Marine Exchange of Alaska
Vessel Tracking System
Google Earth
User's Manual

Marine Exchange of Alaska's Vessel Tracking System receives and disseminates AIS (Automatic Identification System) data to aid safe, secure, efficient and environmentally sound maritime operations.

Google Earth (GE) Display -Table of Contents

Introduction

PACTRACS
Operated by the Marine Exchange of Alaska

Google Earth

Welcome to the Marine Exchange of Alaska's Vessel Tracking System - PACTRACS. This system is designed to track vessels in the Pacific to aid safe, secure, efficient and environmentally responsible maritime operations. Using PacTracs, you can find information on a vessel's present locations, speed, route and destination.

PACTRACS is capable of receiving, processing and displaying the locations of vessels received by both AIS (Automated Identification System) and satellite tracking systems. The Marine Exchange established and operates over 60 AIS receiving stations in Alaska from Prudhoe Bay west to Adak and south to Ketchikan that provide the positions of AIS equipped vessels operating near these sites. The Marine Exchange also has access to AIS information from AIS sites in the lower 48 operated by affiliate Marine Exchanges. The reach of AIS coverage, depending on location, elevation, terrain masking, ranges from 20-150 miles from AIS sites with vessel position reports received several times a minute.

The vessel data collected and processed by PACTRACS may be viewed by Marine Exchange of Alaska members via the Marine Exchange's PACTRACS display or via other display options utilized by authorized users of the system, including the overlaying of PACTRACS data onto users' Google Earth display. This user's guide explains how to superimpose PACTRACS vessel data onto Google Earth, providing an easy display capability with some reduction in features...

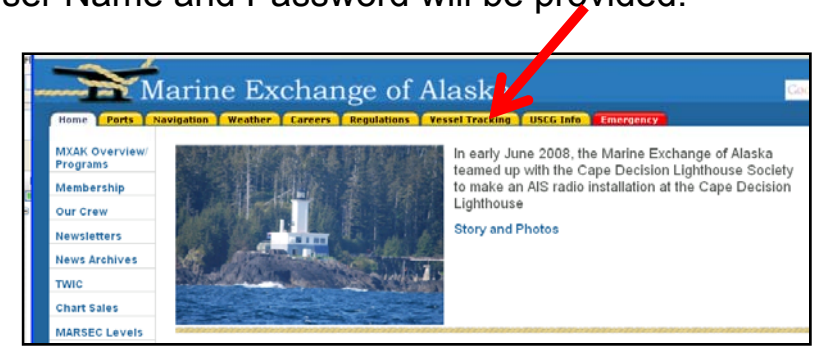
Loading and Enabling Google Earth Display

The below procedures are also available on the Marine Exchange of Alaska's web site (www.mxak.org) accessed by selecting the "vessel tracking" tab.

Step 1: Ensure Google Earth is installed on your computer. If not installed, go to the Google web site, locate the Google Earth software and download it onto your computer.

