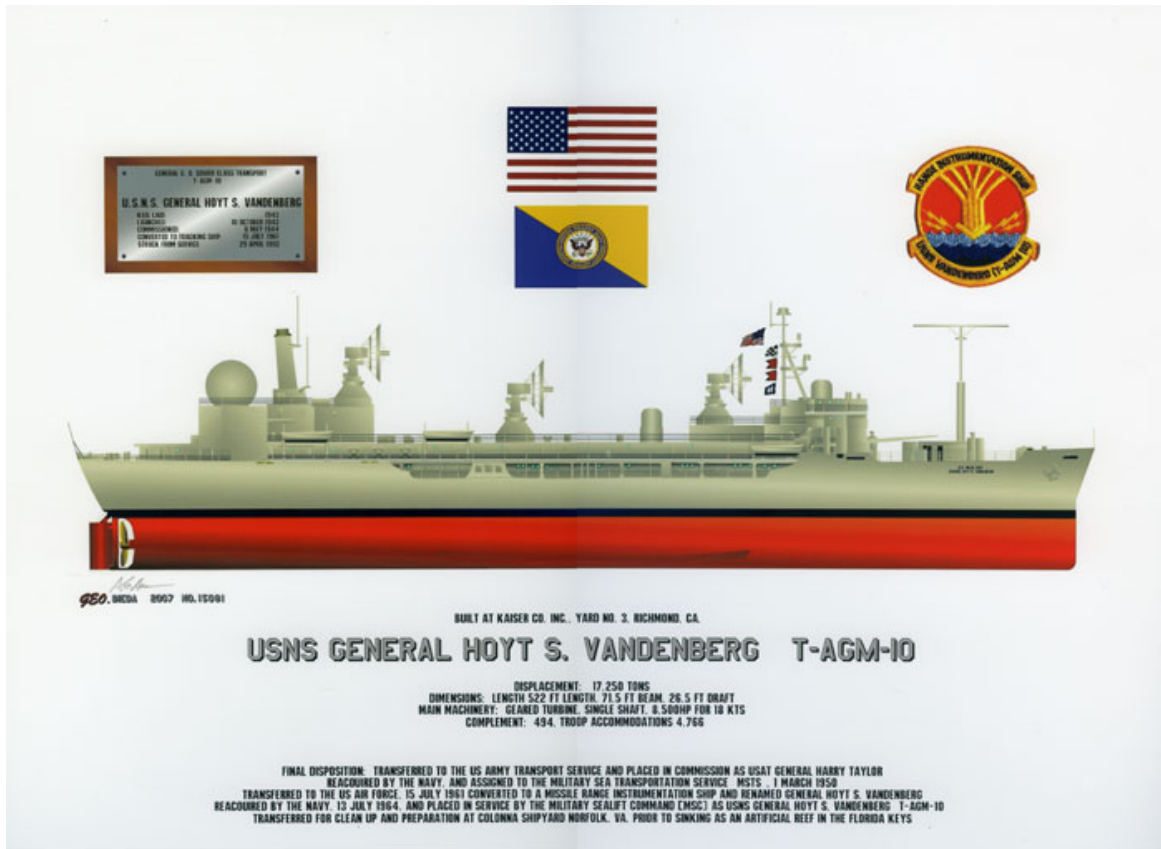


USNS *General Hoyt S. Vandenberg* (T-AGM-10)



Location

At **24.27 N, 81.44 W**. Approximately seven miles south of Key West International Airport in 150 feet of water in the Florida Keys National Marine Sanctuary.





