



# ***PT-Boat Tactics***

## **with**

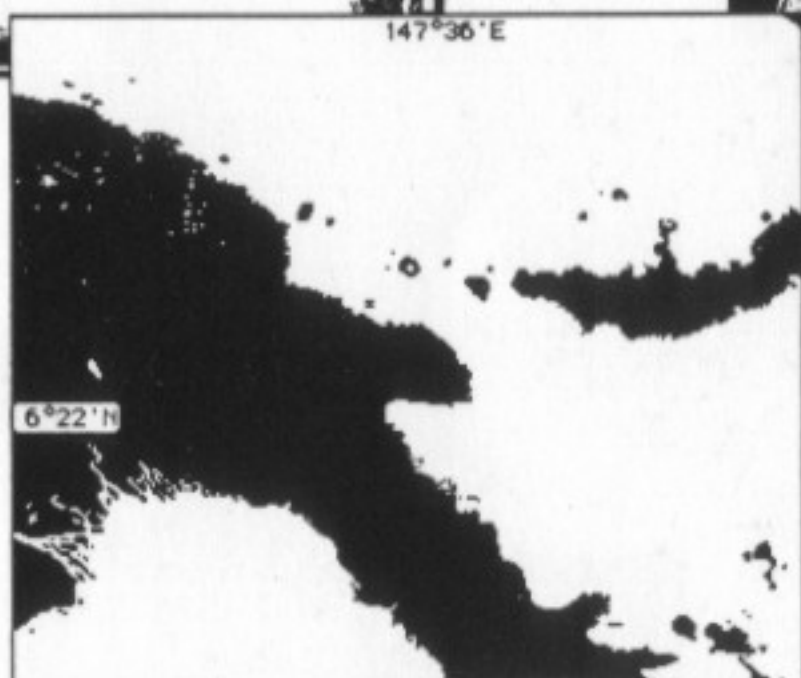
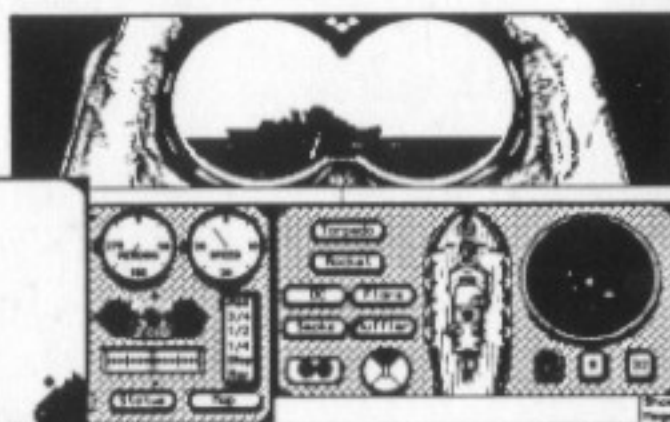
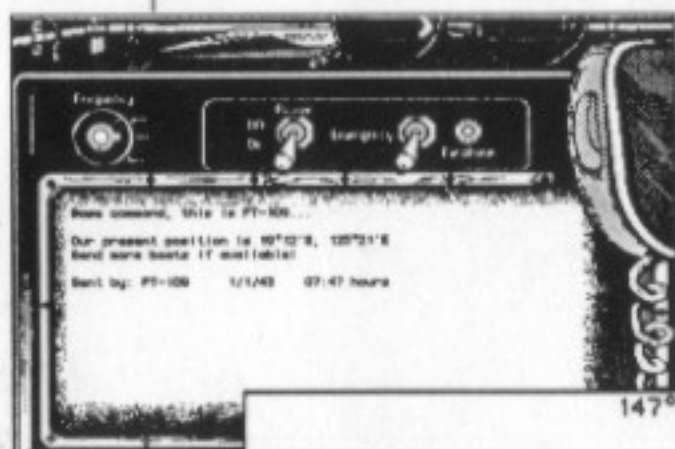
## **Nick McGowsky**

OFFICIAL ORDERS - DEPARTMENT OF THE NAVY



You and your crew are directed to move to the Phillipines and prepare for possible hostilities with Japanese Imperial forces. Your boat and crew are considered expendable. You must hold your position until relieved!

Commander,  
United States Navy,  
EV150 Patrol Torpedo Boats



***Spectrum HoloByte<sup>TM</sup>***



# ***Spectrum HoloByte***<sup>TM</sup>

A DIVISION OF SPHERE, INC.

2061 Challenger Drive

Alameda, CA 94501

(415) 522-3584

*This manual provides torpedo boat strategy, tactics, and history for use with the PT-109<sup>TM</sup> software program. For specific instructions in operating PT-109, please refer to the "PT-109 Operations Manual."*

PT-109<sup>TM</sup> design by Digital Illusions, Inc., Sean Hill, and Mark Johnson

Tactics Manual written by Larry R. Throgmorton and Don Gilman

Editing and Layout by Mark Johnson

If you have questions regarding the use of PT-109, or any of our other products, please call Spectrum HoloByte Customer Support between the hours of 9:00 AM and 5:00 PM Pacific time, Monday through Friday, at the following number:

**(415) 522-1164**

or write to:

Spectrum HoloByte

2061 Challenger Drive

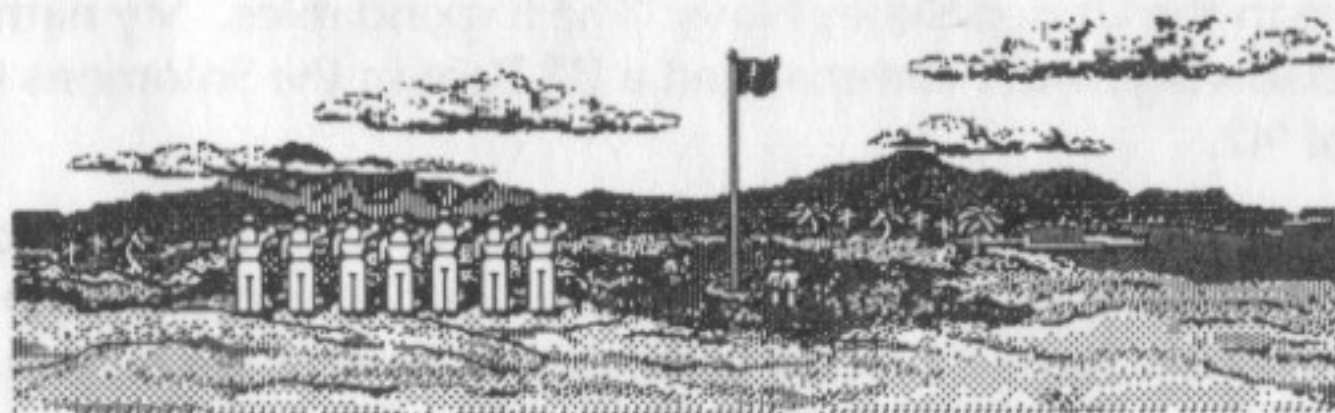
Alameda, CA 94501

Attn: Customer Support

Documentation copyright © 1988 by Sphere, Inc. All rights reserved. Elco is a trademark of General Dynamics' Electric Boat Division. PT-109 and Spectrum HoloByte are trademarks of Sphere, Inc.