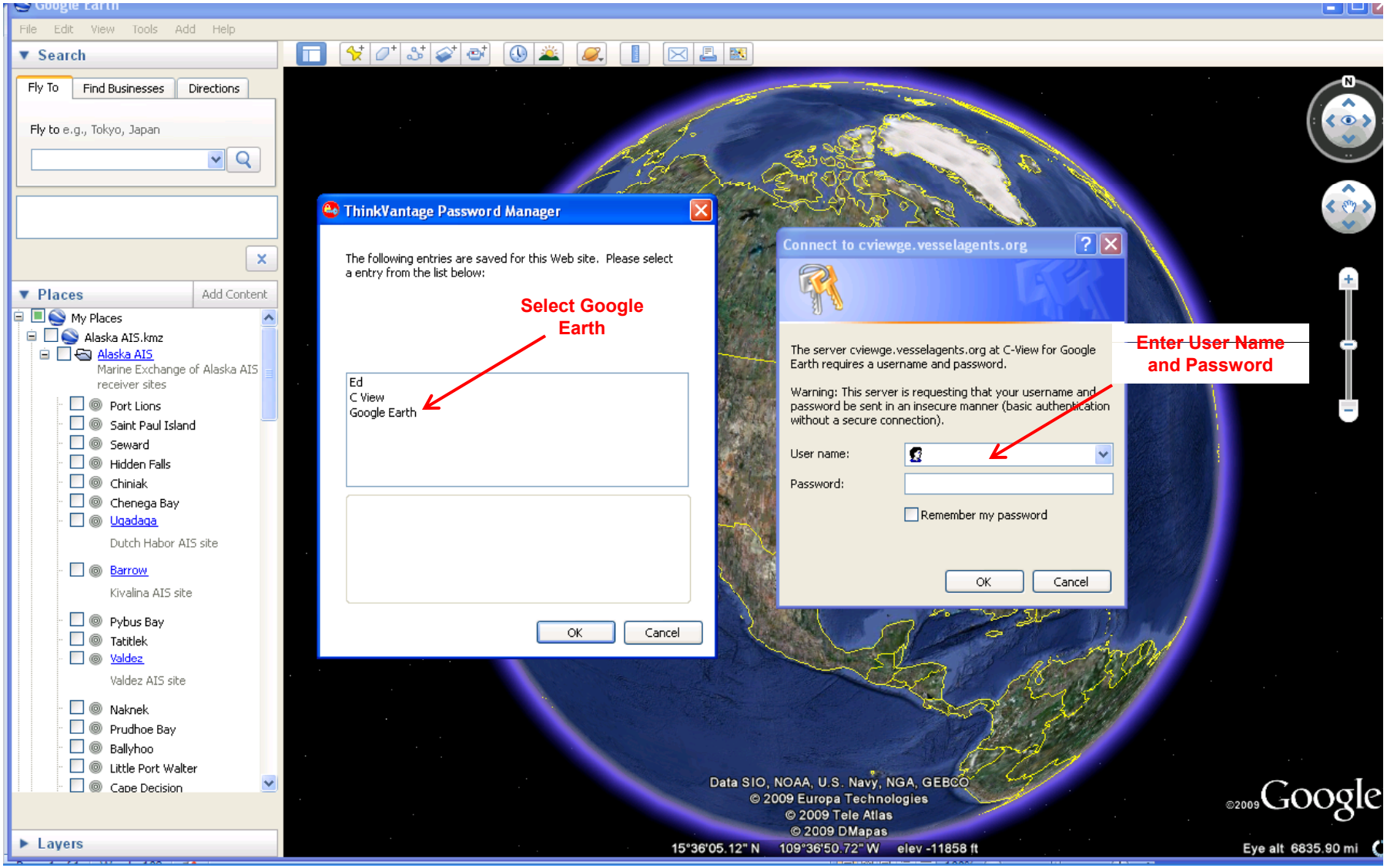
Step 2: Contact the Marine Exchange of Alaska (MXAK) and request a user name and password be assigned. Requests may be made 24 hours a day by calling (907) 463-3064 or via e-mail at ops1@mxak.org. (Access is limited to MXAK members) You will need to provide your name, the company you work for or represent, phone number, e-mail address and regions of Alaska and or Puget Sound you need to see vessels. A "case sensitive" User Name and Password will be provided.

Step 3: Select the appropriate authorized regional "Google Earth Data Feed" button on the Marine Exchange web site (www.mxak.org) in the "vessel tracking" section's Google Earth subset. Selecting the regional button will automatically download a "kmz" file that is continually updated with vessels' AIS data received that is superimposed onto the Google Earth display.



