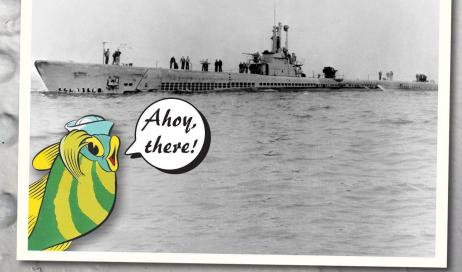


JUNIOR SUBMARINER'S

QUALIFICATION BOOKLET

USS Pampanito-World War II Submarine



Welcome Aboard!

My name is Pete Pampanito and I'm here to help you qualify as a Junior Submariner.
Together we'll learn about the USS Pampanito and her crew. When we're done, show this booklet to a staff member to complete your qualification as a Junior Submariner.

Did you know that the *Pampanito* is named after **me**, a small fish that lives in the warm waters of the Pacific Ocean near Central America? During World War II the U.S. Navy named all of their submarines after "denizens of the deep" (that's sailor talk for "fish and sea animals"). *Circle the other submarine names listed below.*

USS Sea Lion

USS Dolphin

USS Hornet

USS Shark



The Pampanito was built at Portsmouth Naval Shipyard.



Mrs.Violet Wolfenden christened the *Pampanito* on July 12, 1943.

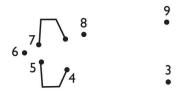


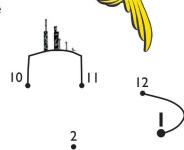
And on November 6, she was commissioned and became an official U.S. Navy submarine.

World War II submarines actually spent more time on the surface than they did underwater. They usually stayed underwater during the day and traveled on the surface at night. If she had to, the *Pampanito* could stay underwater for about 30 hours.

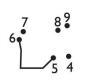
Did You Know that today submarines can stay underwater for months at a time?

Connect the dots to draw the profiles of a World War II submarine and a modern day submarine. Notice how different they look.





Write the numbers "383" for the USS Pampanito on the profile of the World War II submarine.









Now let's go below to see where the crew worked and lived. The area each man was assigned to was known as his duty station. Some men even lived in their duty station.



AFTER TORPEDO ROOM

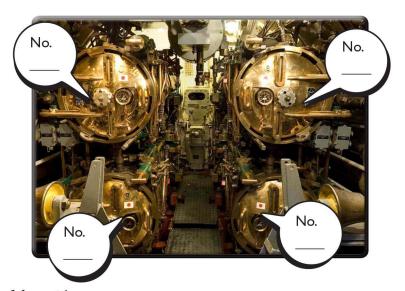
We're in the stern (back end) of the submarine where the Torpedomen lived, worked (assigned duty station), and slept.

How many bunks can you find in this room? _____

Torpedoes, like the one I'm holding, were also called fish. They were stored on skids or racks and were fired out of the torpedo tubes.

Circle the number of torpedoes you see in this room. I 4 7 9

Each torpedo tube has a shiny brass door with a Number on it. Find the torpedo tube doors in this room and then put the correct number on each door in the picture below.



Did You Know that toilets on board a ship or boat are called heads? Keep your eyes open for the heads on the USS Pampanito.



How many levers are there?

COMPARTMENT 2

MANEUVERING ROOM

Each compartment (room) is separated by a watertight door. Be careful going through the doors on the sub. Some compartments have hatches overhead with ladders that lead to the deck. Try to find them as you walk through the sub.

As we move forward through the first door, we enter the maneuvering room. This is where the men controlled the submarine's speed and its forward or backward motion. Look at the levers on the panel.

rion many revers		
How many levers	have an "REV" (for reverse) on them?	

Sailors don't use the terms left and right when they are on a ship. When you are facing the bow (front) of the *Pampanito*, the left side is called port and the right side is called starboard.

To get through the Maneuvering Room we can only walk down one side of this compartment. *Circle the correct side*:

Port

Starboard

Did You Know that a submarine is always called a boat and never referred to as a ship?

AFTER ENGINE ROOM

The Pampanito has two engine rooms – the After (back or toward the stern) Engine Room and the Forward Engine Room. Each engine room has two engines. We are in the After Engine Room.

Look at the engine and find the Builder's Plate. This is a brass plate fastened to the engine. Circle the correct name of the manufacturer (builder) and the city and country where the engines were made.

Westinghouse Chicago USSR

Fairbanks, Morse & Co. Portsmouth England

General Electric San Francisco USA

The diesel engines were only used when the submarine was on the surface. These engines charged 252 cells that are stored in the after and forward batteries. They also could run the electric generators. Underwater, the battery cells powered the electric generators that turned the propellers.

Draw arrows between the engine, generator, and battery cells to show the ways power got to the propeller.









As we walk through the submarine we will go through two compartments with the word "Battery" in their names. The battery cells used to power the boat are stored underneath these compartments. Before you leave this compartment, look into the starboard engine.