## FOREWORD:

This manual is historical fiction. The background, places, and events are true, but the specific details were invented. There *was* a PT Boat school in Melville, Rhode Island during WWII, and some of its early graduates saw combat in the Philippines and Solomons, but the actual combat episodes, the people in those episodes, and Nick McGowsky are fictional.





*Before the war, Nick spent a lot of time tinkering with a special kind of speed boat: one that could move fast, be quiet, get into shallow areas, and carry a small amount of hooch as cargo. The Feds kept building faster boats, and Nick and his cohorts would always be one step ahead of them.*

*After the Japanese attacked Pearl Harbor, Nick headed for his local recruiter in Palm Beach, Florida. (Business was very good.) The recruiter said special provisions were being made for people with Nick's background, if they would agree to serve in the Patrol Torpedo Boats. (The Coast Guard was now a part of the Navy, and they knew all about Nick's rum-running activities.) The recruiter's offer seemed like a deal Nick just couldn't refuse!*

*Nick's superb physical condition and his degree in electrical engineering prompted the Navy to send him to Officer Candidate School in Newport, Rhode Island. After 6 weeks at OCS, Nick shipped off to the PT Boat School at Melville, Rhode Island.*

*The classroom instruction, tests, and at-sea drills were important. Equally important were the case histories. They didn't have a lot of successful ones to tell Nick and his fellow sailors when they went through Melville, because the war and the boats were still kind of new. But what they did tell was as important as anything else they learned during those two months.*

*This "real-life" storytelling is very important, and that's why the Navy brings back experienced skippers like Nick to teach.*



*We join Nick during an indoctrination lecture in early 1944:*



*Welcome to Melville, gentlemen. You've volunteered for the best line of service in the United States Navy: The Expendables. My name is Nick McGowsky, and I commanded a PT Boat in the Solomons Campaigns of '42.*

*I was one of the first to come through Melville. My instructors did what they could, but we didn't have the wealth of experience to build on that you now have. I helped write the tactics you are here to learn. Because of the experience given to you at Melville, fewer of you will perish in battle, and more of the enemy will. Gentlemen, you have a*



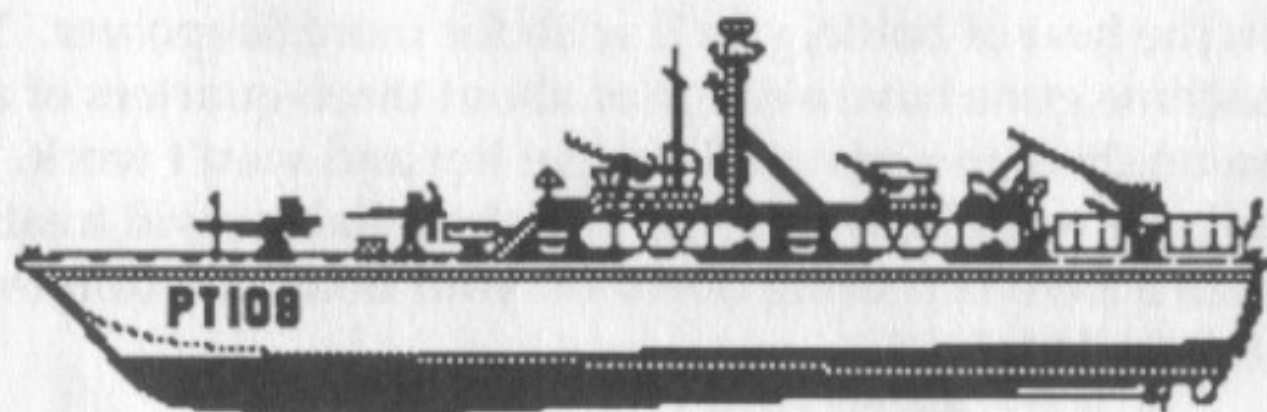


remarkable edge in training, equipment, and personnel. This edge will allow you to make your contribution to ending this war quickly.

The "Mosquito Boats" are high-speed, hard-hitting thorns in the sides of our enemies. They were originally designed to protect coastal areas from enemy incursions. Now, they have evolved to perform a variety of missions. Let me introduce you to some of the history you are contributing to.

Our little boats were needed as far back as '37 when MacArthur requested several hundred of them to defend the Philippines. Starting in about 1939, several companies, most notably Higgins Industries and the Elco Naval Division of the Electric Boat Company, competed for the contracts to supply the Navy with PT Boats. Although there may have been only a few of the boats around in '41 when we entered this war, there will be plenty more when it's done. We had boats at both Pearl and the Philippines those last days of '41. (MacArthur rode out of the Philippines in a PT Boat.) PT boats fired some of the first shots, and I hope they fire the last shots as well! (I bet one takes MacArthur back, too!)

The first production boats were only 70 feet long. They carried the old style torpedo, possibly a few depth charges, a small cannon, and a few machine guns. Rigorous testing of these original boats at sea in both war and peace showed that a larger boat was needed. The Elco 77' and Higgins 78' were produced to fill that need. These boats were a little faster and more rugged than their predecessors. Some still carried the older style torpedo tubes, some carried the new aircraft style torpedo racks, and others carried no torpedoes at all!



To date, the ultimate production version of the PT-Boat is the Elco 80. This is the most common variety built so far. Armament varies considerably, but the majority of boats leave the factory with two aircraft style torpedo racks, three dual .50 cal machine guns, a 40mm Bofors cannon aft, a 20mm Oerlikon cannon forward, a smoke generator aft, and a state of the art surface search radar. Some boats have mortars, grenade launchers, and even rockets installed on them once they hit





the field. The crew consists of 3 officers and 14 enlisted men. Generally speaking, these boats cruise at about 35 knots with a full "war load" of 61 tons. Fuel is 3,000 gallons of high octane aviation gas for the three 1,500 hp Packard engines, giving a range of 500 miles. All of that packed into a wooden boat!