At 10:22 a.m. on May 27, 2009, I was sitting on a tugboat just 200 yards (183 m) astern of a 523-ft (159-m) behemoth, the Gen. Hoyt S. Vandenberg. I know that from looking at the EXIF data on my photos, for at that precise moment the camera caught the explosive charges cutting gaping holes in the ship's hull. Filled with 300 tons of concrete and pig-iron ballast, the Vandenberg followed its last set of orders with military precision: It sank to the sea floor in just under two minutes, settling in upright, intact and ready to receive divers. Just like that — after 12 years of planning and work — Key West was home to the newest world-class wreck dive. The Vandenberg finds itself in good company. Although the Keys have historically been better known for the fishy, shallow reefs of the Florida Keys National Marine Sanctuary, they are also home to an armada of sunken ships that in size and scope rival many a small nation's navy. If wrecks are your passion, then the Keys just might be your next destination. The Vandenberg has a long and storied past. Originally built as a troop transport under the name USNS Gen. Harry Taylor, the ship saw duty in World War II. It was decommissioned in 1946, briefly reacquired by the Navy in the 1950s and retired again. The ship was later transferred to the U.S. Air Force, underwent an extensive refitting to serve as a missile tracking ship and recommissioned as the USAFS Gen. Hoyt S. Vandenberg.



It was retired from military service a final time in 1983 and joined the James River Reserve Fleet. Before being selected by the Key West-based Artificial Reefs of the Keys for artificial reef duty, the Vandenberg served as a set for the 1998 action movie "Virus."





Aerial shot of the Vandenberg above Key West's Old Town skyline.

The immense wreck, from its bluff superstructure to the massive radar dishes, is a marvel to dive. The ship offers a solid 100 ft (30 m) of relief with dive profiles for everyone from novice divers to advanced technical and wreck-penetration divers. There are seven mooring buoys on the Vandenberg, and you'll need to dive them all to get the complete picture of the wreck. On my first dive shortly after the vessel sank, I went down the mooring line forward of the bridge, anchored to the kingpost. Even though the Vandenberg rests at a depth of 140 ft (43 m), on my dive I never went below 82 ft (25 m) and could have stayed even shallower, exploring interesting structures such as its enormous radar dishes. It's amazing to think that this wreck will only get better with each passing year as it becomes a living reef. By now the ship sports a light, fuzzy cloak of algae as Mother Nature begins to decorate the wreck in her inimitable style. Soon the bright white paint will fade, and the Vandenberg's sharp, manmade edges will be smoothed out by encrusting growth. With that transformation come fish that graze on algae. Fish, of course, bring out even bigger fish, the top-of-the-food-chain predators. And with the Gulf Stream gusting over the wreck, you never know what pelagic creature might wander in for a reprieve from a life drifting along in the current. Turtles, in particular, like to snooze in the lee of a good shipwreck. Before long, a complete reef ecosystem will tower above what had been an area of flat, featureless sand. With each passing year, the ship will attract more fish and more color — all the more reason to make a visit to Key West and the Vandenberg an annual pilgrimage.



Gen. Hoyt S. Vandenberg, the second Air Force chief of staff, was one of the youngest Americans to rise to four-star rank. (U.S. Air Force photo)

Name:	USS General Harry Taylor
Namesake:	Harry Taylor
Builder:	Kaiser Co., Inc.
	Richmond, California
Laid down:	22-Feb-43
Launched:	10-Oct-43
Identification:	Code letters and radio callsign NJHB 
Commissioned:	8-May-44
Decommissioned:	13-Jun-46
Struck:	3-Jul-46
Fate:	To U.S. Army Transport Service
Renamed:	USAT General Harry Taylor
Operator:	U.S. Army Transport Service
In service:	after 3 July 1946
Out of service:	1-Mar-50
Fate:	To MSTs
Renamed:	USNS General Harry Taylor
Reclassified:	T-AP-145, 1 March 1950
Operator:	MSTs
In service:	1-Mar-50

Out of service:	19-Sep-58
Struck:	10-Jul-58
Fate:	To National Defense Reserve Fleet, Beaumont, Texas
Operator:	U.S. Air Force
Acquired:	15-Jul-61
Renamed:	USAFS General Hoyt S. Vandenberg
Namesake:	Hoyt S. Vandenberg
In service:	1-Jun-63
Out of service:	1-Jul-64
Identification:	Code letters and radio callsign NBBP 
Fate:	To MSTs
Renamed:	USNS General Hoyt S. Vandenberg
Reclassified:	T-AGM-10, 1 July 1964
In service:	1-Jul-64
Out of service:	1983
Struck:	29-Apr-93
Fate:	NDRF James River, Movie Virus, NDRF