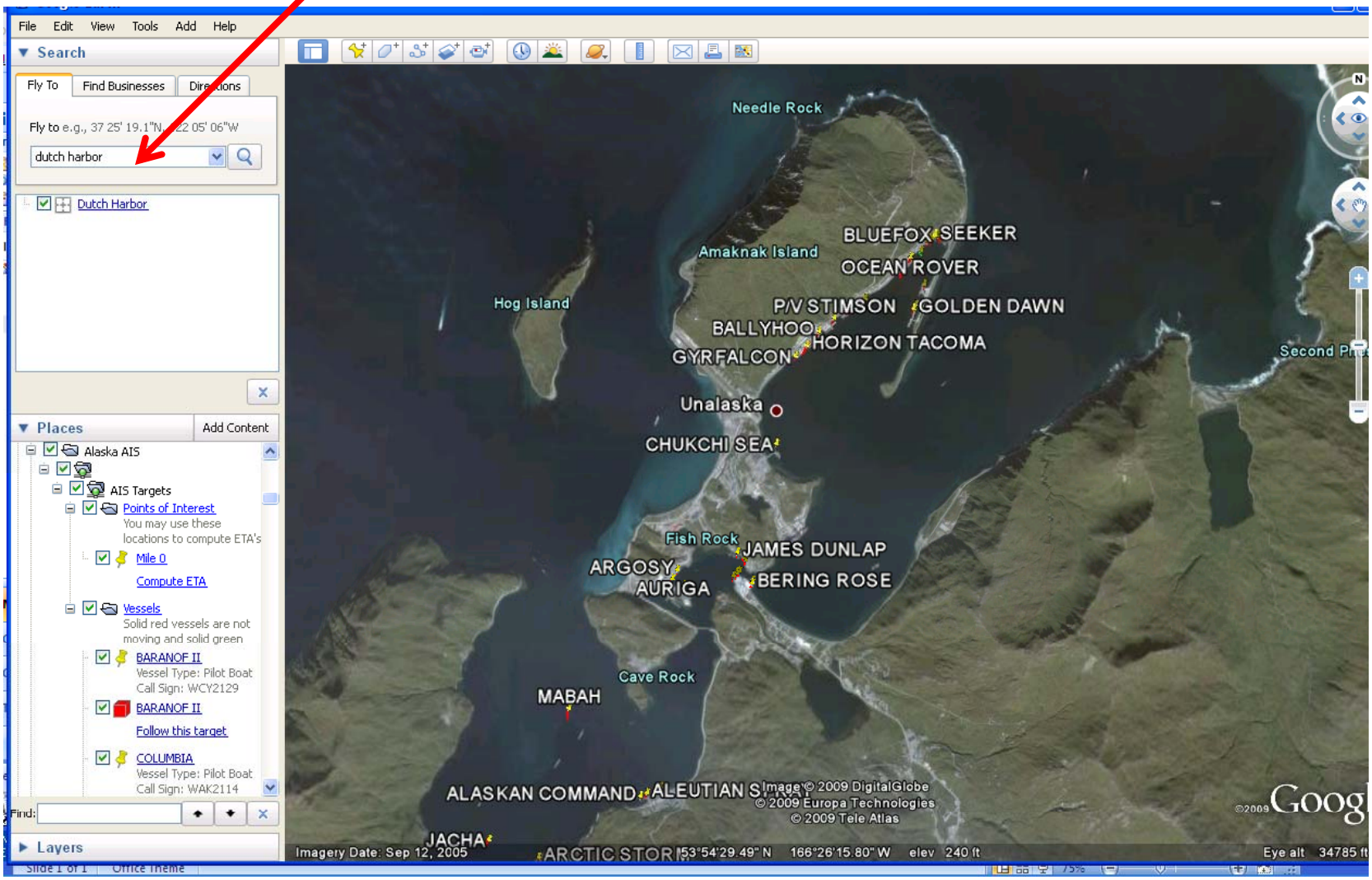
Step 4: After the Google Earth data feed button is selected, the computer will automatically open Google Earth and prompt you for selecting a display option and your user name and password as shown on the following slide.

