

1972

## Some Speculations on the Navy at the End of the 1970's

Frank Uhlig Jr.

Follow this and additional works at: <https://digital-commons.usnwc.edu/nwc-review>

---

### Recommended Citation

Uhlig, Frank Jr. (1972) "Some Speculations on the Navy at the End of the 1970's," *Naval War College Review*: Vol. 25 : No. 5 , Article 2.  
Available at: <https://digital-commons.usnwc.edu/nwc-review/vol25/iss5/2>

This Article is brought to you for free and open access by the Journals at U.S. Naval War College Digital Commons. It has been accepted for inclusion in Naval War College Review by an authorized editor of U.S. Naval War College Digital Commons. For more information, please contact [repository.inquiries@usnwc.edu](mailto:repository.inquiries@usnwc.edu).

*Current political and emotional phenomena both at home and abroad, as well as the growing Soviet Navy, are shaping a new environment to which the U.S. Navy of the 1970's must adapt if it is to remain an effective force. While the missions the Navy will be asked to perform at the end of the decade will not differ greatly from those of today, they must be accomplished with fewer men and ships. These challenges can and will be met, however, through continuing bold innovations in technology, tactics, and design, matching in scope today's widely publicized initiatives in the field of personnel affairs.*

## **SOME SPECULATIONS ON THE NAVY AT THE END OF THE 1970's**

An article prepared

by

Mr. Frank Uhlig, Jr.

Ours is an age of revolution, and revolutions are unpredictable. What is certain about this phenomenon is that everything touched by it will be changed. Many uncertainties lie in the possible direction and magnitude of change, however, making any speculation about the nature of the Navy at the end of the 1970's a risky undertaking. Yet, there are clues to help us. Those that bear most heavily on our future Navy are the nature and condition of the U.S. domestic scene, the general world situation, and, of course, the main rival to the U.S. Navy—the Navy of the Soviet Union.

We have in our country problems of race, drugs, pollution, and transportation, to name just those which come most easily to mind. If we are to live as we believe Americans should live and, perhaps, once did live, they must be

solved. All the talent, energy, and money needed for their solution cannot and will not be spent on naval or military needs until an overwhelming threat from abroad becomes obvious to the citizenry and, most especially, to the articulate citizenry.

There is great concern about the quality of life in our country. We as a people are no longer disturbed—as we once would have been—when our position as the world's greatest nuclear and military power is being assumed by our primary rival. If our efforts do not lead to a life with fewer tensions between people of different races, a life in which getting to and from work is not such a long and disagreeable chore, a life in which the pleasantries of living do not always seem so far distant, and a life in which we can feel safe when we walk down our own streets at night, then,

## 10 NAVAL WAR COLLEGE REVIEW

wisely or not, we are not really going to care very much about who has the greater number of weapons.

These views, stemming largely from the internal needs of our country, are reinforced by the belief on the part of nearly half our people that war is obsolete, or at least a poll taken in the summer of 1971 says as much. Perhaps that is a belief conveniently arrived at, after consideration of the array of problems confronting us at home and the disagreeable spectacle we have been watching for so long in Vietnam.

Internationally we live in a world of stiff economic competition. The Japanese, Germans, and many other peoples have to export in order to live, and export they will. Whether we can compete with them, in our own country, in their countries, and in third countries, is yet to be seen. Nonetheless, as these countries, most of which are political and military allies of the United States, prosper, they will have to assume a larger share of providing for our mutual defense. If the United States cannot pay for troops in Germany or Japan or elsewhere, they will simply have to come home.

Happily, the United States and China have, at last, recognized that neither poses an imminent threat to the other. That recognition will free the United States to redeploy her diminishing naval and military resources to missions where they can most effectively counter threats to the United States which today emanate primarily from the Soviet Union.

Even though the gross national product of the Soviet Union only equals one-half that of the United States, Moscow, unhampered by an expensive war, has been able to greatly improve its strategic position in the world. It has surpassed us in ground-based nuclear arms and appears headed in the same direction in sea-based nuclear arms, in general naval power and in tactical aviation, while maintaining an edge over

us in ground forces in central Europe.