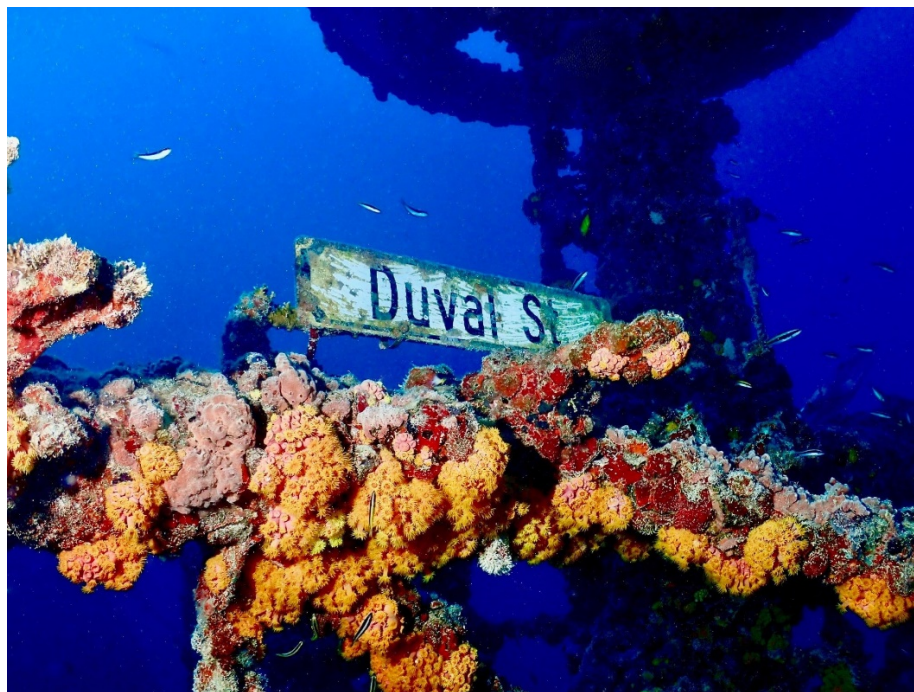
In service:	2007
Out of service:	2008
General characteristics	
Class & type:	General G. O. Squier-class transport ship
Displacement:	9,950 tons (light), 17,250 tons (full)
Length:	522 ft 10 in (159.36 m)
Beam:	71 ft 6 in (21.79 m)
Draft:	24 ft (7.32 m)

Propulsion:	single-screw steam turbine with 9,900 shp (7,400 kW)
Speed:	17 knots (31 km/h)
Capacity:	3,224 troops
Complement:	356 (officers and enlisted)
Armament:	As built: <ul style="list-style-type: none"> • 4 × 5"/38 caliber guns • 8 × 1.1"/75 Anti Aircraft guns • 16 × 20 mm Oerlikon Anti Aircraft guns

Historical Highlights

- **May 8, 1944:** Vessel commissioned U.S. Army Transport Gen. Harry Taylor.
- **June 13, 1946:** Taylor decommissioned.
- **March 1, 1950:** Taylor reacquired by the Navy for use by Military Sea Transportation Service.
- **July 15, 1961:** Taylor transferred to the U.S. Air Force and named Gen. Hoyt S. Vandenberg.
- **1962-1983:** Vandenberg employed tracking missiles and spacecraft launches in the Atlantic and Pacific. Tasked as Advanced Range Instrumentation Ship (ARIS) USNS Vandenberg was designated ARIS 2; sister ship USNS Arnold was ARIS 1.
- **Jan. 1976:** Ship relocates to Port Canaveral, Fla., where it remains until 1983.
- **1983:** Vandenberg retired and moved to James River, Fort Eustis, Va., for storage.
- **April 1993:** Vandenberg title transferred to the U.S. Maritime Administration (MARAD).
- **Sept. 1996:** Vandenberg leased to Universal Studios for the filming of the movie "Virus."
- **June 1996:** From a list of about 400 ex-military ships at the time, Key Wester Joe Weatherby identifies Vandenberg as top candidate for an artificial reef off Key West.