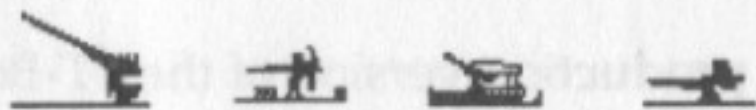
I bet that the "wood" bit bothers some of you. It shouldn't! Wood is the perfect material for our "tools-of-the-trade." Why? Just like our namesake, the British deHaviland Mosquito fighter/bomber, we have to be light, fast, able to take damage, and use as little of the nation's scarce metal supplies as possible.

As for this base, Melville is the home for PT sailors and officers alike. We take care of our own here. Melville is our home, just like the fly boys have Pensacola. Everyone who serves on or with our PT's comes through here so they can learn the PT way of doing things.

This entire base is dedicated to the volunteers who want to take the fight to the enemy, and take it to him NOW! Back when I was getting my first command, we didn't want to wait for the battleships, aircraft carriers, and cruisers. We wanted to get into the scrap immediately. But before we could go to war, we had to learn the trade, and Melville did what it could back then. As I said before, it can do a whole lot more today.

*Nick talks more about the boats and their armament.*

Pound for pound, the boats you gentlemen take out today are the most heavily armed vessels in the entire United States Navy. I assure you though, in the heat of battle, you'll wish for more firepower. Your .50 caliber machine guns have a range of about three-quarters of a mile. Don't lean on them too heavy. They get hot and won't work. Wait a few seconds between bursts of fire, and these babies will treat you right. When a Zero is bearing down on your boat, you don't want the gun to stop working!



The 20mm cannon has a range of about one mile and it'll take you a good six seconds to reload. The 40mm has a range of about one and a quarter miles, and takes nine seconds to reload. These cannons (especially the 40mm) are the most effective weapon we've found against





enemy barges. Barges have such a shallow draft that torpedoes pass right under them!

Speaking of torpedoes (and we have to after all: that's what the "T" in "PT" stands for), you men have it better than we did in the old days. Those old Mark VIII torps we carried were great—when they worked, which was not as often as we hoped. Sometimes I think there were more dud Mark VIII's than there were good ones. Anyway, they had a range of about 2 miles, and traveled at 27 knots. They got to the targets often enough, but they just didn't explode very often.

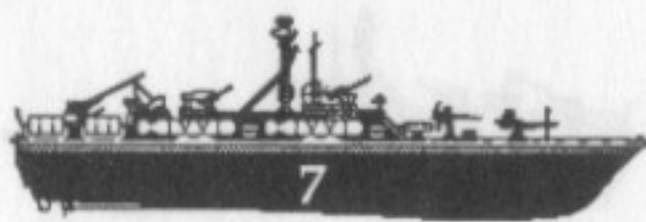
Towards the end of 1943, our boats started carrying the new Mark XIII torpedo. The range is one and a half miles, but they travel at 45 knots. And better yet, most of them explode when they hit their target.

Those sub boys have it pretty easy when it comes to firing their torpedoes. They can take bearings at their leisure, hide, plug numbers into their Torpedo Data Computers, and fire without hardly raising a sweat. PT Boats carry a device that's supposed to help us aim our torps, but it's usually so darned dark (or choppy, or something) that we can't use them. I recommend not bothering. Just get as close as you can, aim the front of the boat toward the spot where the enemy vessel and the torpedo will collide, and fire!

Some of your boats are starting to carry rockets. These are great, when they explode. You'll get a fair amount of duds. They have a range of about a mile.

So that's what we have to offer the enemy in the way of firepower. You're probably wondering what the enemy has to offer us. Well, more of the same! One nice thing though about being on a PT Boat during a war is that we're small enough that the effective range of enemy armament is reduced. Most of their ships and boats carry .50 caliber machine guns, but the effective range is about one mile.

Most of their vessels carry 40mm cannons, too. Their range is one and a half miles. What you really have to look out for are the enemy's three-, four-, and five-inch guns. Their ranges are two miles, three miles, and five miles, respectively. As if that weren't bad enough, one of those three-inch shells does twice as much damage as a burst of .50 caliber fire. A four-inch shell does three times the damage, and the five-inchers do a whopping six times more damage. All in all, be very careful around the enemy's cruisers and destroyers. (By the way, did you know that "destroyer" is short for "Motor Torpedo Boat Destroyer"? That's what those big @\$\*&'s were designed for: to kill our beautiful little boats!)





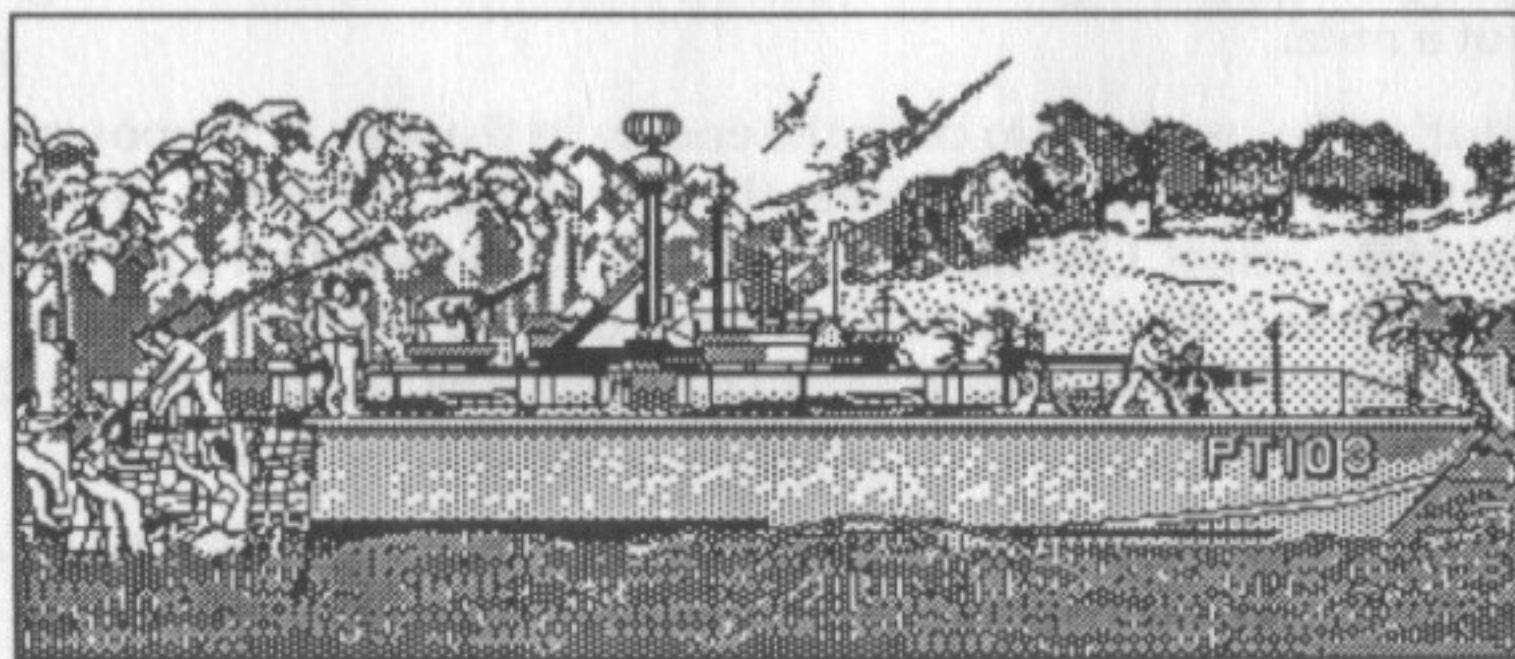
*A few days later, Nick passes out some operational background to the students.*