The Soviet Union appears peaceable enough. Nevertheless, one has only to look back a few years to Czechoslovakia where the Soviets again proved that on their side of the Iron Curtain people do not have the same freedom to change their government as, say, the people of Chile do on ours. The dangers arising from the border and ideological clashes between the U.S.S.R. and China affect us all, and even greater dangers are involved in the Middle East dilemma where both the Soviet Union and the United States can be led into war with each other over issues of secondary importance to each.

So far as the Navy is concerned, the most spectacular change of all relates to the growing strength of the Soviet Navy. To a remarkable extent, that navy resembles the ebullient Imperial German Navy which, earlier in this century, transformed itself from a force of modest proportions to one which challenged the seapower of Great Britain herself.

The U.S.S.R. has built what appears to be a great navy: witness that navy's incomparably powerful submarine force, its very long-range aircraft armed with antishipping missiles, its short-legged but potent amphibious force, its enormous flotillas of small fast combatants, and its boldly designed large surface warships. All these are the instruments of a nation which, over the centuries, has shown itself to be a cautious, though an extremely acquisitive, power. The Soviet Navy has but one important factor working against it, and that is geography.

These, then, are the conditions which affect our own Navy. In some cases our Navy can do nothing more than adapt; in other instances it can and must master new techniques if we are to maintain our place in the world.

\* \* \* \* \*

With the draft likely to disappear

within a few years and given the feeling of many of our fellow citizens that war is obsolete, what will be the size of the U.S. Navy by the end of the decade? Clearly, it will be substantially smaller than now. For three decades, with the exception of the period immediately prior to the Korean war, the Navy has relied on the draft to encourage young men to "volunteer." But with no draft, the Navy will have to offer something more to potential enlistees than the belief that life in the Navy is not as bad as being in the infantry. Whether the Navy will be able to take the hard line, the way the Marines have done, is open to conjecture, though it appears likely that the Marines have preempted that route. In any event, the life a sailor lives is vastly different from that of a marine.

One thing we ought to keep in mind is that the last time the U.S. Navy was manned primarily by men who liked being part of the Navy was in 1939. At that time, a country of 140 million people still deep in the depression, plagued by unemployment, and without any of the antimilitary feeling widely evident today was able to support a volunteer Navy of only 100,000. Perhaps we could have supported a substantially larger volunteer Navy in 1939. However, it appears unlikely, even with a population of 210 million, that we can encourage anything like the present 600,000 men—six times the number who were in the Navy in 1939—to serve in the Navy of the near future.

Given the improvements still possible in a sailor's life (and there appears little left that can be done physically, financially, and legally to improve that life), there probably will be substantially fewer young men who will want to be sailors than the need will suggest. Still, two alternatives, as yet only marginally employed, appear open, and by the end of the decade they probably will have been tested and put to use. One is to use technology to run fighting ships with very few men aboard. This has been

done in submarines for a long time. At the comparatively high salaries lower rated men and junior officers will draw, the incentive will be to turn to technology as a substitute for many of these officers and men. Whether the existing ships, or even the planned ships, can be refitted so that one man can do the work of three or four is an interesting question. But, certainly, new ships built for a conscriptionless Navy will be built as if men to run them were scarcer and more expensive than gold—and they will be.

The other route that probably will have been taken by the end of the 1970's will be to open a much larger part of the Navy's work to women. Up till now the Navy has been a man's world, limiting its appeal to only one-half of the country's population. But by the end of the decade, if we hope to retain a large fleet, we should expect to operate and maintain it with a large portion of women. Will many, or any, of them be afloat? Who knows? For years nurses have served afloat in hospital ships. And who is to say that so spirited and intelligent a combatant as Gloria Steinem might not be as successful a leader in battle as John Paul Jones or William F. Halsey?

