. This hand-held device helps the treasure hunter locate metallic deposits on the sea floor or on beaches.

W 62 46
17 19

17th Century

San Juan Bautista

The Spanish treasure galleon *San Juan Bautista* was one of three ships wrecked off the coast of Guadeloupe in the Lesser Antilles in the year 1603. The ship's treasure of gold was lost in the wreck.

Manifest

Bronze cannons

500,000 pesos in gold bars, coins

20 feet of gold money chain

W 62 46
17 19

La Rosa

The Spanish treasure galleon *La Rosa* was one of three ships wrecked off the coast of Guadeloupe in the Lesser Antilles in the year 1603. The ship's treasure of gold and gems was lost in the wreck.

Manifest

Bronze cannons

200,000 pesos in gold coins

300,000 pesos in gems

W 62 46
17 19

*La Encarnacion**

The Spanish treasure galleon *La Encarnacion* was one of three ships wrecked off the coast of Guadeloupe in the Lesser Antilles in the year 1603. The ship's treasure of gold and silver was lost in the wreck.

Manifest

Bronze cannons

50,000 pesos in gold coins

350,000 pesos in silver bars, coins

Jewelry

W 62 46
17 19

San Juan Bautista

San Juan Bautista, a Spanish merchantman, wrecked off the coast of Guadeloupe in the Lesser Antilles in the year 1609. Her treasure was lost with the ship.

Manifest

Bronze cannons

100,000 pesos in gold bars, coins

300,000 pesos in gems

Silverware

Mercury

W 62 12
18 15

18th Century

Lazy Jane

An English pirate ship, the *Lazy Jane* was lost in the early 1730's in the islands of the Lesser Antilles. She carried a treasure of gold, silver and diamonds.

Manifest

Bronze cannons

200,000 pesos in gold coins

900,000 pesos in silver coins, bars

Small chest of diamonds

W 62 35
18 82

Santissimo Trinidad

This Portuguese ship sank off the Island of St. Martin in the Lesser Antilles in 1781. She carried 1.5 million pesos in gold and silver, as well as general merchandise.

Manifest

Bronze cannons

1 million pesos in gold bars

500,000 pesos in silver coins

CENTRAL AMERICA

16th Century

Nuestra Senora de San Antonio

The Spanish treasure galleon *Nuestra Senora de San Antonio* wrecked in the year 1534 off the coast of Central America. *Nuestra Senora de San Antonio* carried treasure, including silver and gold, from the New World for Spain.

Manifest

Bronze cannons
75,000 pesos in gold ingots
550,000 pesos in silver bars
Gold and silver artifacts

17th Century

San Roque

The Spanish treasure galleon *San Roque* was one of four galleons lost in a hurricane in the year 1605 off the coast of Central America. The lost ships carried a total of 12 million pesos in treasure from the New World (some of the wealth was smuggled aboard by crew members).

Manifest

Bronze cannons
500,000 pesos in gold coins
4 million pesos in silver bars, coins
750,000 pesos in gems
Jewelry

Santo Domingo

The Spanish treasure galleon *Santo Domingo* was one of four galleons lost in a hurricane in the year 1605 off the coast of Central America. The lost ships carried a total of 12 million pesos in treasure from the New World (some of the wealth was smuggled aboard by crew members).

Manifest

Bronze cannons
500,000 pesos in gold coins
2.5 million pesos in silver bars, ingots
Ming Dynasty porcelain
Gold and silver artifacts

Nuestra Senora de Begonia

The Spanish treasure galleon *Nuestra Senora de Begonia* was one of four galleons lost in a hurricane in the year 1605 off the coast of Central America. The lost ships carried a total of 12 million pesos in treasure from the New World (some of the wealth was smuggled aboard by crew members).

Manifest

Bronze cannons
1.5 million pesos in silver bars, coins
300,000 pesos in rare gems
150,000 pesos in mercury

W 76 30
14 52

San Ambrosia

The Spanish treasure galleon *San Ambrosia* was one of four galleons lost in a hurricane in the year 1605 off the coast of Central America. The lost ships carried a total of 12 million pesos in treasure from the New World (some of the wealth was smuggled aboard by crew members).

Manifest

100,000 pesos in gold coins
800,000 pesos in silver bars
50,000 pesos in pearls
Gold and silver artifacts

VENEZUELA

W 68 13
12 4

17th Century

San Felipe

The Spanish treasure galleon *San Felipe* was wrecked off the coast of Venezuela in the year 1610. Her treasure was recovered after the wreck.

Manifest

Bronze cannons
500,000 pesos in gold bars
2 million pesos in silver coins

W 66 54
11 56

*Santa Maria**

The Spanish ship *Santa Maria* was wrecked off the coast of Venezuela in the year 1613. She held a cargo of pearls.

Manifest

Iron cannons
250,000 pesos in pearls



Probe

Remotely controlled underwater probes allow the wreck hunter to explore a wreck that is too deep or dangerous for divers, or to survey a site before sending divers down. Images are sent from the probe's cameras to the surface vessel.

19th Century

464 16
11 20

San Pedro Alcantara

The Spanish warship *San Pedro Alcantara* caught fire while anchored off the coast of Venezuela in the year 1813. Much of her large treasure in silver was lost in the subsequent explosion.

Manifest

Bronze cannons

850,000 pesos in silver bars, coins

Swords

Muskets

ATLANTIC OCEAN

18th Century

441 5
29 55

*Buena Vista**

The *Buena Vista*, a richly-laden Portuguese treasure galleon, left Cuba for Portugal in the year 1702 and was never seen again.

Manifest

Bronze cannons

5 million pesos in gold bars, coins

10 million pesos in silver bars, coins

3 million pesos in gems — 5th & 6th

Jewelry

Gold money chain

Swords

Muskets

Los Bravos

462 35
30 6

The Spanish treasure galleon *Los Bravos* was lost in 1750 in the deep waters of the Atlantic between Cuba and Spain. She held immense wealth, including much silver and gold as well as gems and jewelry.

Manifest

Bronze cannons

250,000 pesos in gold coins, bars

1.75 million pesos in silver coins, bars

3 million pesos in gems

Jewelry

Sword

BERMUDA

The famed Bermuda Triangle, named because of the turbulent weather and large number of vessels and aircraft lost in the area, offers the wreck hunter many diving opportunities. In the early 1500's, a Spaniard by the name of Juan de Bermudez visited the uninhabited islands. The first settlement came in 1609, when the British ship *Sea Venture* blew into the islands in a hurricane. Through the ensuing years, Spanish galleons, British and American trading vessels and ships traveling from the New World to Europe were wrecked in the islands. Bermudan diver Teddy Tucker has discovered many wrecks in Bermuda's waters, including the *Sea Venture* and other historically important ships, since the 1950's.

16th Century

W 60 20
34 35

*La Paz**

La Paz, a Spanish merchantman, wrecked in a storm off the coast of Bermuda in the year 1550. Her cargo of gold and silver was lost with the ship.

Manifest

Bronze cannons

300,000 pesos in gold bars

750,000 pesos in silver bars

Porcelain

*Santa Maria**

W 60 53
34 35

Santa Maria, a Spanish treasure galleon, was lost in a storm off the coast of Bermuda in the year 1590. Her entire crew and treasure were lost with the ship.

Manifest

Bronze cannons

100,000 pesos in gold bars, coins

800,000 pesos in silver bars, coins

200,000 pesos in gems

Jewelry

Gold and silver artifacts

San Pedro

W 61 5
34 35

The Spanish treasure galleon *San Pedro* was wrecked off the coast of Bermuda in the year 1594. She carried a treasure of gems as well as gold bars and coins.

Manifest

Bronze cannons

400,000 pesos in gold bars, coins

200,000 pesos in gems

17th Century

Santa Catalina

Santa Catalina, a Spanish treasure galleon, sank in a hurricane off the coast of Bermuda in the year 1626. Over half of her crew and her entire treasure were lost in the sinking.

Manifest

Bronze cannons

125,000 pesos in gold bars, coins

800,000 pesos in silver bars, coins

75,000 pesos in gems

Jewelry

UNITED STATES & ATLANTIC

Wrecks along the eastern seaboard of the United States run the gamut from Spanish galleons, pirate vessels, ships carrying immigrants, freighters and steamers to Revolutionary and Civil War vessels and German U-boats. Few of these wrecks carry amounts or types of treasure to rival the wrecks in the Caribbean. However the United States offers a large number of historic wrecks (including many wrecks in the Great Lakes, which are not included here). In general, the United States has lenient wreck hunting laws, although several states, including Texas, Florida and the Carolinas, have passed laws governing wreck salvage. However divers and wreck hunters often find themselves embroiled in legal battles with insurance companies and other individu-

als and organizations claiming rights of ownership and salvage, especially when the likelihood of finding treasure is great.