Today, I'll talk about the role of PT Boats in modern naval warfare.

Naval actions are directly or indirectly related to land actions. Consequently, coastal combat is as important a factor in war as are carrier battles or submarine operations.

Amphibious operations are those that occur in coastal waters at relatively confined locations. Since coastal waters are shallow, the units operating there must be small. This small size further dictates the type and quantity of weapons carried. The result is the PT Boat.

Most of our amphibious landings have been within the operational radius of PT Boats operating from forward bases such as Tulagi Harbor in the Solomons, and Morobe, New Guinea. Hence, ever increasing numbers of our boats are going in harm's way. All the missions you may face revolve around supporting land battle. Think about it. Landing covert agents, destroying barges full of supplies, escorting or destroying amphibious landings, providing messenger boat services. All these missions are in support of land battles.







*Nick now discusses the greatest  
threat to any boat: aircraft.*



Gentlemen, one of the things you are here to learn is how to maximize your offensive punch while minimizing the danger to yourselves, your crew, and your boat. I may share with you some real "War Stories," and then point out the relevant details so you may profit by the experience of those who went before you. Or, of course, I may just lecture.

Today, we're going to look at one of our first attempts at daylight operations—without air superiority. Yes, gentlemen, we lost this one.

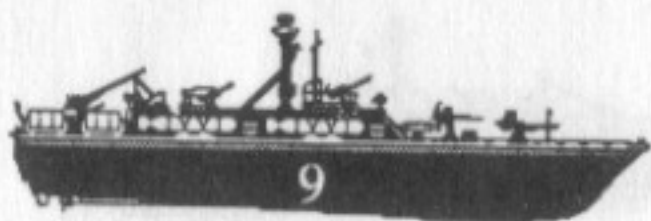
Early in the drive to hold the Philippines, we had some 77-foot Elco's operating out of a makeshift base up the coast from Manila. Their primary armament were four destroyer torpedoes and one or two pair of .50 cal's. We didn't have radar then, so we only had the MK1 Eyeball.

During the day the surviving boats tried to stay hidden because the Japanese owned the air. We learned this the hard way when one of the FORMER squadron C.O.'s thought we should go and stop a landing on Luzon without any friendly air support. The word had come down from MacArthur's H.Q. that another landing was being made by the Japanese in an attempt to flank our boys to the North. It had been decided that this was some major push and that an "all out" effort was required by "all available assets." So that was the need; here are the details.

The boats were given torpedoes and a full load of shells. The night before, the boats' crews and all available mechanics from the Canopus (the Tender) did all they could to make the boats ready. At 08:15 three boats cast off from their makeshift berths on the west side of Manila Bay, on the Bataan Peninsula. The skies were clear and the winds calm. As they left Corrigidor, the crews started their vigil for enemy planes and ships.

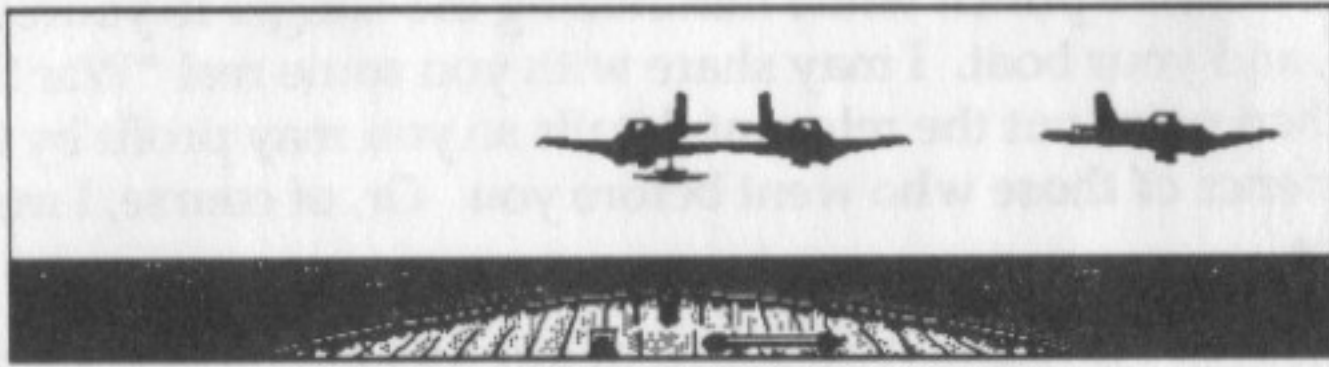
At about 15:30 that afternoon a lookout on the lead boat spotted an IJN seaplane to the west, heading on a western course away from the formation. The skipper of the lead boat called for the other boats to open the distance between them to about 1,000 yards.

Twenty minutes later the easternmost boat signalled that enemy fighters had been spotted to the east, heading west, towards the three PT's. Five minutes later all hell broke loose. The attacking aircraft were three Zero fighters, loaded with bombs.





The Zeroes came in one after another on the easternmost boat. As hard as you may think it is to hit a weaving, twisting, 77-foot target moving at 40 knots, those pilots showed some skill.



With all the twisting and turning of these small targets, you may wonder if it's possible to hit anything at all. It is, if you consider that bombs against PT's count even if they're just "close."

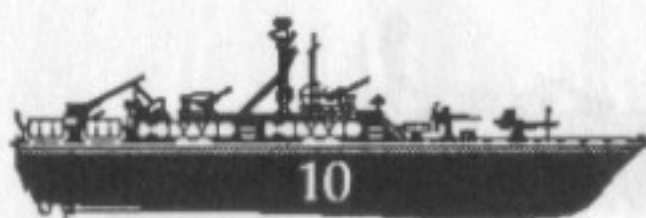
The three planes each carried one bomb, some cannons and machine guns. All were put to good use as they made for their target. They peppered the deck with lead, and then dropped their "eggs." No direct hits were made, but the explosions were close enough to sever a fuel line, knock out electrical power, and start several small fires.