- **Aug. 9, 1999:** Weatherby organizes Artificial Reefs of the Keys with the objective of acquiring the Vandenberg.
- **Jan. 2007:** Vandenberg's title transferred to the State of Florida for reefing.
- **March 31, 2007:** Vandenberg withdrawn from the James River Naval Reserve Fleet and towed to Colonna's Shipyard in Norfolk, Va., for cleanup and preparation.
- **April 22, 2009:** Vandenberg arrives at Key West for final preparations to be sunk as an artificial reef about six miles south of the island.
- **May 27th, 2009:** The Hoyt S. Vandenberg Sank @ 10:24 Am, and is now an artificial reef, in Key West, Florida.



Dive Site Information

A diver's delight, the massive General Hoyt S. Vandenberg is the newest compelling addition to the Florida Keys Shipwreck Heritage Trail. At the trail's southernmost point nearly seven miles south of Key West, the massive ship offers a bounty of captivating dive spots for novices and advanced divers alike. The decommissioned ship, once a venerable part of the U.S. Navy and U.S. Air Force, was intentionally sunk in 2009 to create the Florida Keys' largest artificial reef. Resting upright on the sand, the ship almost immediately began attracting sea life.

At 524 feet long, the Vandenberg is almost two football fields long and stands 10 stories tall. The ship's structure begins at depths of about 40 feet and continues to a depth of 145 feet, offering so many great

nooks, masts, and radar dishes to explore that it cannot all be seen in a single dive. It is the world's second largest ship to ever be sunk to form a coral reef.

For Beginners

Ever mindful of creating a fantastic dive reef, planners purposefully moved some ship structures to form more interesting dive spots, even at the upper levels. As a result, the Vandenberg is great for beginning dive classes and novice divers. Its upper structures feature an expansive crows nest, an engrossing bridge, radar dish antennas and the ship's communications center. The foremast and kingpost each present fun spots for photos.



Sadly, the famous satellite dish was destroyed during a hurricane, a few years ago.

For Experienced Divers

With abundant elevator shafts, cargo holds and hallways, the Vandenberg is a joy for light-wreck penetration divers. The holes that were cut into the ship's hull to facilitate sinking now offer handy swim-through spots for advanced divers at more than 100 feet. At 140 feet, divers can explore the ship's 25-foot tall rudder and prop. During ascension, deep divers can stop at the upper foremast and kingpost decompression spots and rest platforms.

Coordinates:

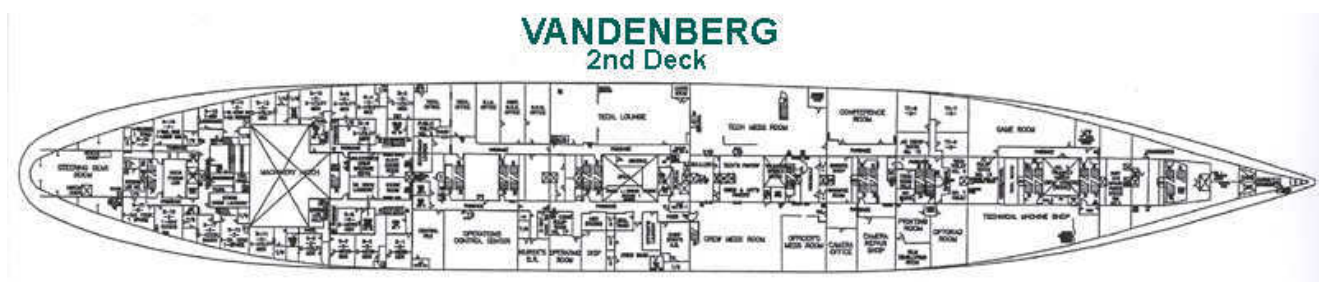
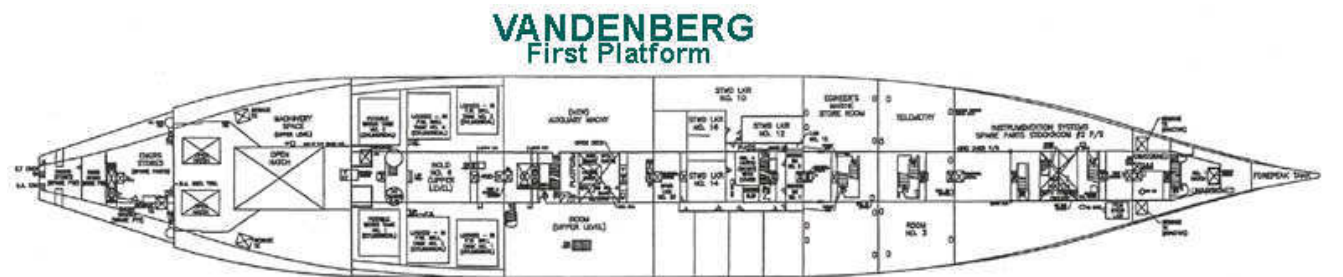
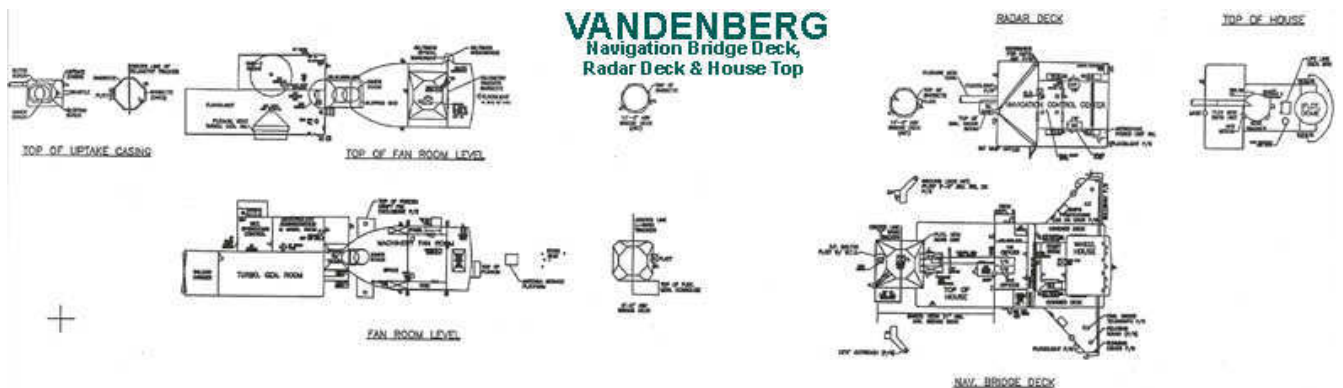
Bow Moring Ball: N 024 27.558' / W 081 44.179'

Stern Moring Ball: N 024 27.593' / W 081 44.267'