Entering User Name and Password



GE Display Features – Vessels in Port

Enter Port name to locate vessels in the area



GE Display Features – Vessel Listings

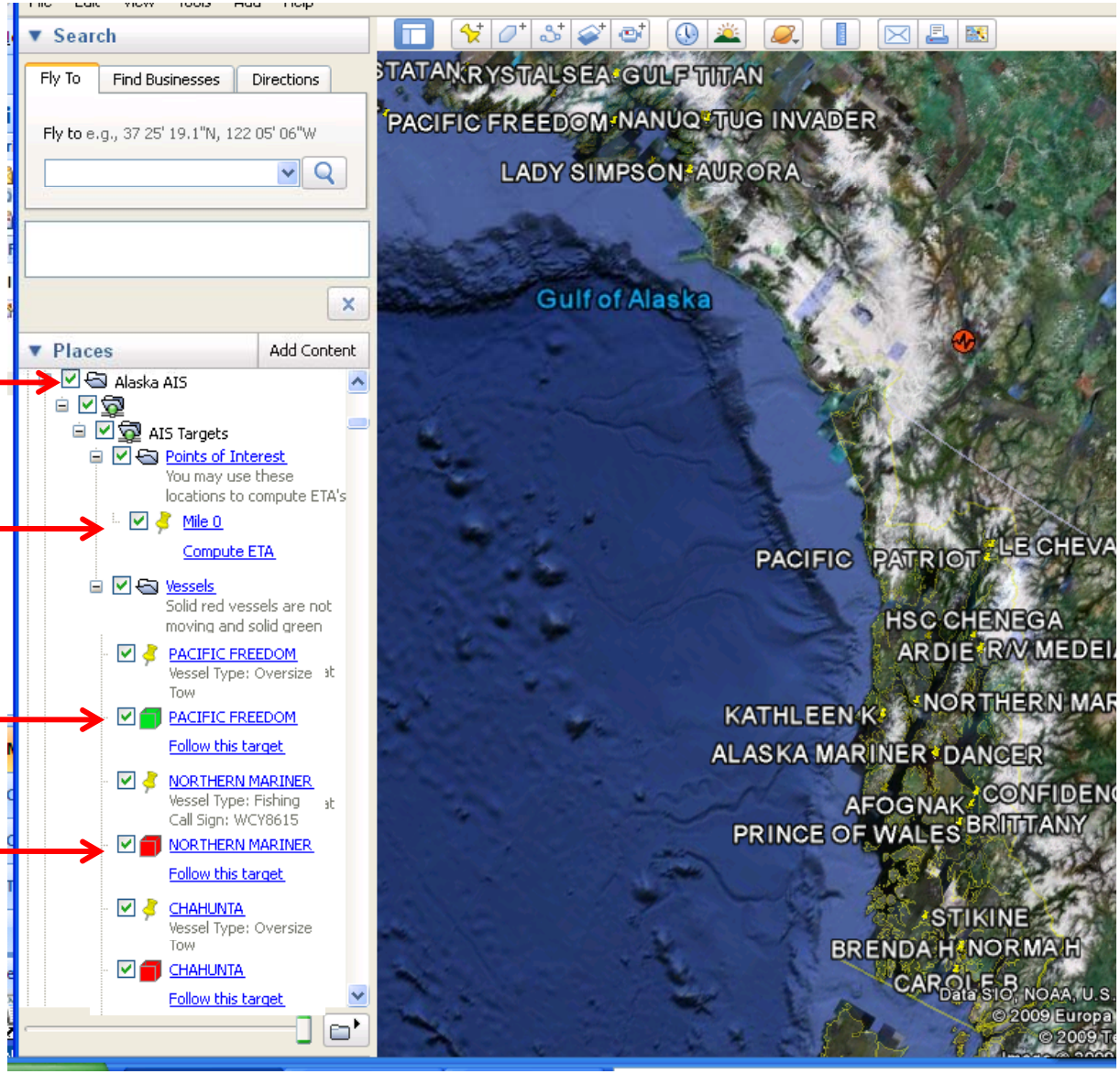
Features of the Left Display Panel

Able to select or deselect display of vessels

Selection of Yellow Pin displays text box with vessel information (shown on next slide)