Our boys on the PT's were firing everything they had at those Zeroes. Consider how hard it is to hit a 40-foot fighter twisting and weaving at 300 knots. It's pretty hard to hit one while you're on land. Imagine how hard it is if you're on a boat that's turning and jumping around, too!

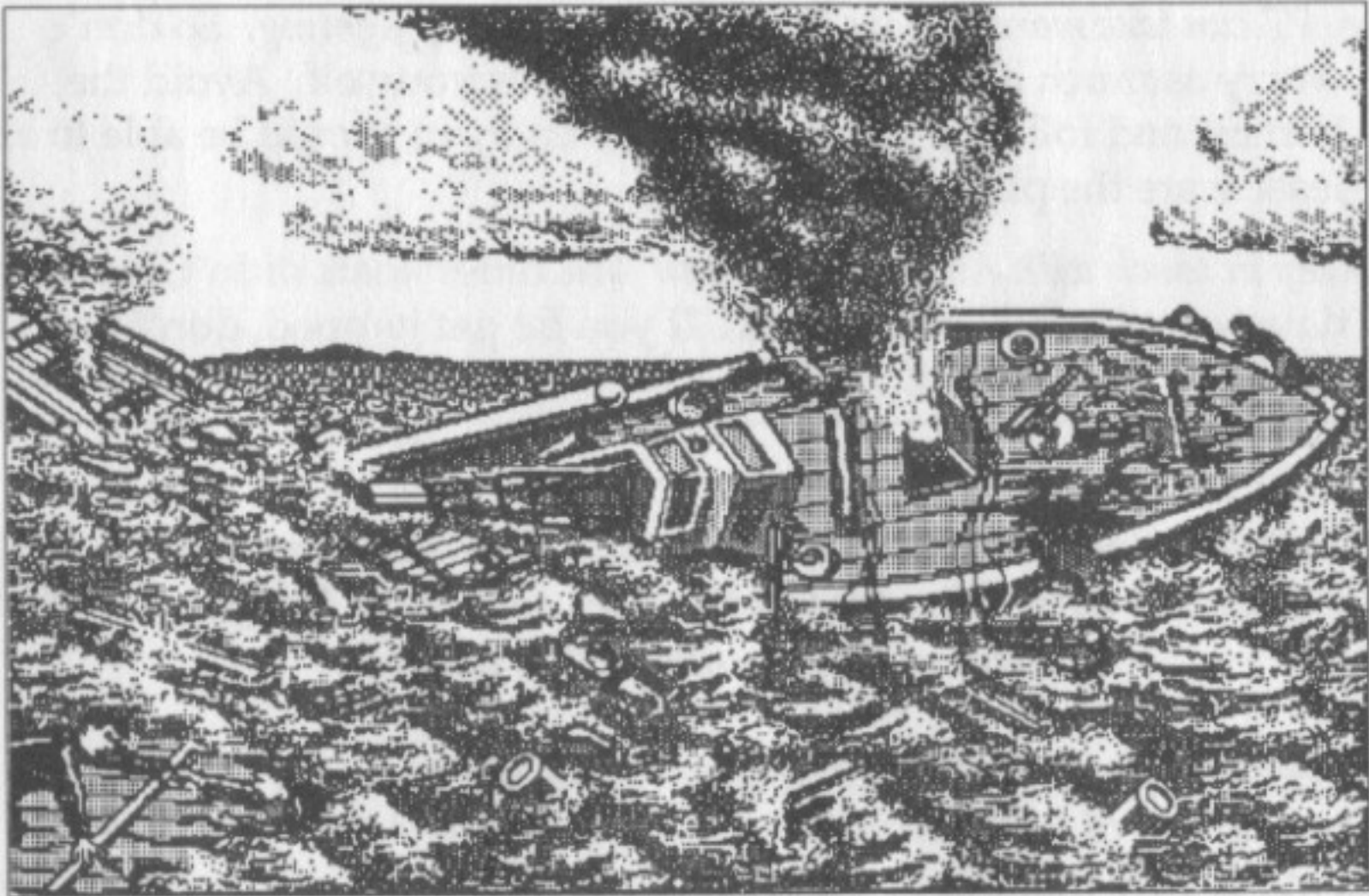
After making their run, the Zeroes pulled up to survey the damage, and were obviously feeling pleased enough to make passes on the other two boats. They came in perpendicular to a line drawn between the two other boats in order to minimize the flak from the boats they weren't attacking.

After four or five passes, all parties concerned had picked up a fair amount of lead. In fact, when one of the Zeroes got cocky and tried to strafe the combat worthy boats in one pass, he drew enough fire to damage his engine. As he started spewing smoke, his engine started coughing. Once the planes took some lead, they decided to call it a day and retired to the east.

As the burning PT started "cooking off" ammunition, the crew took to the water. After about 15 minutes, the hulk had burned to the waterline and was sinking. The survivors were picked up, and the sortie was scrubbed.







The result was one PT sunk, five men killed and eight wounded, compared to one damaged Zero. Tactically, as well as strategically, the boats lost, since they never carried out their mission: countering the Japanese landings!

*Nick now passes out some printed study material, summarizing the case history:*

#### LESSONS VS AIRCRAFT:

You should usually minimize daytime operations. When you must operate during the day, and don't have air support close at hand:

1. *Maximize the difficulty of hitting your boat with a bomb.* The faster you are moving, and the more your course changes, the harder it is to get a bomb close enough to really damage you. Couple this with waiting for the bomb to be released and then dodging, you should be able to escape destruction. Note, you will probably take damage if there are sufficient aircraft.
2. *Fire everything you have at ONE target.* If you concentrate on the one target, the more likely you are to hit it, specially if you're moving fast and changing course as recommended in lesson #2. Further, the *apparent* fire will give the pilots cause to think. Pilots don't like flak!