There will be problems if women go afloat, and it is not likely that any commanding officer would say he wants these problems. But will there be even bigger problems if our fleet lies mainly in mothballs for lack of people to run and maintain the ships? In any event, though the sailors probably will continue to specialize as they do now, without particular regard to the mission of their ship, officers will tend to specialize in new ways. No longer, as Admiral Zumwalt says, will officers be so "platform oriented" as they now are—specialists in, and partisans of, aviation, submarines, or surface ships. Rather, they will tend to be specialists in a particular form of naval war, whether it be "strategic" war, anti-

## 12 NAVAL WAR COLLEGE REVIEW

submarine war, inshore war, amphibious war, or logistic support. The discipline in the surface ships will change, too, to resemble that largely invisible, but obviously practical, form of discipline already found in submarine and aircrews. This change will be necessary because of the kinds of people the Navy will need and the competition from other trades that it will have to meet in order to get them. This, in the main, will be possible because of the smaller, more personal crews on ships and because the kinds of people sought will be the sort who will make sure such discipline works.

Because of its reduced size the Navy will cooperate to a greater extent than ever with allied navies. In accordance with the Nixon Doctrine or whatever its successor may be called, the United States will expect more from its allies than in the past. Since some of them—the Germans, Danes, Greeks, Turks, and Japanese—are keepers of the gates between the Soviet fleets and the open sea, they will have to take on a bigger share of the burden, and the U.S. Fleet will have to take a more direct part than it now does in choking the enemy's essential channels.

Inasmuch as three-quarters of the Soviet Fleet now operates in European waters, the deployment of the U.S. Fleet will increasingly reflect this fact as the war in Southeast Asia winds down. Substantially more than half of the Nation's naval power will be stationed in the Atlantic where it can be used against the main power of the Soviets. Because of the vastly reduced need for American ships in Southeast Asian waters and because of the larger share of the load which the allies will necessarily have picked up, the American ships can spend more time in home waters than they now do. This will aid both in cutting the cost of running the fleet and in attracting and keeping people to run the ships.

At the end of the decade the tasks will not be much different than they are

now or ever have been. Deterrence aside, the main task will be to "control the sea," that is, to make those parts of the sea that are important to us safe for our ships and in conflict situations, unsafe for the enemy's. One thinks of the amphibious forces and the large carriers as principal users and beneficiaries of that control, and they are. But more importantly, they will also be principal contributors to it. The sea-borne Marines, supported by naval aviation, will be ready to help our allies maintain their grip on channels crucial to the Soviet fleets should the Soviets try to challenge us at sea. If the Turks, for example, can maintain their hold on the Dardanelles, the Soviet Black Sea Fleet will be unable in time of war to enter the Mediterranean to support those Soviet ships already in that sea.

But, of course, such things as control of the sea are merely hypothetical as long as there is peace or, at least, "nonwar." In peace, or nonwar, as Admiral Zumwalt has pointed out, the main purpose of the bulk of the Navy is to provide a "presence." The new ships although fewer in number, will provide that as well as the old ones do today.

Affected as much as the rest of the fleet by the scarcity of men and money, the deterrent forces afloat will continue to rely solely on submarines and, unless "strategic" arms limitations are in effect, will provide about the same proportion of the Nation's deterrence as they do now. The new ULMS-class submarines, their missiles capable of being fired from 5,000 or 6,000 miles, will be entering service. But if men and money cannot be found for them, those older FBM submarines not rearmed with Poseidon and already approaching their 20th year will have been discarded.

Fighting ships will have become more comfortable than those of today. They will not be cruise liners but, with fewer people aboard, the crowding which is one of the most uncomfortable aspects

of warship life will have been much relieved.

With nuclear power plants in all submarines and in all new major surface combatants, many ships will have greater strategic speed and tactical nimbleness than their predecessors have. No matter what we do, one ship will never be in two places at the same time, but the higher strategic speed will permit the ships to move great distances more quickly than current ships can (which will permit us to keep more ships in home waters until they are needed abroad). Once deployed, their greater tactical nimbleness—a quality which they will share with the many new surface ships driven by gas turbines—will permit them to reach the point of contact quickly and, when on the scene, to maneuver and change speed more rapidly than our existing ships. Thereby, they will be less vulnerable to enemy torpedoes, missiles, or bombs.