18th Century

Whydah**

Whydah, an American pirate ship owned by Black Sam Bellamy, sank off Cape Cod in a storm in the year 1717. All but two of her crew and all of her sizable treasure were lost with the ship. Barry Clifford discovered the wreck site of the *Whydah* in 1982.

Manifest

Bronze cannons
\$100,000 in gold bars, coins
\$50,000 in silver bars, coins
\$50,000 in gems
Jewelry
Swords

Princess Augusta

The German passenger ship *Princess Augusta*, which was transporting German immigrants to America, was destroyed in a storm off Rhode Island in the year 1738. Many personal items of the immigrants were lost with the ship.

Manifest

\$150,000 in gold coins
\$250,000 in silver coins
Jewelry
Porcelain
Silverware
Gold and silver artifacts

Nuestra Senora de Soledad

Nuestra Senora de Soledad was one of four Spanish treasure galleons that sank in a hurricane in the year 1750 off the coast of North Carolina. Much of the ship's treasure of gold and silver bars and coins was salvaged soon after the wreck.

Manifest

Bronze cannons
100,000 pesos in gold bars, coins
500,000 pesos in silver bars, coins
Gold money chain
Swords

Nuestra Senora de la Magdalena*

Nuestra Senora de la Magdalena was one of four Spanish treasure galleons that sank in a hurricane in the year 1750 off the coast of North Carolina. She carried a treasure of gold and silver bars and coins.

Manifest

Bronze cannons
200,000 pesos in gold bars, coins
300,000 pesos in silver bars, coins
Jewelry

W 75 56
34 36
El Rosario*

El Rosario was one of four Spanish treasure galleons that sank in a hurricane in the year 1750 off the coast of North Carolina. She carried a treasure of gold and silver bars and coins.

Manifest

Bronze cannons
150,000 pesos in gold bars, coins
300,000 pesos in silver bars, coins
Silver artifacts
Mercury

W 76 7
34 56
San Cristobal*

San Cristobal was one of four Spanish treasure galleons that sank in a hurricane in the year 1750 off the coast of North Carolina. She carried a treasure of gold and silver bars and coins.

Manifest

Bronze cannons
200,000 pesos in gold bars, coins
250,000 pesos in silver bars, coins
Muskets
Swords
Silverware

W 71 48
41 23
San Jose

San Jose, a Spanish frigate, sank in the year 1752 off the coast of Connecticut. Her cargo of silver was lost with the ship.

Manifest

Bronze cannons
400,000 pesos in silver bars, coins
Gold and silver artifacts
Navigational artifacts

W 30 4
31 50
Success

Success, a British merchantman, sank in a hurricane off the coast of South Carolina in the year 1761. She held a valuable cargo of gold and silver, which had been recovered from a previous wreck.

Manifest

Bronze cannons
750,000 British pounds in gold bars, coins
325,000 British pounds in silver bars, coins

W 69 21
43 48
Pembroke

Pembroke, an English merchantman, wrecked off the coast of Massachusetts in the year 1766. Much of her cargo was lost with the ship.

Manifest

300,000 British pounds in gold bars, coins
200,000 British pounds in silver bars, coins
Silverware
Art objects

W 74 37
39 37
Merlin**

American Revolutionary forces at forts Mercer and Nassau fired upon and sank the British warship *Merlin* in the year 1777. The *Merlin* sank off the coast of New Jersey, taking her treasure of gold and silver bars and coins with her.

Manifest

Bronze cannons
350,000 British pounds in gold bars, coins
750,000 British pounds in silver bars, coins
Sword
Musket

W74 37
39 59
Augusta**

American Revolutionary forces at forts Mercer and Nassau fired upon and sank the British warship *Augusta* in the year 1777. The *Augusta* sank off the coast of New Jersey, taking her treasure of gold bars and coins with her.

Manifest

Bronze cannons

100,000 British pounds in gold bars, coins

400,000 British pounds in silver bars, coins

Sword

Musket

W71 48
41 23
Defense

Defense sank in the year 1779 off the coast of Connecticut. Her cargo of gold and silver was lost with the ship.

Manifest

Bronze cannons

\$150,000 in gold bars, coins

\$100,000 in silver bars, coins

Gold and silver artifacts

W75 56
38 22
Faithful Steward

Faithful Steward, an immigrant ship sailing from Ireland, was lost in a storm off the coast of Delaware in the year 1785. Over 200 of her passengers died in the disaster. Many of the large number of gold and silver coins carried by the *Faithful Steward* have washed up on "Coin Beach", providing visitors to the beach with ample beachcombing opportunities.

Manifest

100,000 gold coins

75,000 silver coins

Silverware

Jewelry

Porcelain

W76 7
38 41
H.M.S. DeBraak

H.M.S. DeBraak, an English warship, was wrecked off the coast of Delaware in the year 1798. Although many of her crew survived the sinking, the *DeBraak's* treasure was lost with the ship. The location of the *DeBraak* remained a mystery until 1984, when Harvey Harrington identified the wreck site.

Manifest

Bronze cannons

400,000 British pounds in gold bars, coins

250,000 British pounds in silver bars, coins

Sword

Musket

Silverware

Porcelain

19th Century

W75 86

38 41

Juno

Juno, a Spanish warship, sank in the year 1802 off the coast of New York. Her crew and cargo were lost with the ship.

Manifest

Bronze cannons

350,000 pesos in silver bars, coins

Swords

Muskets

W77 15

32 10 2 5 15

Tamerlane

Tamerlane, a French ship, wrecked off the coast of Virginia in the year 1818. Most of her treasure was lost with the ship.

Manifest

Bronze cannons

\$250,000 in gold bars, coins

\$750,000 in silver bars, coins

Porcelain

Muskets

W71 25

41 5

Ligera

Ligera, a Spanish ship, sank in a storm off Long Island in the year 1823. Most of her treasure was lost with the ship.

Manifest

Bronze cannons

\$250,000 in gold coins

\$200,000 in silver coins

Gold and silver artifacts

W72 33

32 1

*S.S. Central America***

The *S.S. Central America*, a transport ship that usually carried mail between New York and Panama, was lost in deep water off the coast of Charleston, S.C. in the year 1857. On her last voyage, she carried a cargo of gold bullion that was worth \$1 million at the time of her sinking. A little less than half of her crew of 100 men survived the wreck. The wreck is being salvaged by a group based in Columbus, Ohio.

Manifest

\$1 million in gold bars, coins

W70 4

32 1

*Hunley***

This historical wreck is the final resting place of the Confederate submarine *Hunley*. The *Hunley* was the first submarine to sink a warship. On February 17, 1864 the *Hunley* and her crew of nine men found and sank the Union warship *USS Housatonic*. In the attack the *Hunley* also sank, and her entire crew was lost.

The *Hunley* was made of iron and was powered with a crank-turned propeller. An interesting note is that the *Hunley* actually sank and was raised twice, killing most of her crew in both instances, before she sank the *Housatonic*. Her first attack was on the *USS New Ironsides*. The attack was unsuccessful, and all crew members but the commander were killed. The submarine was recovered from the floor of Charleston Harbor and a new crew began sea tests. Unfortunately, she sank once again,



Luxury Liner

As a result of advances to the engine and the increase in travel between America and Europe, the luxury liner was developed. These huge ships required tremendous power to carry their passengers safely across the Atlantic. Many luxury liners of the early 20th Century were opulent, offering all the comforts of a small city. Perhaps the most famous luxury liner is the Titanic, which was lost in the year 1916.

killing the entire crew, including Horace Hunley, who helped finance and build the submarine. Her third crew succeeded in torpedoing the *Housatonic* in February 1864 in Charleston Harbor.

Manifest

Compass

Crank-turned propeller

Personal items of crew members

Portland

Portland, an American steamer, was lost without a trace in a violent storm off the coast of Massachusetts in the year 1898. Her crew, passengers and cargo were lost with the ship.

Manifest

\$500,000 in gems

Personal items

S.S. Delaware

S.S. Delaware, a wooden steamer, caught fire and sank in the year 1898 off the coast of New Jersey. She carried a cargo of gold, as well as personal items.