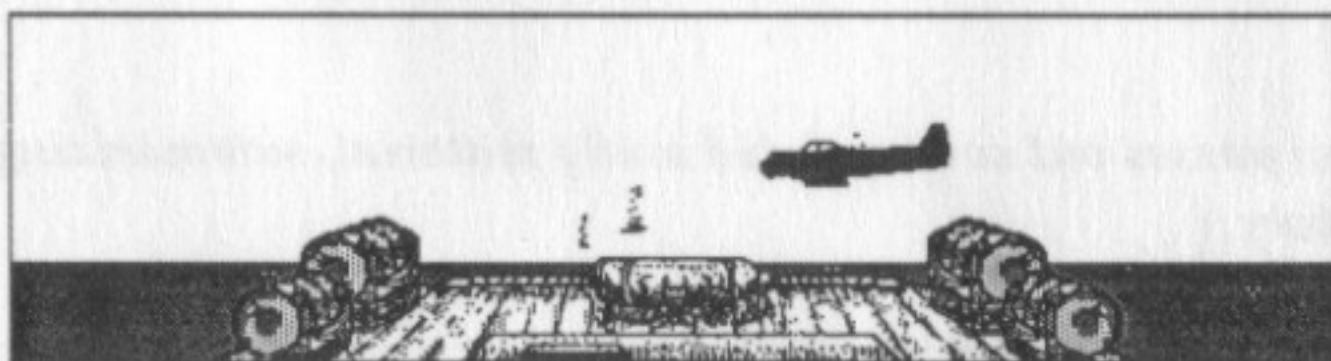
3. *A PT can take more damage than a plane, and keep fighting.* So don't worry as much about taking a few rounds yourself. Avoid the bombs, and follow lessons #2 and #3 and you should be able to at least scare the planes off.
4. *Keep in touch with Air Corps Liaison.* The older boats didn't, but these days we generally own the air. If you do get jumped, don't be too proud to call for help.



*Nick answers some questions, and then dismisses the class. After this, the lectures turn to current Pacific Theater of Operations (PTO) actions.*



The geography of the Southwestern Pacific dictates that we need a large number of fast, hard-hitting vessels to patrol the many islands and make sure that bypassed Japanese garrisons are totally blockaded. This task falls to the PT Boats for a variety of reasons, mostly having to do with shallow water, and the urgent need for the bigger ships (destroyers, destroyer escorts, corvettes, etc.) to be off with the carrier fleets and Atlantic convoys.



Current PTO operations generally consist of barge busting, with some assorted other duties such as amphibious landing and fleet support. Barges are the primary means the Japanese employ to resupply their bypassed garrisons. Occasionally, submarines are used for this purpose, but we will discuss anti-submarine warfare (ASW) tactics later in this course. Landing support operations vary, but we are normally asked to patrol the flanks, escort minesweepers, deliver Underwater Demolition Teams (UDT), guide landing craft, and deliver messages. Occasional requests are also made for us to deliver recon teams. Fleet support is a topic I wish to cover a little more fully now.

The use of PT Boats in fleet actions will be limited to coastal operations, normally related to an amphibious landing. Normally, fleet units stay out to sea where enemy land units have a harder time





finding them. When the landing occurs, any and every unit available is thrown into the fight.

If you're asked to attack a task force conducting an amphibious landing, you will seek out and destroy the transports carrying the enemy troops. Normally, these transports are accompanied by Escorts, Destroyers, and sometimes even Cruisers. PT Boats normally don't have a chance if they attack during the daytime. However, during the night, the boats do have a good chance of sneaking in and hitting the supply ships and transports that have yet to unload. Honestly speaking, it's unlikely that we'll be asked to repulse many more enemy landings.

A more common mission will entail assisting fleet units to ward off an enemy counterattack. Eventually, we will invade the Continent of Europe, and the Philippines. When we do, you better believe that the response from our enemies will be fierce.

Some combat examples of these types of missions can be gleaned from our encounters with the Tokyo Express during the long battle for Guadalcanal. There, the boats would leave their anchorage on Tulagi and position themselves around the coasts of the many islands in the Solomon Archipelago, and wait. When their radars picked up the incoming destroyers and cruisers, they would attack. Problems typically consisted of poor communications between the boats, faulty maintenance of them, old torpedoes, and generally very good shooting on the part of the Japanese.

Our boats would typically make individual runs, thus allowing an alerted enemy to concentrate their fire on each of the boats in turn.

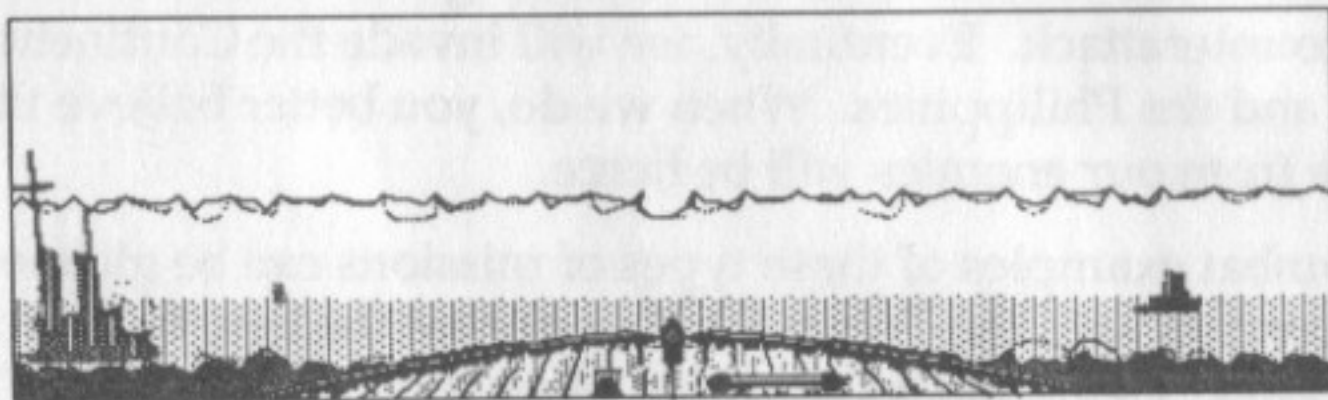
Granted, the boys in those boats did everything their situation allowed them to, but you are benefiting from their experience. Some rules to keep in mind when planning a fleet attack:

1. *Stay quiet*, using your engine muffler until the enemy starts shooting. Then, turn the mufflers off for full power and maximum speed.
2. *Spread out your salvos of torpedoes to hit as many targets as possible.* This maximizes the enemy's confusion!
3. *Always lay smoke to cover your retreat.* This goes with keeping the enemy confused. Their gunners seem to like shooting at smoke!
4. *If you have DC's on board, they can discourage destroyers.* This tactic sounds good, but in practice we haven't really had much luck with it.