There will probably be no more carriers than today, and if we do not learn to run such ships with considerably fewer people than they now need, there will be even fewer. But, since so much depends on the ability of the United States to gain and maintain control of the air over certain parts of the sea and land, there can be no American seapower without American aircraft carriers.

The main development in aviation, however, will be that many more ships than nowadays will have aircraft aboard. The antisubmarine escort ship without at least one helicopter will have become a thing of the past, and the career pattern of the helicopter pilot may as well lead him to command of a destroyer as to command of a squadron of aircraft. In any event, against an opponent who can launch missiles from aircraft, surface ships, or submarines hundreds of miles from their targets, there will be no substitute for manned aircraft with which to engage those hostile forces.

Our own submarines, now carrying a large share of the antisubmarine burden, will probably be shouldering even a larger share by the end of the decade. A clue to that future came early in 1971 when the Defense Department let contracts for a dozen of the very big and expensive SSN-688 class of submarines while, at the same time, reducing its construction program for nuclear-powered frigates, also very big and expensive, from five ships to three.

Because of the greatly increased size and power of the Soviet surface fleet, by the end of the 1970's U.S. submarines will once again have been armed with a weapon suitable for use against surface targets. This time, however, it will likely be a missile, comparable to that in the Soviet "Charlie" class of nuclear-powered submarines, rather than a torpedo.

As submarines get quieter, it will be interesting to see whether those on ASW patrol will be able to continue seeking the foe by means of passive listening. If they are forced to use active sonar, the world of submarine warfare will have undergone its private revolution, one whose impact would be exceeded only by the development of a long-range and reliable means of tactical communication to and from submerged ships.

Except in one important respect, the supporting role to which surface combatants were relegated 30 years ago by the unexpected successes of the submarine and the airplane will not change by the end of the decade. As we have seen, when money became scarce in 1971 and the Navy could not afford to buy both expensive submarines and expensive surface ships, it was the submarines which were chosen.

In an engagement between surface ships and airplanes, the latter will retain the tactical advantage they have always had, and the SAM-armed destroyer or cruiser, which may strike 10 or 20 miles away but never more than about 70 miles, will be ineffective against an

## 14 NAVAL WAR COLLEGE REVIEW

airplane which can launch its missiles hundreds of miles from its target. Against such air attack the SAM-armed surface ship will be a point-defense ship only; she will be useful mainly near the hostile shore when the enemy's small tactical aircraft can enter the battle.

The submarine of the late 1970's will have an advantage over the surface ship, as she has had for years. But her advantage will be compounded not only by her relative speed advantage and her ability to steam very quietly, but also by weapons which will be able to strike beyond the range of the surface ship's weapons. Thus, the surface ship must either have aircraft to make up for the deficiencies of speed, weapons, and concealment, or she must so change herself that she can travel more rapidly than the submarine, either to avoid engagement or to force it on her own terms. Because a ship makes noise at high speed, maintenance of contact and coaching onto the target will probably be carried out, as often is the case now, by another vessel, moving slowly and quietly.

The amphibious forces will not have changed their character by the end of the decade, for in the last 10 years they have been almost completely rejuvenated with new ships of excellent design. Assuming that the fleet is well balanced as to its responsibilities, there will be a larger share of amphibious ships than today, though, without the draft the number of marines available to be carried probably will have been reduced, mainly through cutbacks in the Pacific. Conceivably, if the ships cannot be automated sufficiently, we will see a closer marriage in performing onboard tasks by the ship's company and the embarked marines. After the latter are landed, the ships will have to return home shorthanded. That certainly will influence amphibious and amphibious support tactics.

Gunfire support from the sea, once plentiful, will have become scarce. But a

few new ships will have begun to appear, perhaps resembling the 2,000-ton, 20-knot *Erie* class gunboats (each with four 6-inch guns) completed in 1936 and well suited both for diplomatic missions and gunfire support.