Manifest

\$250,000 in gold bars

Jewelry

Silverware

Gold pocket watches

20th Century

W 65 2
42 35

*S.S. Republic***

On January 23, 1909 one of the most opulent passenger liners of her time, the *S.S. Republic*, sailed from New York for the Mediterranean. She was struck by the freighter *S.S. Florida* 50 miles off Nantucket Island and sank 35 hours later. The *Republic* was the flagship of the White Star Line, owned by American financier J.P. Morgan. Until the sinking of the *Titanic*, the *Republic* was the largest ocean liner to sink.

The *Republic* was carrying relief supplies for victims of the earthquakes in Italy that had occurred in the fall of 1908. Ironically she was hit by the *Florida*, which was transporting 850 Italian earthquake survivors to the United States. Only ten people died on both the *Republic* and the *Florida*, due in part to the first use of the Marconi telegraph to send distress signals.

The *Republic* carried jewels and personal items worth an estimated \$285,000 at the time of her sinking. In addition it is rumored that three million American Gold Eagle coins, worth an estimated \$2 billion today, were also lost with the ship.

The *Republic* lies 270 feet below the ocean's surface and was located in 1981. Although a salvage claim was filed, the ship has not yet been excavated.

Manifest

3 million American Gold Eagle coins

Jewelry

Artifacts

W 76 30
34 31

S.S. Merida

S.S. Merida sank in the year 1911 after colliding with a steamship off the coast of Virginia. The *Merida* held a cargo of 30 tons of gold ingots, which was lost with the ship.

Manifest

\$8 million in gold ingots

W 68 2

*S.S. Andrea Doria***

42 26

On July 25, 1956, the luxurious Italian passenger liner *S.S. Andrea Doria* was struck by the Swedish *M.S. Stockholm* and sank in deep water about 55 miles off Nantucket Island. The ships were traveling in the Northeast shipping lanes when the bow of the *Stockholm* rammed into the *Andrea Doria*.

The *Andrea Doria* lost power and began drifting. She sank 11 hours after the collision with the *Stockholm*, which was able to return to port. Fifty-two people died in the disaster.

After the *Andrea Doria* sank, rumors began circulating that a fortune in gems had gone down with the ship. The mystery of the *Andrea*

Doria's treasure ended when Peter Gimble recovered the Bank of Rome safe, thought to hold the rumored gems. Gimble found only packs of United States silver certificates and Italian notes in 50, 100 and 1,000 lire denominations.

Manifest

United States Silver Certificates

Italian Notes in 50, 100 and 1,000 lire denominations

Artifacts

CANADA, NEWFOUNDLAND AND GREENLAND

Sable Island, a sliver of an island well off the coast of Nova Scotia, is home to the majority of Canada's wrecks. The island has claimed hundreds of ships. Another area of interest for wreck hunters is Cape Breton Island, Nova Scotia, where several warships were lost. One of the most famous wrecks of our times, the *Titanic*, lies in the cold, deep waters of the Atlantic off Newfoundland.

As a note, Canada has stringent laws concerning wreck salvage. Anyone wanting to dive a wreck in Canada's chilly waters will need a permit and a good reason for wanting to explore the lost ship.

CANADA

18th Century

Feversham

Feversham, a British warship, was lost off the coast of Nova Scotia, Canada in the year 1711. She carried a treasure of gold and silver, which was lost with the ship. A diving team salvaged a portion of the treasure in the late 1960's.

Manifest

Bronze cannons

50,000 British pounds in gold coins

100,000 British pounds in silver coins

Muskets

Swords

Navigational artifact

Le Chameau 1661-27 49-24

On August 26, 1725 the French supply and pay ship *Le Chameau* sank off the coast of Louisbourg, Cape Breton Island, Nova Scotia. *Le Chameau* was carrying 310 passengers and crew, and a cargo of gunpowder, shot, cannons and small arms, as well as 300,000 gold and silver coins to pay the garrison.

The force of the destruction of *Le Chameau* was so loud that it awoke sleepers on the shore at 3:40 a.m. The morning search parties found no survivors, only 180 bodies and large pieces of wreckage on the shore. The commandant of the fortress sent the sea captain, Pierre Morpain, to recover the gold and silver coins but because

of icy waters and swift currents he managed to only salvage some anchors and cannons.

In 1961, three separate diving teams brought up gold and silver from *Le Chameau*, but further dives were halted as legal battles over ownership between the divers and the government arose.

Manifest

Bronze cannons
200,000 gold coins
100,000 silver coins
Silverware
Swords

✓ ***H.M.S. Tilbury***

The English frigate *H.M.S. Tilbury* was wrecked on a reef near Louisburg Harbor in the year 1758. Payship for Admiral Edward Boscawen's fleet, her cargo of gold and silver coins was lost.

Manifest

Bronze cannons
300,000 gold coins
100,000 silver coins

Grandy

In 1771 the English merchantman *Grandy* capsized and sank in a storm in Halifax Harbor. She was carrying 3,000 British pounds in coins and military supplies.

Manifest

3,000 British pounds in silver coins
Swords
Muskets

19th Century

H.M.S. Barbadoes

In September 1812 the *H.M.S. Barbadoes* was wrecked off Sable Island. She was carrying over \$500,000 in gold and silver coins and bullion.

Manifest

Bronze cannons
\$250,000 in gold coins, bullion
\$250,000 in silver coins, bullion

L'Americaine

L'Americaine sank in shallow water off Sable Island in 1822. She was carrying over one million dollars in gold and silver coins and bullion.

Manifest

\$500,000 in gold coins, bullion
\$600,000 in silver coins, bullion

20th Century

Eric

Eric, an American steamer, was lost off the coast of Nova Scotia, Canada in the year 1912. Her cargo of gold and silver was lost with the ship.

Manifest

\$50,000 in gold bars, coins
\$200,000 in silver bars, coins
\$100,000 in gems
Personal items

NEWFOUNDLAND

11th Century *W 49 37*

*Valkyrie**** *50 19*

The Viking ship *Valkyrie* (named for the Norse goddesses who led the souls of warriors slain in battle to the god Odin) sank off the coast of Newfoundland in the 11th Century. Between the 8th and 11th centuries, Viking raiders fought for and won territory in England, Ireland, Russia and France. In addition, the Vikings settled in Iceland, Greenland and Newfoundland. These great seafarers, in their sturdy wooden long boats, traded and raided in the North Atlantic and Baltic Sea for over 400 years. Fierce fighters, they were feared by coastal communities throughout Europe.

Manifest

50 gold coins
300 silver coins
Iron artifacts

20th Century *43 54 49* *45 1*

*Titanic***

On the night of April 14, 1912 the British passenger liner *Titanic* was steaming at 19 knots off the Newfoundland coast. The voyage from Southampton to New York was to be the ship's maiden voyage. With a displacement of over 41,000 tons, the *Titanic* was the largest passenger liner ever built and one of the most luxurious. Just before midnight the

"unsinkable" *Titanic* struck a 100-foot high iceberg. The impact was hardly felt in the upper decks, but the iceberg had torn a gash in the *Titanic* that would soon flood the ship. Within minutes Captain E.J. Smith knew the *Titanic* was going to sink and ordered the lifeboats lowered.

Unfortunately, because she was considered unsinkable, there were only enough lifeboats for a third of the passengers. Women and children were quickly loaded into the boats and the boats began rowing away from the sinking vessel, with many of the boats only half full. Three hours later, the *Titanic* slipped beneath the frigid North Atlantic waters taking 1522 people with her. Lessons learned from the *Titanic* disaster included improvements in maritime safety laws for adequate lifeboats, ice patrols and radio communications.

The *Titanic* sank to a depth of 12,730 feet, where she remained undisturbed for over 70 years. But in 1989, an intrepid researcher and scientist, Dr. Bob Ballard, found the *Titanic's* final resting place and uncovered some of the mysteries surrounding the great ship's loss.

Using a mini-sub, Dr. Ballard and crew painstakingly photographed the entire wreck site and, with the use of a small camera-equipped drone, explored some of the *Titanic's* interior. The *Titanic* actually broke in two while sinking, with both halves coming to rest near each other. The wreck site is strewn with wreckage of every kind.

W 96 25
47 37

Empire Manor

The freighter *Empire Manor* sank in the deep water of the Atlantic off Newfoundland in the year 1944. Much of her treasure of gold was salvaged in the early 1970's.

Manifest

\$4.5 million in gold bars, coins

Personal items

GREENLAND

10th Century

Thor**/*

The Viking ship *Thor* (named for the Norse god of thunder) sank off the coast of Greenland in the 10th Century. Between the 8th and 11th centuries, Viking raiders fought for and won territory in England, Ireland, Russia and France. In addition, the Vikings settled in Iceland, Greenland and Newfoundland. These great seafarers, in their sturdy wooden long boats, traded and raided in the North Atlantic and Baltic Sea for over 400 years. Fierce fighters, they were feared by coastal communities throughout Europe.