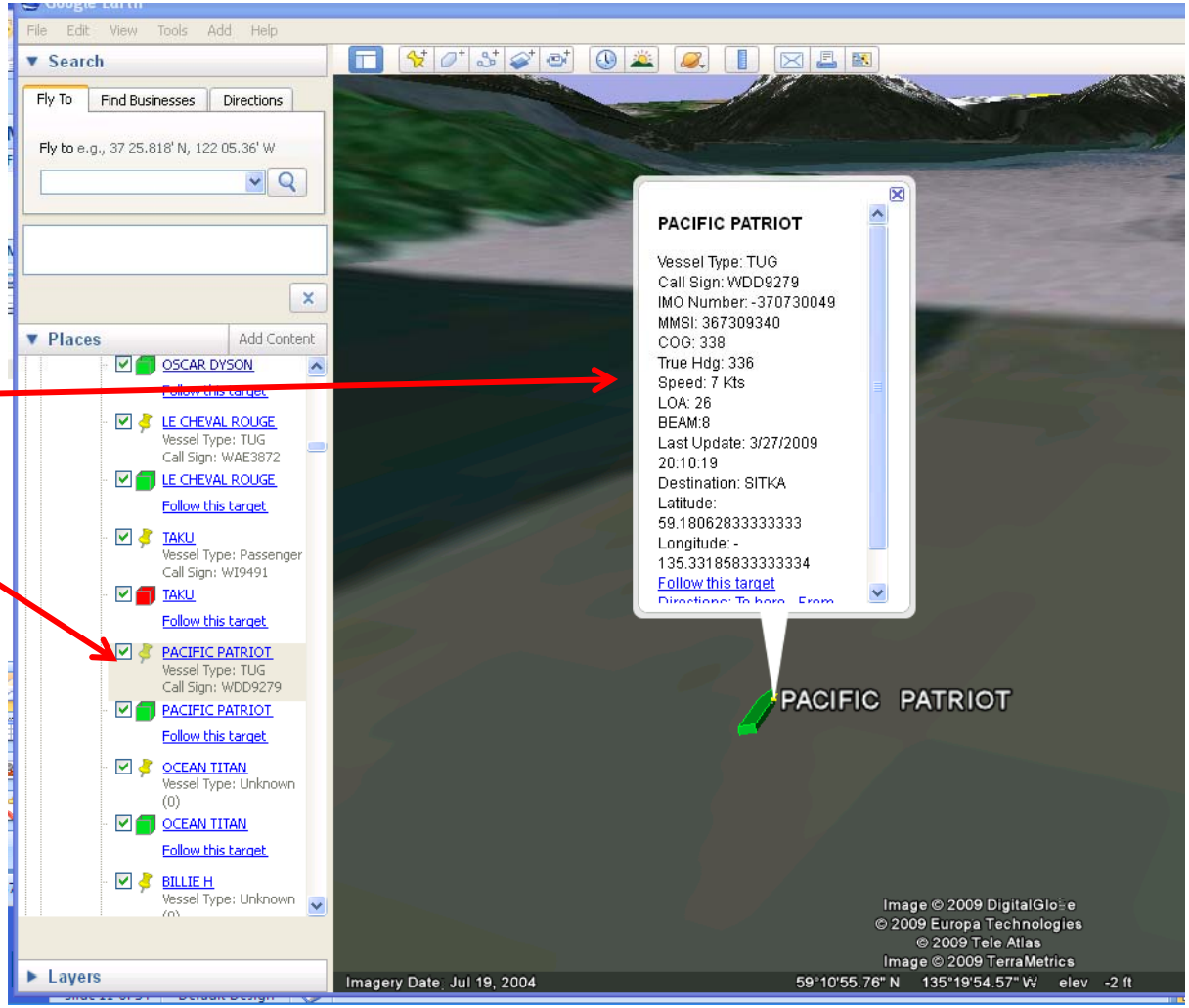
Green Box indicates vessel is underway

Red Box indicates the vessel is moored or anchored