The mine countermeasures force will not have recovered from the steep decline which began in 1969. With their wooden hulls and nonmagnetic engines and equipment, minesweepers are expensive ships to build and maintain, so those built in the 1950's and now nearing the end of their careers will not have been replaced. The Soviet Union, to be sure, has a strong tradition of effectiveness in mine warfare. But it appears that even in Russian eyes mining has declined in importance, and many of their new ships seem to have no means of laying mines—though it must be admitted that such means can be provided quickly and easily. But the United States, which will still be providing the largest part of the West's naval force, will have come to depend on her allies who will have mine countermeasures craft on the scene to provide nearly all the necessary capability both in Europe and in Asia. For our amphibious squadrons approaching an enemy shore and for the protection of our own ports, helicopter-drawn sweep gear will be employed and, in shallow waters, swimmers will be used to disarm individual mines spotted by mine-hunting craft.

As for minelaying, the United States will have about the same capability as she now has; that is, almost none. There will be no surface minelayers; submarines will be too large, too expensive, and too scarce for such uses; and those aircraft which can get into enemy airspaces and out again will probably go armed with missiles or bombs rather than mines.

The one element of surface forces in which the U.S. Navy will be stronger than now will be that which will provide new opportunity for offensive action on

the surface of the sea; that is, the small fast combatant, such as the Soviet *Osa*, the Israeli *Sa'ar*, and the West German *Jaguar* classes.

Most naval action takes place not too far from land, and, if the United States is to take advantage of the geography which works so spectacularly against the Soviet Navy, that will be especially true in any "conventional" war between the United States and the U.S.S.R. Three of the Soviet fleets are based on partly enclosed seas, and the fourth is hampered until it can gain the use of Norwegian harbors. Clearly, the most crucial points of a naval war between the two Great Powers will be the straits which the Soviets must attempt to control before they can seriously consider contesting for control of the seas beyond. Hence, some of the navies guarding those straits are already provided with excellent small combatants armed with torpedoes or, increasingly, with surface-to-surface missiles. By the end of the decade all those navies will be well provided with such craft, as will the U.S. Navy.

Because they cannot cross the oceans comfortably on their own, such craft lack strategic mobility, but that can be supplied by an LSD or a ship resembling an LSD. Task units, each consisting of such a ship, plus four small combatants armed with surface-to-surface missiles, and a pair of helicopters, will be part of the U.S. fleets in European and Asian waters. Besides providing the strategic mobility for her task unit, the LSD-like ship will be the repair yard, the source of replenishment, and the command and control center. The helicopters will provide tactical reconnaissance and mid-range guidance against distant targets and the small combatants the striking arm. Such a task unit, moving as the

political or strategic situation demands, can transfer itself quickly from Norfolk to the Aegean Sea or the Baltic or from San Diego to the Sea of Japan, providing immediately usable reinforcements to the U.S. and allied fleets on the scene.

There remains the Reserve, of which much is now being made. If the Reserve forces are to be useful, they cannot be large bodies of men whose real experience in naval war falls farther and farther into the past. To be employable, they must be good and they must be ready. The kinds of men most likely to be sought by the Navy for its Reserve force are also the kinds their civilian employers will most depend on; hence, it is unlikely that many such people will be free to train as much as necessary. This suggests that by the decade's end the Reserve will, in fact, be substantially smaller than it now is or now is contemplated.

Altogether, the Navy will be smaller than it is today, but it will be an interesting Navy to be part of and, individual for individual and ship for ship, it will be highly effective.

---

### BIOGRAPHIC SUMMARY



Frank Uhlig, Jr., is editor of the *Naval Review* and senior editor, U.S. Naval Institute. He holds a B.A. in history from Kenyon College and served in the U.S. Navy in 1945-46. He has had articles published in *Foreign Affairs*, *American Heritage*, the *U.S. Naval Institute Proceedings*, and the *Baltimore Sun*. He was the 1970 recipient of the Navy League's Alfred Thayer Mahan Award for Literary Achievement.

---