Manifest

200 gold coins

500 silver coins

Ivory walrus tusks

THE BRITISH ISLES, THE NETHERLANDS AND FRANCE

The seas around the British Isles, the Netherlands and France hold a vivid history of seafarers, including the Viking raiders, the ill-fated sailors of the Spanish Armada and the unfortunate victims of warfare in our own and previous centuries. The English Channel has claimed hundreds of ships since man first began sailing her waters. Many of the ships of note in this area sailed with the Spanish Armada, which was battered and dashed against the shores of the British Isles, the Netherlands and France in the year 1588. Another interesting wreck in this area is the *Telemaque*, which capsized in the Seine River, France in 1790. She was said to be carrying coins of King Louis XVI and his French nobles, as well as precious religious artifacts of the Church.

BRITISH ISLES

10th Century

Odin**/*

The Viking ship *Odin* (named for the supreme Norse god) sank off the coast of Ireland in the 10th Century. Between the 8th and 11th centuries, Viking raiders fought for and won territory in England, Ireland, Russia and France.

In addition, the Vikings settled in Iceland, Greenland and Newfoundland. These great seafarers, in their sturdy wooden long boats, traded and raided in the North Atlantic and Baltic Sea for over 400 years. Fierce fighters, they were feared by coastal communities throughout Europe.

Manifest

200 gold coins
400 silver coins
Ivory walrus tusks

11th Century 217 53
52 17

Frigga*/**

The Viking ship *Frigga* (named for the Norse goddess of the atmosphere) sank off the coast of England in the 11th Century. Between the 8th and 11th centuries, Viking raiders fought for and won territory in England, Ireland, Russia and France. In addition, the Vikings settled in Iceland, Greenland and Newfoundland. These great seafarers, in their sturdy wooden long boats, traded and raided in the North Atlantic and Baltic Sea for over 400 years. Fierce fighters, they were feared by coastal communities throughout Europe.

Manifest

250 gold coins
700 silver coins
Iron artifacts

16th Century 65 36
53 20

Jean Florin

Jean Florin, a French ship, sank in the English Channel in the year 1522, taking her treasure of gold and silver to the bottom of the sea floor.

Manifest

Bronze cannons
300,000 francs in gold bars, coins
300,000 francs in silver bars, coins
Jewelry
Swords

The Spanish Armada of 1588

In the mid-1500's, Spain was considered the most powerful sea power in the Atlantic. The effectiveness of Spain's naval tactics relied upon close combat with the enemy, with the objective of boarding the ships of their foes. Spain's sturdy ships could carry many soldiers and war supplies, including cannons that did devastating damage at a close range.

The Spanish Armada of 1588 was a fleet of 130 ships made up of galleons, warships, transports and support vessels. Despite the reputation of the Spanish navy, the Armada of 1588 had several strikes against it. The commander of the Armada and many of the captains of the ships had little or no naval experience. In addition, many of the ships were rotted and ill-provisioned and the sailors poorly trained.

England had long feared an attack by sea by the Spanish. When, in 1588, they learned that an invasion by the Spanish was imminent, the English devised an innovative naval plan. To counter the known tactics of the Spanish fleet, the English composed a fleet of maneuverable ships equipped with long-range cannons. Their plan worked. In their naval engagements with the Spanish, the English were able to pound the Spanish ships from afar, sustaining minimal damage to their own ships.

After chasing the Armada up the coast of England, the English fleet had to return home. The Armada struggled up the coast of Scotland and Ireland, battered by storms, disease and lack of provisions. Many ships were wrecked on the coasts of England, Scotland and Ireland, with only half of the Armada returning home to Spain.

La Juliana

La Juliana, a warship in the Spanish Armada, capsized and sank off the coast of Scotland. Her crew and cargo were lost with the ship.

Manifest

Bronze cannons
200,000 pesos in gold coins
100,000 pesos in silver bars
Swords
Muskets
Silver artifacts

La Trinidad

The galleon *La Trinidad* sailed with the Spanish Armada. She wrecked off the coast of Scotland. Most of her crew and all of her treasure were lost with the ship.

Manifest

Iron cannons
300,000 pesos in gold coins
250,000 pesos in silver bars
Gold money chain
Jewelry
Gold and silver artifacts

El Gran Grifon

El Gran Grifon, the Capitana of the Spanish Armada, wrecked off the northeast tip of Scotland. The captain and many of the crew members survived, but most of the treasure was lost with the ship.

Manifest

Bronze cannons
500,000 pesos in gold bars, coins
200,000 pesos in silver bars, coins
Jewelry

Francesca

Francesca, a galleon of the Spanish Armada, sank in a storm off the coast of Scotland.

Manifest

Bronze cannons
250,000 pesos in gold coins
200,000 pesos in silver bars, coins
Religious artifacts



Frigate

The frigate was a three-masted sailing vessel square-rigged, carrying rows of guns in broadside on the gun deck. Sailing frigates served many purposes, performing blockade and convoy duty, as well as devastating enemy commerce. Frigates, as a class of naval vessels, were retired when sailing ships were replaced by steam ships.

La Scala

La Scala, a galleon in the Spanish Armada, sank in a storm off the coast of Scotland.

Manifest

Bronze cannons
300,000 pesos in gold bars, coins
200,000 pesos in silver coins
Swords
Muskets

Theresa

Theresa, a ship sailing with the Spanish Armada, wrecked along the coast of Scotland. Her cargo was lost with the ship.

Manifest

Iron cannons
200,000 pesos in gold coins
150,000 pesos in silver bars
Swords
Muskets
Gold and silver artifacts

W 9 23
57 6

W10 20
56 43
Tobermory Galleon**

The *Tobermory Galleon*, as she is known to underwater archaeologists, sank to the bottom of Tobermory Bay with a large treasure in gold, silver and artifacts. In 1740, the Glade Gun was recovered from the wreck. This historical artifact was crafted by Benvenuto Cellini for King Francis I of France, and was stolen by Charles V of Spain.

Manifest

Bronze cannons
1.5 million pesos in gold bars, coins
750,000 pesos in silver bars, coins
The Glade Gun
Jewelry
Gold and silver artifacts

W15 2
53 42
San Juan Bautista

San Juan Bautista, a ship of the Spanish Armada, wrecked off the coast of Ireland in September of 1588.

Manifest

Bronze cannons
250,000 pesos in gold bars, coins
200,000 pesos in silver bars
Jewelry

W15 13
53 20
El Castillo

El Castillo wrecked off the coast of Ireland. She was said to carry a valuable treasure.

Manifest

Bronze cannons
250,000 pesos in gold coins
1 million pesos in silver bars, coins
Jewelry
Gold and silver artifacts

W10 20
56 0
Girona**

Girona, a galleass of the Spanish Armada, was wrecked on the northeast coast of Ireland. Of the 1,300 men aboard, some of whom included Spanish nobles, 5 survived. In 1967 Robert Stenuit began salvaging the wreck. Through the years, he and his team recovered a considerable wealth of treasure.

Manifest

Bronze cannons
2 million pesos in gold bars, coins
1 million pesos in silver bars, coins
Navigational artifacts
Gold winged salamander with rubies
Gold cross, Knights of Malta
Silverware

W16 54
55 47
La Trinidad Valencera**

La Trinidad Valencera, a warship sailing with the Spanish Armada, was wrecked along the coast of North Ireland. Her treasure was lost with the ship.

Manifest

Bronze cannons
200,000 pesos in gold bars, coins
150,000 pesos in silver bars, coins
Jewelry
Gold and silver artifacts
Swords
Navigational artifacts

W15-13
03 15
Santa Maria de la Rosa

Santa Maria de la Rosa, a ship sailing with the Spanish Armada, was wrecked off the coast of Ireland. Most of her crew was lost with the ship. *Santa Maria de la Rosa* was reported to have carried gold, silver, gems and plate.

Manifest

Bronze cannons
Iron cannons
250,000 pesos in gold coins
100,000 pesos in silver coins
100,000 pesos in gems
Gold and silver artifacts
Pewter plates

17th Century

W29-33
53 4
La Margarita*

La Margarita, a Spanish ship, sank in the Atlantic in the year 1614. Her crew and treasure of silver were lost with the ship.