FORWARD ENGINE ROOM

This compartment also has two Fairbanks Morse Engines. They are just like the ones in the After Engine Room.

Both engines have little drip pans located on the deck plates near the bottom of the engine. These were used to catch oil when the engines were running. There is one drip pan for each engine cylinder.

Count the dr	ip pans to	figure out	how many	cylinders	each engine has.
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_____ Drip Pans = _____Cylinders

Cylinders are important because more cylinders mean a more powerful engine.

Did You Know the crew of the Pampanito could turn sea water into fresh water?

See the two large steel barrels at the forward end of this compartment? These are the evaporators that could each turn 500 gallons of sea water into 500 gallons of fresh water through a process called desalination.

In order to desalinate sea water you have to remove something so the water will become drinkable. What product that you might use at home is left over after desalination. (Circle one.)

Pepper Sand Salt Seaweed

AFTER BATTERY

The After Battery Compartment is made up of two distinctive parts – the Crew Berthing (sleeping) area and the Mess (dining room) & Galley (kitchen). These areas are in the same compartments because they are not separated by a watertight_

Remember the battery cells that the engines charged? Half of those battery cells (126 of them) are stored beneath the deck you're walking on. which is why this area is called the After Battery Compartment.

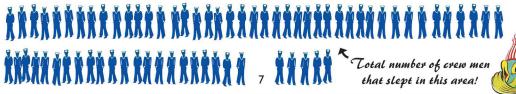
CREW'S BERTHING AREA

Unscramble the words below to discover some of the items located in the Crew's Berthing Area. (The locations at the left are clues to help you find these items.)

	dunraly	(Aft port)
	knubs	_ (3 high, port, center, starboard)
	cie remac hemacin	(Forward starboard
t	rifs ida tik	(Forward port)

How many crew members could sleep in here at the same time? (Count the bunks to find the answer.)

Did You Know the 70 crew members that slept in this area "hot bunked"? That meant they had to take turns sleeping, so when one got up another crawled into a warm bed.



CREW'S MESS & GALLEY

ate and relaxed. Walk forward into the Crew's Mess. The tables in the Mess could seat a total of 24 men at a time.	
How many men sat at each table?	
Since there were 70 crewmen, they ate in 3 shifts. When meals weren't being served the men who were not working at their duty stations often came here to relax.	
What kinds of things could you do here besides eat?	
<u> </u>	

Most of the Crew (except the torpedomen) slept right next to the Mess where they

Can you find the Battle Telephone? Make a rubbing of it in the space below.

The Galley is the small kitchen forward of the Mess. Here two cooks and one baker worked to make enough food to keep all the men fed. In addition, Stewards (busboys) prepped the dining area while Steward Mates (waiters) served the officers. The crew served themselves.

CONTROL ROOM

Look at the room on the port side near the watertight hatch. This is the Radio Room where the *Pampanito* sent and received coded messages. *Can you break the coded message below?* Use the code on the left. It's based on each letter of the Alphabet having a number between I and 26. Each word is separated by a slash(/).

9/1 - 13/1/21 - 19 - 19/16 - 1 - 13 - 16 - 1 - 14 - 9 - 20 - 15/10 - 18/19 - 21 - 2 - 13 - 1 - 18 - 9 - 14 - 5 - 18

What color are the lights in the control room? _____.

Did Gou Know these lights were used at night so the men's eyes would quickly adjust to the darkness when they went on deck at night for lookout duty?

Look up the ladder and you can see part of the Conning Tower where the Skipper looked through the periscopes. To the left of the top of the ladder, there are three alarms. These are the **general** alarm, **diving** alarm, and **collision** alarm.



On the picture to the right, draw a circle around the collision alarm, a star on the general alarm, and an arrow pointing at the dive alarm.



CODE

H -- 8

J – 10 K – 11

L-12 M-13

N - 14

0 - 15

P - 16 Q - 17

R – 18 S – 19

T - 20

U-21

V - 22

W - 24 X - 25

Z - 26

These big white wheels controlled the bow and stern dive planes. The dive planes helped the sub go down (submerge) and up (surface).

Have you ever stuck your hand out the car window and pointed your fingers up? That's how the dive planes work.

FURWARD BATTERY

This is the area where the officers all slept, ate, and relaxed. There were 10 officers on the USS *Pampanito*. Only the Skipper (Commanding Officer) of the sub had a room all to himself.

Circle the name of the Skipper.

R. J. SHERLOCK, LT. (JG)

L.S. ORSER, LT. CDR.

P.E. SUMMERS, C.O.

C.A. McGUIRE, CY

Look in all of the officer's staterooms. Each stateroom has bunks for sleeping, lockers for clothes and belongings, and a mirror hung above a silver object. This object is folded closed.

What do you think it would be if you opened it up?