GE Display Features – Vessel Information

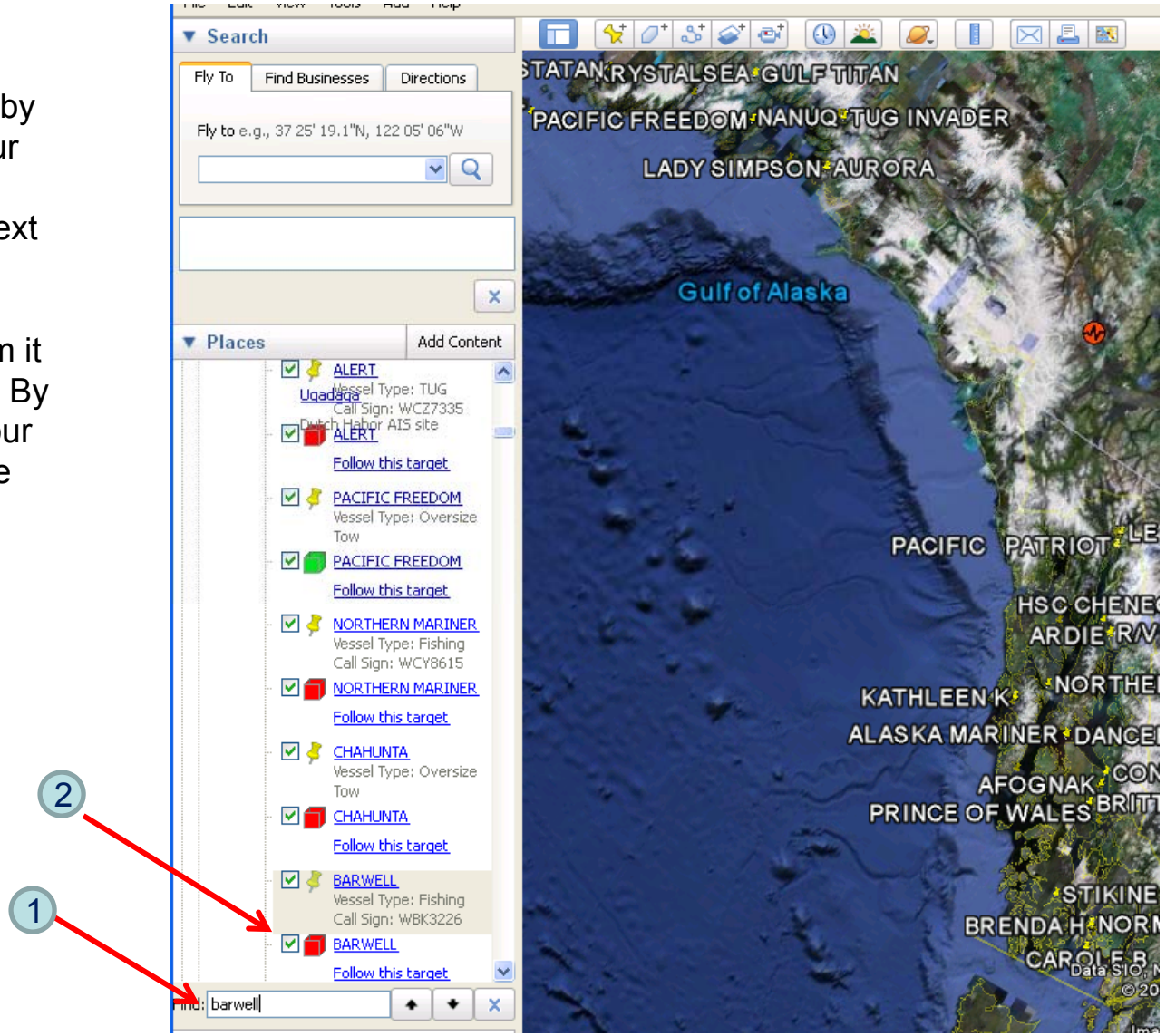
Selection of Yellow Pin displays text box with vessel information