<http://ussvanderberg.com/index.html>

Vanderberg deck plans and ship profile - Key West, FL



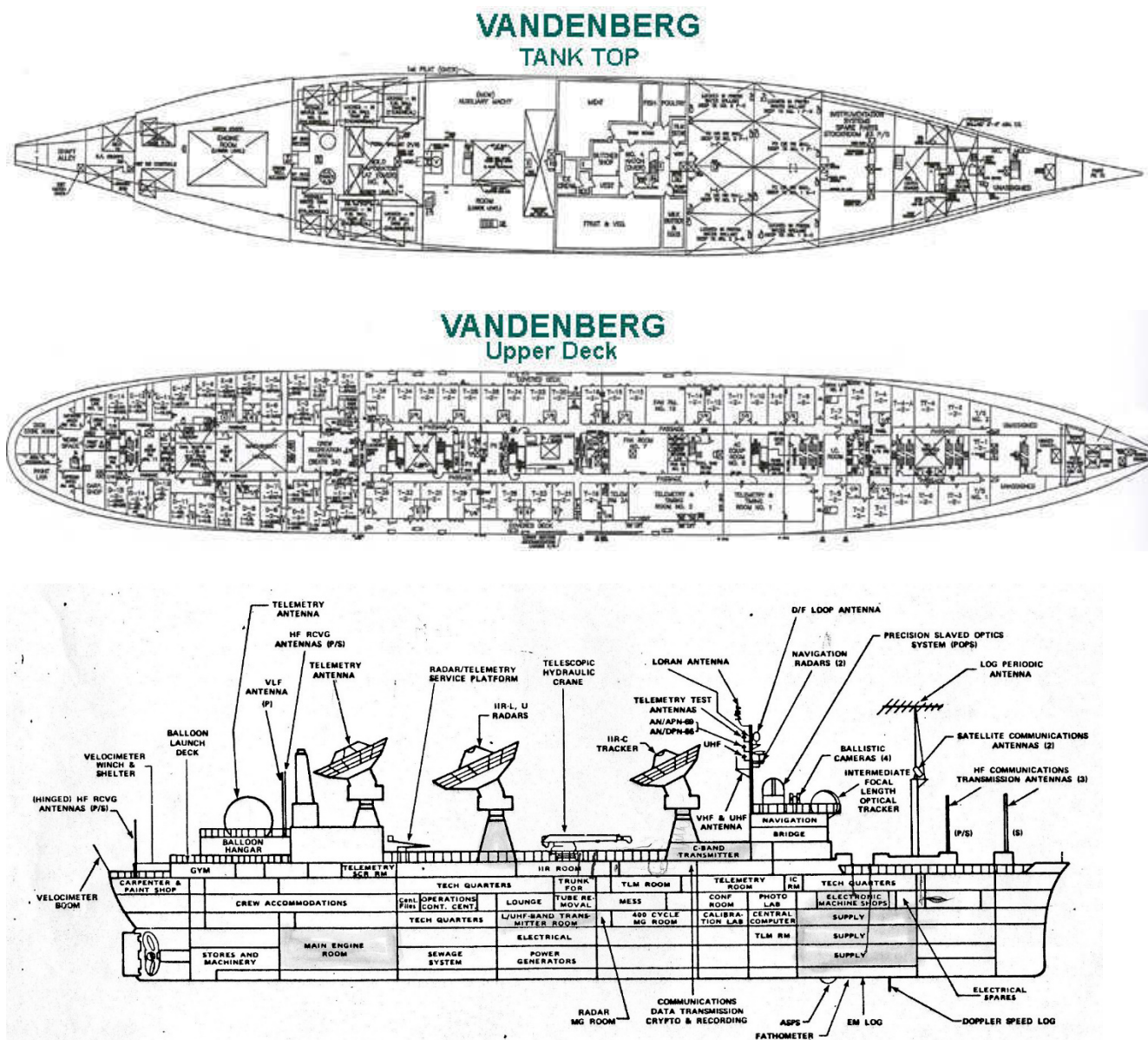


Figure 4-3. ARIS Inboard Profile -- USNS Vandenberg

USS Vandenberg Dive Safety

The USS Vandenberg is the most outstanding artificial reef dive location in the US. Divers should be especially careful on this dive site, as the size and layout of the wreck increase the potential risks associated with any dive. This is not intended to be dive training, nor a complete list of all risks which may be encountered while diving, but it points out some of the most significant precautions divers can take to eliminate hazards. Getting maximum enjoyment from a dive on the USS Vandenberg starts with not having an incident during your dive.

Preparation. Go over gear and review the dive plan the night before your scheduled dive. Many accidents start with a simple oversight such as forgetting a piece of gear, or rushing to assemble your dive kit. A dive on the USS Vandenberg should get a little extra attention to detail, so that everything has been checked more than once.

Get a good dive briefing. Your dive charter operator will provide details in your dive briefing which can help keep you safe and more thoroughly enjoy the dive. Information such as currents, site conditions, safety information, and special procedures used by that operator are important.