Coffee maker

Sink

Table

Chair

As we walk down the passageway (hallway) look to the port and you will see the Ward room. This is where the officers ate their meals, read or wrote letters, and held meetings. The next small room on the port side is the Pantry where the Mess Stewards kept hot coffee and food ready for the officers to eat.

Look at the deck you are walking on. Do you remember what is beneath your feet? (Circle the correct answer.)

126 Battery Cells

Food Storage

Supplies

Did You Know that during World War II, Pampanito's crew called this area "Officer's Country"?



FORWARD TORPEDO ROOM

Do you get the feeling you've already been in this room, or one very much like it? If you feel that way, you're right! We started in the After Torpedo Room and now we are in the Forward Torpedo Room. You've almost finished walking through the submarine.

As you enter this compartment look around and find the place where I had my picture taken while in the



@ WALT DISNEY

Not everyone enjoyed this luxury. Most of the crew would go swimming when they needed a bath.

Circle the crew members who you think used the shower every day.

Torpedoman Cook

Mess Steward Electrician

Pharmacist Mate/Medic Baker

For the most part, this torpedo room looks almost identical to the one in the stern. Look at the torpedo Tube Doors at the forward end. How many are there?

Now look at the middle port torpedo tube door and circle its number. 3 4 7 2

Which do you think the numbers of the starboard tubes are? **Even** Odd

How many bunks can you find in this compartment? _____

In the middle of the room there is a ladder. Look up and you will see the escape trunk. This was a special escape hatch that submariners could use to get out of the boat if the sub could not surface.

EXTERIOR DECK STATION

When the *Pampanito* traveled on the surface, men were stationed as lookouts above the bridge. They would use binoculars to look for other ships and planes. *Unscramble* the letters below to discover the name of the famous island you would see if you were the port lookout.



CALRATZA

The *Pampanito* had three deck guns to help defend her when she was on the surface. Her best defense when in danger was to slip beneath the waves and out of sight. The little holes in the deck and the large ones along the sides of the superstructure (the deck area) helped the air beneath the deck escape and be replaced by water as the sub dove beneath the waves. These holes are called limber holes.

Look up at the very top of the *Pampanito*. Can you see something you might find in your house near the very top of the sub? *Circle the correct object*.



Did You Know submariners put this object at the top of the periscope shears when they entered their home port? They did it to tell everyone they had "swept" the seas clean of enemy ships.





During World War II, Walt Disney Studios provided artwork for submarine logos. That's who created me, Pete Pampanito. Another man named Carl Carlsen created my cousin Paul who was used on the submarine's Battle Flag, shown below.

Everything on the flag tells part of the submarine's history.

OWALT DISNEY

The white flags with the red dots represent the enemy ships sunk by the *Pampanito*.



The white flags with the red circles are for the enemy ships damaged by the sub.

 Each red / stands for one of the war patrols Pampanito completed.

The Red Cross with the number 73 on it honors the Prisoners of War rescued from the South China Sea by the crew of the USS *Pampanito*.

Can you find these submarine related words in this word search?

P	A	M	R	S	P	A	N	E
S	1	L	A	D	T	C	P	0
- U	W	1	D	1	Â	0	S	В
R	N	M	A	K	C	N	-U	E
·F	A	В	R	S	T	N	Λ	M
A	E	E	1	F	K	1	D	F
C	0	R	A	R	D	N	A	D
E	E	H	E	N	- 1	G	N	E
P	E	0	N	H	A	T	C	H
R	E	L	L	E	P	0	R	P
N	R	E	T	S	I	W	Z	E
N	0	S	F	T	H	E	E	D
E	L	A	D	D	E	R	E	P

AFT	PERISCOPE
BUNK	PROPELLER
CONNING	OWER
DIVE	RADAR
ENGINE	SKIDS
HATCH	STERN
LADDER	SURFACE
LIMBER HO	DLES

The unused letters will reveal a message about the submarine.

Junior Submariner Qualification Assessment

Match the Sailor terms on the left to their meanings on the right.

Port Toilet

Pampanito Right
Galley Dining Room

Stern Left

MessFront of boatHeadSubmarineBowTorpedoStarboardBack of boat

Fish Kitchen

World War II submarines, such as the Pampanito were named after:

People Cities Denizens of the Deep

Draw a picture of the USS Pampanito.

Concept and content: Clark Munroe, Diane Cooper, CJ Wierzbowski, Aaron Washington, Lesley Wilhite, Kathy Fields, Ann Hall, Andre Higginbotham, Lisa Ernst, Julie Paro, Josie Owens, Tom Sweetman, Laura Redding, Lenore Henry, Wendy Wright, Keith LeDue.

Design and graphics: Tony Mesler • Funding provided by a grant from The Cooper Foundation.

unior Tubmariner Qu ERTIFICATE



This certifies that on_

successfully completed the Junior Submariner's Qualification Booklet on board the USS Pampanito and qualifies to be known hereafter as a Junior Submariner.

Signature of Junior Qualification Verification Officer, USS Pampanito