Manifest

500,000 pesos in silver bars, coins
Silver artifacts

W5-38
57 39
Carmelan

The Dutch ship *Carmelan* was wrecked in a storm in the year 1664 when she was swept onto the rocks along the Out Skerries, England.

Manifest

3 million Dutch coins

W7-42
54 33
Mary**

The *Mary*, the first English royal yacht, was presented to King Charles II of England by the Dutch in the year 1660. She sank off the coast of England in the year 1675. She was serving as a naval vessel at the time of her sinking. Thirty-five of her 61 passengers and crew were drowned. Divers discovered the wreck in 1971 and have recovered several ornate bronze cannons, silver coins and jewelry.

Manifest

Bronze cannons
Silver coins
Jewelry
Navigational artifacts
Masks
Swords

W8-27
52 58
Santa Cruz

Santa Cruz, a Spanish treasure galleon, sank off the coast of England in the year 1679. Her treasure of gold, silver and gems was lost with the ship.

Manifest

Bronze cannons
Iron cannons
300,000 pesos in gold bars, coins
600,000 pesos in silver bars, coins
100,000 pesos in gems
Porcelain

18th Century W 9 12 S 17

H.M.S. Association**

H.M.S. Association, a British warship, struck a reef and sank off the coast of England on October 22, 1707. The *Association* was sailing in a fleet that had been searching unsuccessfully for 13 Spanish treasure galleons that had been scuttled in Vigo Bay in 1702. Three other British warships followed the *Association* onto the rocks. Over 2,000 men drowned in the wrecks.

It is rumored that the personal treasure of Sir Cloudesley Shovell, who sailed with the *Association*, as well as some funds from British merchants in Portugal were lost with the ship. Several salvage attempts have been made on the *Association*, with some success.

Manifest

Bronze cannons
100,000 gold coins
300,000 silver coins
Jewelry
Gold plate
Silverware
Muskets

De Liefde** W 5 38 S 7 42

De Liefde, a ship of the Dutch East India Company, wrecked on the cliffs of the Out Skerries, England in the year 1711. Of the 300 people who sailed with *De Liefde*, only one man survived the wreck. The ship's treasure of silver coins was also lost with the ship. Several salvage attempts have been made on *De Liefde*, including an extensive excavation in the 1960's.

Manifest

Bronze cannons
200,000 silver coins
Muskets
Swords

Hollandia W 9 1 S 7 17

Hollandia, a ship of the Dutch East India Company, sank in the year 1743 off the coast of the England. No one survived the wreck, and her treasure was lost with the ship.

Manifest

Bronze cannons
275,000 silver coins
Swords

Nuestra Senora de la Lima* W 8 16 S 2 0

Nuestra Senora de la Lima, a Spanish treasure galleon, was lost in the year 1750 off the coast of England. Her treasure of gold and silver was lost with the ship.

Manifest

Bronze cannons
100,000 pesos in gold bars, coins
400,000 pesos in silver bars, coins
Jewelry
Gold and silver artifacts

W15 2
53 9

La Cancion*/***

La Cancion, a Portuguese galleon, was attacked and set ablaze by pirates off the coast of Ireland in the year 1799. The ship's treasure of gold and silver was lost in the sinking.

Manifest

Iron cannons
100,000 pesos in gold bars, coins
100,000 pesos in silver bars, coins
Jewelry
Navigational artifacts

19th Century W056 52 18

Earl of Abergavenny

Earl of Abergavenny, a ship of the Dutch East India Company, sank in the year 1805 off the coast of England. Over 300 people were drowned in the wreck.

Manifest

Bronze cannons
50,000 British pounds in gold coins
20,000 British pounds in silver coins
Porcelain

W8 4
59 28

Royal Charter**

The *Royal Charter*, a sailing ship equipped with a small engine, sailed from Australia for England in the year 1859. Disaster struck on what should have been the last night before the *Royal Charter* arrived safely in Liverpool. Without warning, the *Royal Charter* was caught in an extremely violent storm. Though the crew struggled for several hours to keep the ship afloat, the *Royal Charter* was dashed against the English shoreline. At least 450 people were lost with the ship, along with an estimated 500,000 British pounds of gold bars and coins.

Manifest

500,000 British pounds in gold bars, coins

20th Century

Oceana

Oceana, a British steamer, was lost off the coast of England on March 16, 1912. Her cargo of gold and silver was lost with the ship, however salvage efforts later that year yielded much of the treasure.

Manifest

900,000 British pounds in gold bars
1.8 million British pounds in silver coins
Personal items

W13 9
55 55
Lusitania**

Lusitania, a British luxury liner, was torpedoed by a German submarine off the coast of Ireland on May 7, 1915 on her voyage from New York to Ireland. Of her 1,959 passengers and crew, 1,198 people died in the sinking of the *Lusitania*, including 124 Americans. The loss of American lives in the incident contributed to the decision by the United States to declare war on Germany in 1917, and thus join World War I.

The public raised an outcry against the Germans. In defense, the German government asserted that the *Lusitania* had been armed with weapons and ammunition. Though the *Lusitania* did carry ammunition as war supplies, the British denied that she was armed.

Manifest

Gold

Jewelry

Ammunition

Personal items

Hampshire

Hampshire, a British warship, was struck by a torpedo and sunk off the coast of Scotland on June 5, 1916. Her treasure of gold coins was lost with the ship. Some salvage work has been accomplished on this wreck.

Manifest

8 million British pounds in gold coins

Personal items

W12 1
56 4
S.S. Laurentic

In 1917 the White Star Liner *S.S. Laurentic* hit a mine and sank off North Ireland while sailing from Liverpool to Halifax. She carried an immense treasure of gold bars that was almost totally recovered by Captain Damant in a salvage effort.

Manifest

18 million British pounds in gold bars

Argonaut

Argonaut, an American steamer, was torpedoed by a German submarine off the coast of England on June 5, 1918. Her treasure of gold and silver was lost with the ship.

Manifest

\$75,000 in gold bars, coins

\$250,000 in silver bars, coins

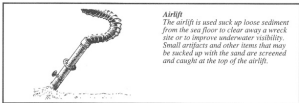
Personal items

W11 1
57 72
Egypt

The passenger liner *Egypt* collided in a heavy fog in the English Channel with the French ship *Selve* in the year 1922. She carried a treasure of gold bars and coins worth over 1 million British pounds. Over 80 of the 340 people who sailed with the *Egypt* died in the wreck. The treasure of gold, which was lost with the *Egypt*, was recovered later.

Manifest

1 million British pounds in gold bars, coins



Airlift

The airlift is used to suck up loose sediment from the sea floor to clear away a wreck site or to improve underwater visibility. Small artifacts and other items that may be sucked up with the sand are screened and caught at the top of the airlift.

Empress of Britain

Empress of Britain, a British steamer, was lost off the coast of England in the year 1940. Her treasure of French coins was lost with the ship.

Manifest

10 million francs in gold bars, coins
35 million francs in silver bars, coins
Personal items

In addition, the Vikings settled in Iceland, Greenland and Newfoundland. These great seafarers, in their sturdy wooden long boats, traded and raided in the North Atlantic and Baltic Sea for over 400 years. Fierce fighters, they were feared by coastal communities throughout Europe.

Manifest

100 gold coins
400 silver coins
Iron artifacts
Walrus ivory tusks

FRANCE

10th Century

Tyr***

The Viking ship *Tyr* (named for the Norse god of war) sank off the coast of France in the 10th Century. Between the 8th and 11th centuries, Viking raiders fought for and won territory in England, Ireland, Russia and France.

16th Century E 3 34 52 41

La Maria Juan

La Maria Juan, a galleon in the Spanish Armada (see page 171), sank off the coast of Calais, France. The ship and her cargo went to the bottom of the Strait of Dover.

Manifest

Bronze cannons

200,000 paces in gold bars, coins

100,000 paces in silver bars, coins

Gold and silver artifacts

18th Century E 2 26 51 34

Conqueror

Conqueror, a British warship, was lost off the coast of France in the year 1791. Her treasure of gold and silver coins sank with the ship.

Manifest

Bronze cannons

Iron cannons

1.2 million francs in gold bars, coins

2.5 million francs in silver bars, coins

Sword

Musket

Telemarque** W 0 0 50 32

Mystery and intrigue have surrounded the sunken wreck of the French brig the *Telemarque*, which capsized in the Seine River in early January of 1790. Rumors of fabulous treasure hoards that were being ferried aboard the *Telemarque* by members of the French aristocracy appeared soon after the sinking. The treasure included coins of King Louis XVI and his French nobles, as well as precious religious artifacts of the Church. The wealth was supposedly being smuggled to England to keep the treasure from falling into the hands of French Revolutionary forces. Salvage efforts were fruitless until the outbreak of World War II, when gold coins and religious items were recovered.