GE Tools – Find Vessel

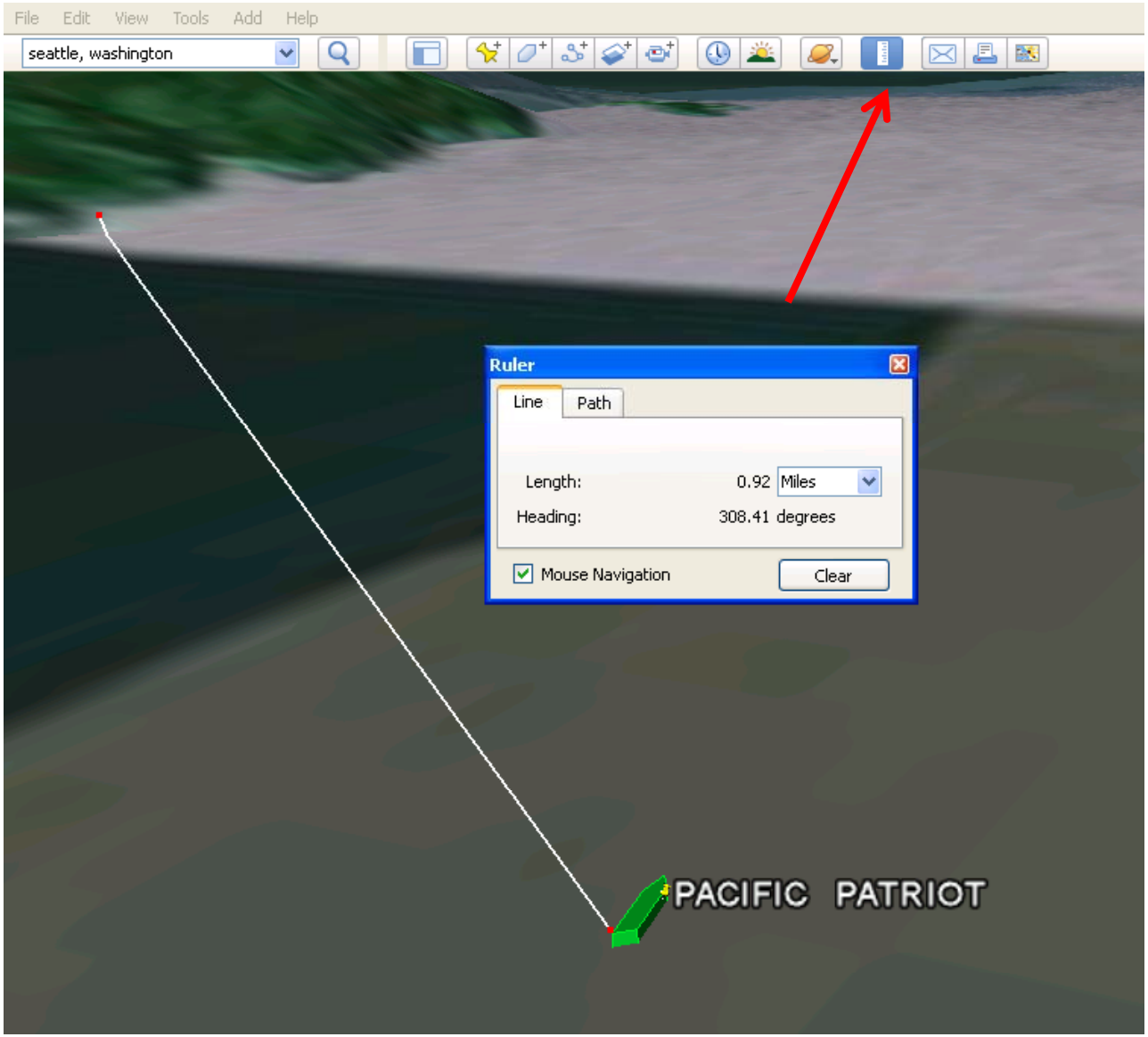
"Find" vessel may be done by selecting "Control F" on your computer (Command F for Macs) which provides the text entry box below (1)

If the vessel is in the system it will be shown in the listing. By selecting the vessel with your cursor and clicking on it, the display will zoom into the vessel. (2)



GE Tools – Measuring Distance

Distances may be measured by selecting the ruler icon on the upper tool bar as shown



GE Tools – Mouse Activated Movements

The upper right of the screen shows the mouse navigation tools that are available to zoom, swoop or rotate the view.

1. Click the north-up button to reset the view so that north is at the top of the screen. Click and drag the ring to rotate your view.

2. Use the Look joystick to look around from a single vantage point. After clicking an arrow, move the mouse around on the joystick to change the direction of motion.

3. Use the Move joystick to move your position from one place to another. Click an arrow to look in that direction or continue to press down on the mouse button to change your view.

4. Use the zoom slider to zoom in or out. As you move closer to the water Google Earth swoops (tilts) to change your viewing angle to be parallel to the waters' surface. You can turn off this automatic tilt by going to the header and selecting (Tools>Options>Navigation>Navigation Controls.) For Mac (Google Earth>Preferences>Navigation>Navigation controls)