5. *Swerving targets are hard for big guns to hit. Just like when fighting aircraft, maneuverability is an advantage often wasted by our skippers. Don't waste your assets!*
6. *Don't get too close, or the A-A guns on the enemy vessels will cut you to pieces. The fleet ships carry lots of "light" guns for Anti-Aircraft protection. These light guns are exactly what you carry, and you know what that can do to wooden boats!*
7. *If you have to shadow the enemy formation, do so at maximum radar range. Once your torpedoes are shot, you are cannon fodder for the fleet boats, so don't give them any opportunity to start shooting at you.*



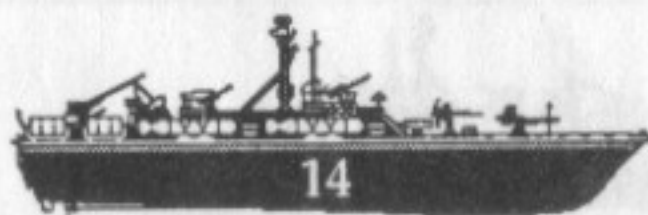
*The next lecture is a short one. The  
subject is the enemy target least vulner-  
able to the PT Boat—submarines.*

As mentioned some time ago, we occasionally find submarines on our patrols. Considering we have no sound gear installed on the boats, and don't always carry depth charges, it is quite difficult to kill a submerged submarine. So don't let it submerge!

During the Solomons campaigns, two of our boats were tasked with finding new hunting grounds. They were looking for barge routes and were generally tracing possible routes through the islands from known Japanese garrisons towards the general direction of Rabaul, the Japanese HQ for the Solomons.

At about 0300 hours, the boats were cruising on mufflers, all hands searching for enemy barge traffic. The stern lookout on the #2 boat thought he saw a wake pass under his boat. He notified the skipper and they followed the suspected vessel.

After about 10 minutes, the single island they were heading towards showed to be really two islands. (This was not a surprise as the charts for this area dated to the 1920's.) As the boats entered the channel, a





light was seen on the coast of the smaller island. The boats cut their engines and drifted, hoping to hear or see something. Another five minutes passed, and the sound of compressed air was heard in the same area as the light. At this time, the #1 boat started one muffled engine and very slowly went to the north, while #2 generally drifted eastward towards the light and noise.

When #1 got directly north of the suspected target, the clouds broke from the moon just long enough to allow the crew to make out a moderately sized Japanese submarine, with small barges being loaded from a variety of hatches along its top. The skipper of #1 immediately lined his boat up and let fly with two torpedoes.

At the same time the skipper of #2 realized he was in a bad position for a torpedo shot, so he started all three engines, without muffler, and made a gun run on the assembled barges and beach stockpiles. Luckily, he heard the launch of the two torpedoes from boat #1, and attacked from the south side of the sub. This focused the Japanese on him, and two minutes later, a large explosion rocked the area as two torpedoes hit the sub.

After the explosion, the moon appeared again to illuminate the destruction. The few barges still afloat had no gun crews standing, so they were promptly sunk by boat #2.

This discovery and kill cut off another supply route to the forces on that particular island, and contributed greatly to their "neutralization."

Some additional lessons to be learned are:

1. *Attack any sighted subs immediately.* Any delay once they spot you will quickly diminish your chance to hit the target. Submarines dive when given the chance.
2. *Ambushes require silence.* When ambushing anything, drift, anchor, or if you have to, use your mufflers. Any waiting shore party will surely warn the sub of your presence if you're seen or heard.
3. *Use torpedoes first!* This is the only effective way to kill a sub. Use them while you have a chance to hit the sub partially surfaced.
4. *The 40mm is effective against subs,* but then only against the conning tower. Any hull shots will ricochet!
5. *If you have them, use rockets!* These are your best alternative to torpedoes.
6. *Depth charges should only be used as a last resort.* Since we carry no sound gear, only luck will be of help in placing depth charges.







7. *Machine guns are of limited value.* In fact, they are only good on exposed crew, beached supplies, and landing parties. Don't waste your ammo on the sub itself!
8. *Inform HQ of any sub sightings!* Even if no other units are available to attack the sub, other ships should know that they could be vulnerable.



*The emphasis on Pacific operations covers several sessions, and finally wraps up half way through the course. Discussion then turns to the European Theater of Operations (ETO).*



Our boats operate mostly in the English Channel and the Mediterranean, and their missions are mainly barge and convoy attacks, decoy work, covert landings, some amphibious support, and some fleet support work.

When we first sent PT boats to the ETO they operated very closely with British forces like their Motor Torpedo and Gun boats (MTB, MGB), as well as their Destroyer type vessels.

Our quarry there include a variety of German PT Boats (E-Boats), Destroyer Escorts (R-Boats), Barges (F-Lighters and Flak Lighters), "Torpedo Boat Destroyers" (TB Destroyers), and Freighters. The combat vessels are always found escorting small coastal convoys and barges. Air support is common as well if you're in the Med. The armament of these vessels is included in your intelligence briefings.

*Nick now answers some questions on the weather, administrative details, and some technical aspects of the war in Europe. He then discusses covert activities.*

Our initial activities in the areas of covert transportation have been kept quite secret. As our duty is to train you for any mission you might be assigned, we will share some details with you now. Keep in





mind that every covert mission is different, and your mission planner will provide additional operating orders at the appropriate time.

When you are deployed to your units, you may be ordered to provide transportation to special passengers. These passengers may be commandoes, coast watchers, special shore parties, or downed fliers.

Commandoes are used to destroy enemy depots, communications facilities, or conduct other espionage activities against the enemy. They are an interesting group to have onboard; most get seasick, and they often have as much firepower as the rest of the boat! They usually never talk, and are always nervous. You really have to watch them because the green ones must think they're on a civilian luxury liner: they try to smoke below decks!

Coastwatchers provide us with most of our information on Japanese naval movements. Every once in a while, we have to reposition them so the Japanese don't track them down and eliminate 'em. Without the coastwatchers, we would have no idea of where to find the enemy as they sneak around the islands of the Southwest Pacific.

Downed fliers are always glad to see us. Sometimes we have to go in under shore fire to retrieve them, but we always get lots of points from the flyboys when we do. And we all can appreciate having good relations with Army Air Corps.

If you ever get a "Shore Party," don't ask any questions. You will be told only what you need to know to complete your part of the mission. It's been hinted that if you somehow mess up their part, watch your back...



*Nick has some pointers on covert missions, applicable for either the Pacific or European Theaters of Operation:*

1. *Never beach your boat!* The Zodiac Inflatable is brought along to get your passengers and cargo to the shore! If you beach your boat, you may damage the bottom. If you are disabled on the enemy shore, the mission, the passengers, your crew, and the entire operation could be compromised.
2. *Never rush.* If you rush, you make noise that can get you spotted. If you are spotted, you, your crew, your passengers, and much larger plans will be laid to waste. Your mission was timed to take advantage of weather and moon conditions, and normally leave you plenty of time.