Note your entry location. The USS Vandenberg is a big boat. There will likely be only 6 mooring buoys for over 500 feet of wreck length. Be aware of where the buoy is for your boat, and its number. As you descend, note the location of the downline where it is attached to the wreck, and nearby features. The line itself may be difficult to see when you are looking for it to ascend from your dive, but familiar large structures on the ship can help you find it. As you leave the line to explore the wreck, look BACK towards the line to see what the structures look like from that direction.

Watch your depth. The ocean floor at the dive site is actually deeper than recreational diving depths. Most of the interesting features of the wreck are shallower than 100', but in the event that you wish to explore deeper, be aware that you can suddenly find yourself in 150 feet of water fast. Narcosis can kick in anytime, and make you even less aware of your situation. Also, at greater depths, your gas consumption will increase greatly. Watch your buoyancy and location to stay where you want to be. Also, nitrox divers should be aware that the ocean floor at the site is well beyond the depth where 32% oxygen becomes toxic.

Turn pressure. Unlike an up-and-down dive, or drift dive, on the Vandenberg you may need to travel back to the ascent line before you begin moving to the surface. If you have explored a lot of the wreck, you may have covered a lot of ground, and may be several hundred feet down the ship, away from your ascent line. It will take some time to make your way back, which will require available gas for breathing. Waiting until you have used ½ of your tank will not work. Your trip back to the line may take more gas than the outbound trip, if there is a current, or other unforeseen circumstances. Using a typical 3000 psi start pressure, turning your dive at 1500 could put you in a bad situation. Be sure to use at least the "Rule of Thirds", or even a more conservative turn pressure on the Vandenberg, due to its large size. Ascending in open water would put you at risk of being swept away without your dive boat seeing you. In 10 minutes, a 1 knot current can pull you 1/4 mile away. Don't rush to try and see the whole ship on one dive. The Vandenberg will still be there tomorrow. Make sure you are too.

Wreck penetration. There are numerous features to enjoy on the Vandenberg which do not require any entry into the ship. However, the lure of open doors, hatches, and passages can be strong. Gliding into an interior compartment "just to take a look" can seem like an innocent decision, but a single fin kick can silt out an entire room, obscuring the view of the door and daylight. If the thought of being in the dark, seemingly trapped underwater does not motivate you to stay out of the wreck's interior, [read this account of a real-world experience of exactly that scenario](#). Wreck penetration of a ship as complex as the USS Vandenberg is much like a cave dive; think of the Vandenberg as a big steel cave system. Cave divers undergo extensive training before entering an overhead environment, and follow advanced procedures with specific gear configurations, (high intensity lighting with triple backup, completely redundant regulator systems, guidelines and reels, etc.). At the entrance to many underwater caves is this warning sign:



STOP

**PREVENT YOUR DEATH!
GO NO FARTHER.**

FACT: More than 300 divers, including open water scuba instructors, have died in caves just like this one.

FACT: You needed training to dive. You need cave training and cave equipment to cave dive.

FACT: Without cave training and cave equipment, divers can die here.

FACT: It CAN happen to YOU!

**THERE'S NOTHING IN THIS CAVE WORTH DYING FOR!
DO NOT GO BEYOND THIS POINT.**

It would be impossible to post such a sign at each entry point on the USS Vandenberg, but divers should consider the same warning regardless.

Cutting tools: The Vandenberg will eventually be visited by many fishing boats, and will accumulate lost fishing line over time. Be sure to have at least 2 cutting devices within reach on your gear. A set of trauma shears/safety shears is recommended, as a standard dive knife may not be able to cut through steel leader or high strength "Spider Wire" type line.

Ascent: Be sure to ascend on an upline to a mooring ball. The open water above the wreck will likely contain moving boat traffic. Ascent up a line will keep you from impacting a boat hull or propeller, and make it easy for a safe boarding back to your dive boat.

Training: Refer back to all of the information you learned in your dive training, and remember to follow the rules to keep you safe. Open water divers should consider taking an advanced open water course if regular diving on the Vandenberg is anticipated. Not only will it add a margin of safety, but it will provide the skills to enjoy the wreck more completely. Divers who have not been in the water for some time may also want to consider a refresher course dive, or guided dive to acclimate them to the wreck.