Manifest

Bronze cannons

2 million francs in gold coins

Jewelry

Gold and silver artifacts

Religious artifacts

19th Century E 4 30 57 13

Le Jeune Henri

Le Jeune Henri, a French ship, was lost off the coast of France in the year 1820. Her treasure sank with the ship.

Manifest

Bronze cannons

500,000 francs in silver bars, coins

20th Century ⁴⁵³⁸ ⁴⁸⁷

Elisabethville

The *Elisabethville*, a Belgian cargo and passenger liner, normally traveled from the Belgian Congo to Europe carrying rubber, palm oil and ivory tusks. In September of 1917, the *Elisabethville* was making another of her routine voyages. However, hidden within the mail room was a large shipment of the Belgian Congo's diamond production, about 13,000 carats worth.

Of the 200 passengers and crew members, only the first officer knew of the precious cargo concealed within the ship. The *Elisabethville* stopped in the port of Le Havre, where the captain learned that the ship would be at risk to attack from German U-boats. The French Navy ordered that two destroyers escort the *Elisabethville* until she was out of danger. However the captain did not want the escort. He left before the destroyers could rendezvous with him. The *Elisabethville* was struck by a torpedo off the west coast of La Belle-Ile, France and sank. Fourteen crew members were killed in the incident.

Reports of the sunken diamonds did not surface until after World War I. In 1928 salvage attempts were made, but only the ivory was successfully recovered. The diamonds were scattered over the wreck site and lost in the surrounding mud in an explosion meant to open the mail room.

Manifest

8 tons of ivory tusks
13,000 carats of uncut diamonds

*Bismarck*** ⁴⁵⁴⁷ ⁵⁰¹⁷

Bismarck, one of the most powerful German battleships deployed at the time of her loss, was sunk by the British in the year 1941. The *Bismarck* first sailed on May 18, 1941. Her destination was the North Atlantic shipping lanes that allowed supplies to be transported from North America to Britain.

British aircraft sighted, and then British ships tracked, the *Bismarck* through Denmark Strait. On May 24, the British cruiser *Hood* and the battleship *Prince of Wales* engaged the *Bismarck*. The British sent every available warship to search for the *Bismarck*. The British fleet sighted the *Bismarck* on the 26th of May about 400 miles off the coast of France and succeeded in sinking her on May 27. This wreck is of historic value.

Manifest

Historical artifacts

NETHERLANDS

10th Century E5 49

*Freya***

The Viking ship *Freya* (named for the Norse goddess of love) sank off the Netherlands in the 10th Century. Between the 8th and 11th centuries, Viking raiders fought for and won territory in England, Ireland, Russia and France. In addition, the Vikings settled in Iceland, Greenland and Newfoundland. These great seafarers, in their sturdy wooden long boats, traded and raided in the North Atlantic and Baltic Sea for over 400 years. Fierce fighters, they were feared by coastal communities throughout Europe.

Manifest

300 gold coins
600 silver coins
Iron artifacts

16th Century E6 0

La Trinidad de Scala

La Trinidad de Scala, a warship in the Spanish Armada (see page 171), was battered in a storm and sank off the coast of the Netherlands.

Manifest

Bronze cannons
250,000 pesos in gold bars, coins
150,000 pesos in silver bars, coins
Navigational artifact

Patrona E6 0

Patrona, a galleass sailing in the Spanish Armada (see page 171), wrecked off the coast of the Netherlands.

Manifest

200,000 pesos in gold bars, coins
100,000 pesos in silver bars, coins
Gold and silver artifacts
Gold money chain
Jewelry
Silverware

18th Century

*La Lutine***

La Lutine, a British frigate, was wrecked off the Dutch coast on October 9, 1799. Only two men survived the wreck, and both died soon after the incident. The frigate's insured treasure consisted of 2 million British pounds in gold and silver bullion and coin in pay for troops. Though the British knew of the ship's loss, they made no real effort to recover the treasure. Dutch fishermen who worked near the wreck uncovered gold and silver bars and coins. Throughout the 1800's, treasure was

recovered, including *La Lutine's* bronze bell. The bell, currently displayed in the offices of Lloyd's of London, is rung when a ship is lost at sea or is overdue.

Manifest

Bronze cannons

500,000 British pounds in gold bars, coins

1.5 million British pounds in silver bars, coins

Navigational artifacts

Muskets

Swords

Bronze bell

20th Century

*Tubantia***

E 5 4
15 20

Tubantia, a Dutch liner, was fired upon and sunk by a German submarine off the coast of the Netherlands on March 10, 1916. Ironically, *Tubantia* is said to have carried German gold in the amount of \$1.5 million which was concealed in blocks of cheese.

Manifest

\$1.5 million in gold bars, coins

Personal items

Renate Leonhardt

The German steamer *Renate Leonhardt* was damaged in an attack by a British warship in the year 1917. She later sank off the coast of the Netherlands due to faulty repairs. Her cargo was lost with the ship.

Manifest

\$1 million in gold bars, coins

\$250,000 in gems

Personal items

SPAIN AND PORTUGAL

Many Spanish treasure galleons made the entire trans-Atlantic journey only to be wrecked or attacked off the islands of Portugal or coast of Spain. These lost ships provide the wreck hunter plenty of opportunities for discovery and excavation. The wrecks in Vigo Bay have been of special interest to wreck hunters in this century and have yielded much treasure and historic artifacts.

SPAIN

16th Century

W 4 3 3
44 5 2

Santa Ana

The *Santa Ana*, the largest galleon of the Spanish Armada (see page 171), exploded and sank off the coast of Spain on her journey home. Her crew and treasure were lost with the ship.

Manifest

Bronze cannons

1 million pesos in gold bars, coins

500,000 pesos in silver bars, coins

100,000 pesos in gems

Jewelry

Gold and silver artifacts

Swords

17th Century

Urca de Parda

Urca de Parda sank in a storm off the coast of Spain in the year 1606. Her crew and cargo were lost with the ship.

Manifest

Iron cannons
500,000 pesos in gold bars, coins
1 million pesos in silver bars, coins

W108
382

*Nuestra Señora de Espíritu**

Nuestra Señora de Espíritu, the capitana in a Spanish flota, sank in a storm in the year 1642 off the coast of Spain. Her treasure of silver was lost with the ship.

Manifest

Bronze cannons
1.5 million pesos in silver bars, coins
Gold money chain
Jewelry
Swords

W2834
3742

Capitanilla de Cartagena

Capitanilla de Cartagena, a ship with the flota of 1656, sank outside Cadiz Bay, Spain after exchanging fire with English ships.

Manifest

Bronze cannons
1 million pesos in gold bars, coins
Swords

Urca de Paredes

Urca de Paredes, a ship with the flota of 1656, sank outside Cadiz Bay, Spain after exchanging fire with English ships.

Manifest

Bronze cannons
1.5 million pesos in gold bars, coins
250,000 pesos in silver coins

W2834
3742

*Brandon**

The *Brandon*, a Dutch warship, sank off the Canary Islands, Spain in the year 1693, taking her treasure of gold and silver to the bottom of the ocean floor.

Manifest

Bronze cannons
150,000 francs in gold bars, coins
450,000 francs in silver bars, coins
Jewelry
Swords
Masks

W139
312

18th Century

The Galleons of Vigo Bay

Leaving Havana on August 24, 1702, the New Spain Armada of 1699 was the wealthiest fleet to sail from the New World. War with the English and Dutch had kept the fleet from returning to Spain for three years, and Spain had gathered an incredible wealth over the years from the mines of Mexico and Peru. But Spain could wait no longer for its share of the gold, silver and jewels loaded on the ships. Under the command of General Don Manuel

W1150
442

de Velasco, the fleet of three war galleons, ten merchant galleons and four potaches set sail for Cadiz, Spain. The fleet was escorted by a group of French warships.

Stopping in the Azores, the fleet learned that the port of Cadiz had been blockaded by 50 English and Dutch ships. The fleet decided to hide out in Vigo Bay, a fortified and sheltered bay, in the north of Spain.

In September of 1702 the fleet entered Vigo Bay. The fleet manufactured defenses such as a barrier across the Straits of Rande. Sailors set up gun-points along the shore.

The King's share or "Royal Fifth" was unloaded immediately, but most of the treasure remained on the ships. The ships' manifests listed 45 million pieces of eight, but there was probably much more than that onboard the vessels.