3. *Don't wait on stragglers.* If the contact is late, odds are the enemy is alerted and looking for anything unusual, like a PT Boat 100 yards off their fortified shores! If your contact is captured, the last thing you wish to do is join him! Generally, our people won't be captured alive, and if they are, it's unlikely they will be in much shape to talk. So if you're waiting around and are seen, YOU will end up filling in the pieces, not the agents!

*Nick finishes up the discussion and whets the students' appetites for his next lecture by having them read in their texts about barge busting.*

Barge busting is presently the most common mission for PT Boats. Both in Europe and the Pacific, large amounts of men and material are transported via barges. These barges normally move at night, and very close to the shore. This makes them worthwhile targets for PT Boats.

There is no average barge convoy. Some may have their own guns in addition to armed escorts. Those with air support are much harder to find, let alone destroy. Float planes and Zeroes are very deadly when coordinated by the convoy they are protecting.

Heavily travelled lanes are almost always covered by shore guns. These shore batteries include AA sized weapons up to 5" naval guns. Some barge convoys travel through mine fields. PT Boats may be made out of wood, but there is enough steel in the engines to detonate magnetic mines. Of course, in shallow waters, the bottom mines could be hydrostatically fused. This means that the faster you go, the more likely you are to have your stern blown off!

1. *Beware of escorts.* The Japanese use Zeroes, floatplanes, and armed barges a great deal. The Germans use R and E Boats as strike groups to attack the flanks of our PT Boats as we go after barge convoys.
2. *Only 40mm cannons work against Flak Lighters.* Anything smaller will bounce off. Save your ammo for other targets or planes.
3. *Use only the newer torpedoes on German barges.* Only the late model torpedoes can be set shallow enough to reliably kill any F or Flak Lighters. The old models can't keep depth control and take too long a run to arm. Against Japanese barges, only use guns, as torpedoes aren't effective.

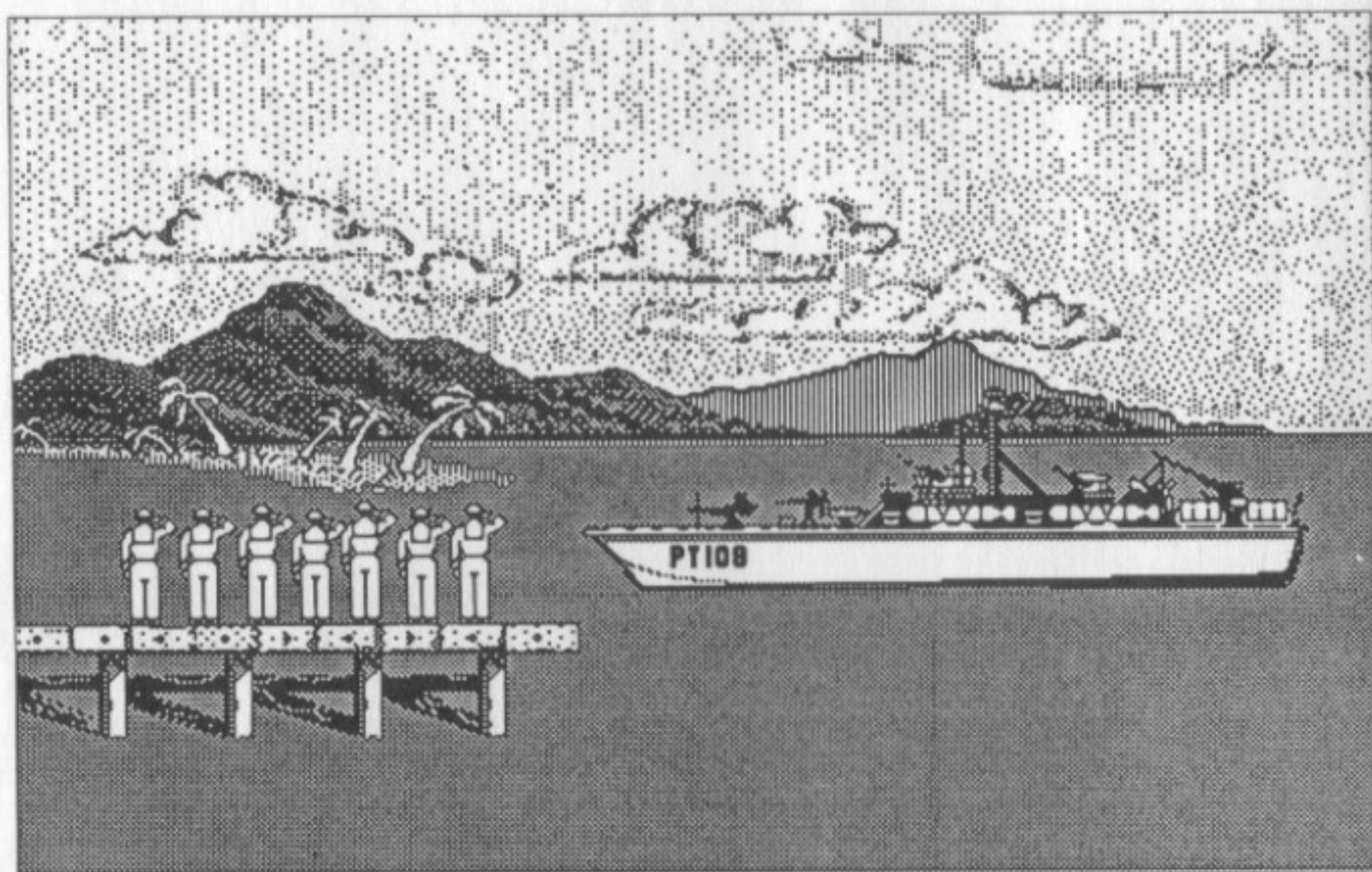




4. *Shoot everything you have against escorts.* They typically are lacking in armor around the bridge and gun mounts, so even .50-cal can be effective.
5. *If you get in over your head, lay smoke and regroup.* If your damage is controllable, report the situation and consider attacking again.
6. *Japanese convoys typically have Zeroes as escorts.* In some areas, the ground fire is so bad you'll need SPD and Destroyer support to destroy the shore installations so you can take care of the barges.

Well, that concludes your introduction to PT Boat operations. Next week, you will attend detailed classroom and open water training sessions to refine specific skills on torpedo aiming, gunnery, navigation, engine repair, first aid, etc. I wish you the best of luck, and don't be shy about writing us about your adventures at the front. We are here to educate, and need fresh information to do that job correctly.

Good Hunting!



***Spectrum HoloByte***<sup>TM</sup>

A DIVISION OF SPHERE, INC.

2061 Challenger Drive

Alameda, CA 94501

(415) 522-3584