The English and Dutch fleets had been unsuccessful in their attack on Cadiz. Admiral Sir George Rooke was feeling heat from Queen Anne of England for his failure. Then they stumbled on some news. There were galleons in Vigo Bay. The parting fleet reassembled and made its way up the coast. By the 22nd of October, the 140 English and Dutch vessels had arrived at Vigo Bay.

The attacks began the following day. The Anglo-Dutch fleet penetrated the barrier, sent troops ashore, and engaged the French warships. Upon these first encounters it was obvi-

ous the tide of battle was with the English and Dutch. With the French vessels shattered, the English moved in, ready to take on the Spanish fleet. The Spanish Admiral Manuel de Velasco, seeing the opposition's strength, gave the order to set the galleons afire. And they did blaze. The English and Dutch found themselves battling flames rather than men, for many of the Spanish sailors fled their burning ships.

When it was all over, the Anglo-Dutch forces had seized 24 ships, 13 of which were deemed seaworthy. The vessels that were not suitable to set sail were burned. The English and Dutch sailed out of Vigo Bay victorious and wealthy.

W/1 50
Jesus Maria Joseph 94 2

Jesus Maria Joseph

The Jesus Maria Joseph was the almiranta of Admiral Velasco. He gave the order to set her ablaze when he saw the Anglo-Dutch fleet moving in. She burned and sank in Vigo Bay.

Manifest

Bronze cannons
3 million pesos in gold coins
6.5 million pesos in silver bars, ingots and coins
4 million pesos in gems
Swords
Gold money chain

W/21
142

Nuestra Senora de las Animas

Nuestra Senora de las Animas was the capitana of Admiral Velasco's fleet. Velasco gave the order to set her ablaze when he saw the Anglo-Dutch fleet moving in. She burned and sank in Vigo Bay.

Manifest

Bronze cannons

3 million pesos in gold coins

5.5 million pesos in silver bars, ingots and coins

4 million pesos in gems

Gold and silver artifacts

W/21
143

Santo Domingo

Santo Domingo was a merchant galleon in the fleet of Admiral Velasco. Velasco gave the order to set her ablaze when he saw the Anglo-Dutch fleet moving in. She burned and sank in Vigo Bay.

Manifest

Bronze cannons

2 million pesos in gold coins

4.5 million pesos in silver bars, coins

1.5 million pesos in gems

Silver artifacts

Religious relics



Viking Ship

To successfully survive in rough Northern waters, the Vikings constructed double-ended ships with both a sharp bow and stern. The broad hull gave the Viking a smooth, flowing curve from the high bow through the well-rounded midships to the high stern. The single, large square sail was constructed of leather or cloth supported with leather strips. When the oars were not being used, the oar ports were stopped up with sliding plugs to prevent water from entering the ship. In 1200, the Viking became heavier, with a bowsprit to hold the ship's bowlines, which were needed when the ship sailed with the wind blowing on its side. Castles were erected both fore and aft as fortifications against enemy archers and as refuges where men could shoot arrows onto enemy decks.

W 12 1
44 2

Nuestra Señora de los Dolores

Nuestra Señora de los Dolores was a merchant galleon in the fleet of Admiral Velasco. Velasco gave the order to set her ablaze when he saw the Anglo-Dutch fleet moving in. She burned and sank in Vigo Bay.

Manifest

Bronze cannons
4 million pesos in gold coins
10 million pesos in silver bars, coins
3.5 million pesos in gems
Gold artifacts
Jewelry
Gold money chain

W 11 50
44 2

Santa Margarita

Santa Margarita was a merchant galleon in the fleet of Admiral Velasco. Velasco gave the order to set her ablaze when he saw the Anglo-Dutch fleet moving in. She burned and sank in Vigo Bay.

Manifest

Bronze cannons
2 million pesos in gold coins
4.5 million pesos in silver bars, coins
1.5 million pesos in gems
Jewelry
Art objects
Silverware

W 12 1
44 2

Nuestra Señora de las Angustias

Nuestra Señora de las Angustias was a merchant galleon in the fleet of Admiral Velasco. Velasco gave the order to set her ablaze when he saw the Anglo-Dutch fleet moving in. She burned and sank in Vigo Bay.

Manifest

Iron cannons
1 million pesos in gold coins
3 million pesos in silver bars, coins
1 million pesos in gems
Gold artifacts
Navigational artifact
Porcelain

W 11 50
44 2

Santo Cristo de Maracaibo**

Santo Cristo de Maracaibo, the largest galleon in the fleet of Admiral Manuel de Velasco, was the prize of the *H.M.S. Monmouth*. As the English were departing Vigo Bay, under the command of Admiral Shovell, the *Maracaibo* struck submerged rocks along San Martin Island and sank. She was carrying a tremendous amount of Spanish treasure as well as some English booty.

Manifest

Bronze cannons
8 million pesos in gold coins
20.5 million pesos in silver bars, coins
3.5 million pesos in gems
Jewelry
Gold money chain
Artifacts
Art objects

Santa Teresa

W 12 1
39 30
The *Santa Teresa* sank off the coast of Spain in the year 1704. Her treasure was lost with the ship.

Manifest

300,000 pesos in gold bars, coins
200,000 pesos in silver bars, coins

San Pedro Alcantara

W 12 35
40 55
✓ *San Pedro Alcantara* was wrecked in the year 1786 off the coast of Spain. Much of her valuable cargo was salvaged after the wreck.

Manifest

Bronze cannons
2.5 million pesos in gold bars, coins
5 million pesos in silver bars, coins

Hartwell

W 12 55
34 2
Hartwell, a British warship, was lost off the Canary Islands, Spain in the year 1787. Her treasure of gold was lost with the ship.

Manifest

Bronze cannons
Iron cannons
1.5 million British pounds in gold bars, coins
Porcelain
Swords
Muskets

19th Century

Cantabria

Cantabria, a Spanish warship, was lost off the coast of Spain in the year 1802. Her treasure sank with the ship.

Manifest

Bronze cannons
Iron cannons
300,000 pesos in gold bars, coins
750,000 pesos in silver bars, coins
100,000 pesos in gems
Jewelry
Muskets
Sword

Mercedes

W 9 23
36 41
Mercedes, a Spanish warship carrying a treasure from the New World, exploded and sank off the coast of Spain in the year 1804 after falling under attack by British warships. Her crew and passengers, as well as her treasure of gold and silver, were lost with the ship.

Manifest

Bronze cannons
400,000 pesos in gold bars, coins
500,000 pesos in silver bars, coins
Porcelain
Muskets
Swords

W12 39
35 32
Gambia

Gambia, a British steamer, was lost off the Canary Islands, Spain in the year 1878. Her treasure sank with the ship.

Manifest

250,000 British pounds in gold bars, coins
500,000 British pounds in silver bars, coins
Ivory

PORTUGAL

16th Century

San Anton

The Spanish ship *San Anton* was pounded by waves off the coast of the Azores Islands, Portugal in the year 1551. Her crew and treasure of gold were lost with the ship.

Manifest

Bronze cannons
300,000 pesos in gold bars, coins

Nuestra Senora de Maria*

The Spanish galleon *Nuestra Senora de Maria* was wrecked in a storm in the year 1554 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship.

Manifest

Bronze cannons
1 million pesos in gold bars, coins
500,000 pesos in silver bars, coins
Gold money chain
Sword
Gold and silver artifacts

W20 6
37 42
San Marcos*

The Spanish galleon *San Marcos* was wrecked in a storm in the year 1554 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship.

Manifest

Bronze cannons
300,000 pesos in gold bars, coins
200,000 pesos in silver bars, coins

Nuestra Senora de la Pena

The Spanish galleon *Nuestra Senora de la Pena*, sailing with a flota from the Americas, was lost in a storm in the year 1591 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship.

Manifest

Bronze cannons
1 million pesos in gold bars, coins
750,000 pesos in silver bars, coins
100,000 pesos in gems

W41 32
50 20
La Madelena

The Spanish galleon *La Madelena*, sailing with a flota from the Americas, was lost in a storm in the year 1591 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship.

Manifest

Bronze cannons
2 million pesos in gold bars, coins
1 million pesos in silver bars, coins
Sword
Gold and silver artifacts

422 10
Nuestra Señora del Rosario 38 12

The Spanish ship *Nuestra Señora del Rosario*, sailing with the Tierra Firme flota from the Americas, was lost in a storm in the year 1591 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship, though much of the treasure was later salvaged.

Manifest

Bronze cannons

1 million pesos in gold bars, coins

750,000 pesos in silver bars, coins

Silverware

Swords

Santa María del Puerto

The Spanish galleon *Santa María del Puerto*, sailing with a flota from the Americas, was lost in a storm in the year 1591 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship, though much of the treasure was later salvaged.

Manifest

Iron cannons

750,000 pesos in gold bars, coins

500,000 pesos in silver bars, coins

300,000 pesos in gems

Jewelry

422 10
38 12
Nuestra Señora del Rosario

The Spanish galleon *Nuestra Señora del Rosario*, sailing with the New Spain flota from the Americas, was lost in a storm in the year

1591 off the Azores Islands, Portugal. Her valuable treasure was lost with the ship, though much of the treasure was later salvaged.

Manifest

Iron cannons

1 million pesos in gold bars, coins

500,000 pesos in silver bars, coins

Gold money chain

Sword

Navigational artifact

421 3
38 2
La Magdalena

The Spanish ship *La Magdalena* was lost off the Azores Islands, Portugal in the year 1593. Most of her treasure was recovered after the wreck.

Manifest

Bronze cannons

750,000 pesos in gold bars, coins

2 million pesos in silver bars, coins

Gold artifacts

Silverware

421 3
38 2
Nuestra Señora de los Remedios

The Spanish ship *Nuestra Señora de los Remedios* sank off the coast of the Azores Islands, Portugal in the year 1593. Her treasure was lost with the ship.

Manifest

Bronze cannons

300,000 pesos in silver bars, coins

Las Cinque Chagas

Las Cinque Chagas, a Portuguese carrack, was attacked by English warships off the coast of the Azores Islands, Portugal in the year

1594, *Las Cinque Chagas* caught fire in the ensuing battle. Of the 1,000 passengers who had sailed with *Las Cinque Chagas*, only 13 survived. The ship's valuable treasure was lost with the vessel.

Manifest

35 million pesos in gold bars, coins
10 million pesos in gems
Jewelry
Gold money chain
Swords

La Corona*

La Corona was wrecked off the Azores Islands, Portugal in the year 1596. Her valuable cargo of gold and silver was lost with the ship.

Manifest

Bronze cannons
1 million pesos in gold bars, coins
750,000 pesos in silver bars, coins
Jewelry
Gold and silver artifacts

17th Century

W 12 35
3 5 19

San Josefe

The galleon *San Josefe* was lost off Madeira Island, Portugal in the year 1635. Her valuable treasure was lost with the ship.

Manifest

Bronze cannons
750,000 pesos in gold bars, coins
500,000 pesos in silver bars, coins
Silverware
Swords

W 21 36
34 2

Isabella

Isabella, a Spanish ship, was lost in a storm off the Azores Islands, Portugal in the year 1672. She held a cargo of gold from the Americas.

Manifest

Bronze cannons
750,000 pesos in gold coins, bars

Soleil d'Orient**

W 25 7
35 17

The French merchantman *Soleil d'Orient* was lost without a trace in the 1680's after setting sail from Siam for France. The ship carried treasure from the Siam court destined for the French king. All the treasure, crew and passengers were lost with the ship.

Manifest

300,000 francs in gold coins
400,000 francs in gems
Art objects
Gold and silver artifacts
Jewelry
Swords

19th Century

W 12 35
44 52

San Felipe*

San Felipe, a Spanish treasure galleon, sank off the Madeira Island, Portugal in the year 1802. Her treasure was lost with the ship.

Manifest

Bronze cannons
300,000 pesos in gold bars, coins
1 million pesos in silver bars, coins
100,000 pesos in gems
Porcelain

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SEA ROGUE™

TECHNICAL SUMMARY AND INSTALLATION INSTRUCTIONS

Activity	Keyboard Command	Activity	Keyboard Command
Bridge Controls		Weapons/Diving Officer's Station: F2 key	
Increase speed	= key	Load/Unload Weapons	1 key
Maximum speed	+ key	Target Information	2 key
Decrease speed	- key	Combat	3 key
Full stop	_ key	Dive Team	4 key
		Dive Wreck	5 key
		Personal Statistics	6 key
Change Course (Trawler and Research Vessel)		Sensor Officer's Station: F3 key	
Turn left	left arrow key	Active Sonar	1 key
Turn right	right arrow key	Passive Sonar	2 key
Steady as she goes	"Enter"	Side-Scan Sonar	3 key
		Signal Analysis	4 key
Change Course (Sea Rogue)		Search	5 key
Turn left	left arrow key	Personal Statistics	6 key
(mouse) left arrow indicator			
Turn right	right arrow key	Navigator's Station: F4 key	
(mouse) right arrow indicator		Plot Course	1 key
Steady as she goes	"Enter"	Ship's Log	2 key
		Current Location	3 key
Change Depth		Area Maps	4 key
Increase depth	down arrow key	Treasure Maps	5 key
(mouse) down arrow indicator		Personal Statistics	6 key
Decrease depth	up arrow key	Leave map	ESC key
(mouse) down arrow indicator			
Sound Effects/Music		Communications Officer's Station: F5 key	
Toggle sound on/off	ALT-S	Radio Traffic	1 key
		Automatically Decode Messages	2 key
Save game		Manually Decode Messages	3 key
Bridge/Officers stations	S key	Identify Wreck	4 key
		Evaluate Treasure	5 key
		Personal Statistics	6 key
Captain's Station: F1 key		Engineer's Station: F6 key	
Captain's Safe	1 key	Damage Control	1 key
Captain's Log	2 key	Repair Damaged Systems	2 key
Archive Information	3 key	Engine Report	3 key
Appraise Treasure	4 key	Launch Probe	4 key
Cargo Manifest	5 key	Treasure Separator	5 key
Personal Statistics	6 key	Personal Statistics	6 key
Quit Game			
(from Bridge, officer's stations, search screen, map screen) ALT-Q			

Activity**Keyboard Command****Activity****Keyboard Command****Map: F8 key**

Manual plotting: p key
Auto zoom/zoom toggle: z key

Ship Movement

Automatic plotting procedure: l key (in plotting screen)
Leave map: ESC key
Ship location: w key
Ship location display (toggles on/off): l key
Zoom: r key
(toggles on/off): z key
Auto pilot: a key
(toggles on/off - default off)

Searching For a Wreck

Increase speed: = key
Maximum speed: = key
Decrease speed: - key
Full stop: _ key
Auto search: a key
Manual search: m key
Drop a buoy: b key

Diving an Old Wreck

Diver 1: 1 key
Diver 2: 2 key
Diver 3: 3 key
Diver 4: 4 key
Diver increases depth: = key
Send diver back to ship: - key
Recall all divers at one time: ESC
Get or pick up items: g key
Automatically pick up treasure items (toggles on/off): a key
Drop an item: d key
Display map of wreck site: m key
Mark squares with a flag: s key
Fire spear/tank with knife: k key
Hoist cannon: h key
Searching: = key

Old Wreck Map

Depth toggle: d key
Flags toggle: f key
Items toggle: i key
Leave map: ESC

Diving a Modern Wreck

Move probe through wreck: arrow keys
Go up ladders: u key
Go down ladders: d key
Leave the wreck site: ESC key
Go to lower levels of ship: = key (auto map only)
Go to upper levels of ship: > key (auto map only)
Text (toggles on/off-default on): r key

Encounters/Combat

Distinguish contact (Sea Rogue): ESC key
Fire the gun: Spacebar
Leave combat screen (travel/research): ESC key
Leave combat screen: F2-F7
Scale changes for the range (Sea Rogue) (decrease to increase): 1-9 keys
Select a target (Sea Rogue): t key
Fire torpedo or decoy from port torpedo tube (Sea Rogue): p key
Fire torpedo or decoy from starboard tube (Sea Rogue): s key

From Sensor Officer's Station

Appearance of target's signal (Sea Rogue): 4 key
Increase scale of signal (Sea Rogue): + key
Decrease scale of signal (Sea Rogue): - key

Combat with Damaged Equipment

Fire torpedo from port torpedo tube: p key
Fire torpedo from starboard tube: s key

Installation Instructions**Installing Sea Rogue**

1. Insert Disk A into the A: or B: drive (depending upon the disk type you purchased).
2. Change directory to drive A: or B:.
3. Type "install." Press "Enter."
4. Insert the other disks as you are prompted by the computer.
5. When installation is complete, you may begin the game by typing "Rogue."

Running Sea Rogue

1. Change directory to the drive where the game is installed.
2. Change directory to "Rogue."
3. Type "Rogue." The game will now be running.

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