

Data for Project 60

Once I had completed Project 60 with the staff support of Rear Admirals Stan Turner and Wirth Bagley, it was necessary to achieve approval of it in concept in order that it could serve as the planning document from which our naval modernization program would flow during the four years of my watch. The process was, of course, long and involved.

Even before the project had been completed, both Turner and Bagley had held many discussions with action officers throughout the Navy to get their ideas and therefore, in a certain sense, the document already had been widely vetted.

The next step was to hold briefings for the senior deputies throughout the establishment. These three-star deputies, each charged with a different area of responsibility under me, each expected strongly to advocate those areas in which they had the responsibility, had to be gotten aboard in support of the project if we were going to sail through the higher echelons of civilian authority. This briefing went well, and after some discussion and negotiation of detail, achieved the expected support from the military

deputies, with one exception. Vice Admiral Hyman Rickover had come to the meeting with a very detailed point paper which made the following major points. (Bob, I don't have a copy of the Rickover point paper that I can find, so you may have to summarize it here from yours.) This point paper made all of the standard arguments in favor of nuclear propulsion and they are many. As a matter of fact, no one has ever disagreed that a nuclear-propelled ship is more effective than a non-nuclear-propelled ship. The whole argument has always been whether the additional cost was worth the additional effectiveness. The cost differential is much higher than has ever been truly demonstrated because there are many hidden costs, in addition to the acknowledged greater construction costs and greater life-cycle costs. These hidden costs are the tremendous additional expenditures that must be made for highly-trained personnel and the much higher quality personnel that must be funneled into the nuclear propulsion program to the detriment and reduced readiness of other programs, in a period when we do not have enough highly competent technical personnel to man the overall Navy very well. Put in its simplest form, the argument has always been whether at any given budget level the Navy could afford to give up a

larger number of ships, non-nuclear-propelled; that is, to do without constructing them in order to construct a smaller number of nuclear-propelled ships. It is very similar to a family which decides that it is more important and effective to have two small priced cars because of the need to have two sets of transportation than it is to have one very expensive, more effective car. All of the calculations that the Navy has done demonstrates quite clearly that it would be disastrous for the Navy to seek to make every ship nuclear-propelled. We would end up with a very small Navy indeed. There has been very little argument that most of our submarines ought to be nuclear-propelled, although for theological reasons (read Rickover) we have not been permitted by the Congress to build any diesel submarines while the Russians are continuing to build numbers of them.

It begins to be a much more even argument when one asks whether our aircraft carriers ought to be nuclear-propelled because we could afford three conventionally propelled aircraft carriers for the price of two nuclear-propelled carriers and then it gets to be a very good question, indeed, as to whether one ought to go beyond the aircraft carriers now that we have four we are building of the nuclear-propelled variety and make the

escorts nuclear-propelled. My own position has always been that one could justify having a few nuclear-propelled escorts, but that the advantages of nuclear power were not sufficient to justify the very large reduction in the number of ships the Navy could have unless we keep the number of nuclear-propelled ships small. The Russians, in my judgment, have done a much better job of optimization of their Navy (unencumbered as they are by congressional lobby) and have not only continued to build some diesel-propelled submarines, as a result in part of which they are able to have a much larger fleet of submarines; and they have never built a nuclear-propelled warship, as a result in part of which they are able to have four-times as many ships.

I was rather familiar with all of the fine grain of the points that Admiral Rickover had made because he and his staff had thrown them at me in spades, during that period in 1967 when, as the Navy's director of Systems Analyses, I was responsible for the major fleet escort force level study supplement on endurance. (Bob, here you can refer to the previous dictation I've done on the way in which this study was forced on us by Admiral Rickover's call to Forest Peterson.) In that study, my associates and I gave nuclear propulsion every advantage which was possible to credit

them with for purposes of quantitative analyses. In any study, it is necessary to make assumptions and it was quite clear that the study group concerned gave the benefit of the doubt with regard to these assumptions to nuclear propulsion. Every advantage of nuclear propulsion was listed in the final report, both those that could be quantified and those that could not. Nevertheless, notwithstanding all of these and notwithstanding the fact that nuclear power was given the advantage of the doubt in the assumption process, it was quite clear to me that the Navy ought not to go beyond the level of a total of 16 nuclear escorts, and that a much larger number of conventional escorts was required. All of the calculations made it quite clear that we gained more from having additional sonar platforms, additional missile platforms, and additional anti-aircraft platforms, in any given location, than we did from the advantages of the nuclear propulsion. And that in the event of either a lowlevel or highlevel war, the United States Navy would lose sooner for a lack of adequate number of platforms than it would for any inadequacies in the propulsion capability of the individual platform. Therefore, although I was willing to accommodate and make some minor modifications in Project 60 to get Admiral Rickover's temporary support for it,

I was not willing to follow all of Project 60's emphasis on lowcost systems. For the moment Admiral Rickover went along, and the briefing went forward to the Secretary of the Navy and his assistants, and then to the Assistant Secretaries of Defense and finally to Mel Laird and Dave Packard, each of whom gave approval in principle to the concept of Project 60.

This was the easy part. This was the immaculate conception for a project of unknown gestation period. We had hoped that we would have the majority of it entrained and underway in a year or two. The bureaucratic process proved to make it impossible to get all of it underway, even in four years, although appreciable progress was made. But the details of that, I will discuss in subsequent chapters.

(Note to Bob: Even the major fleet escort force level study supplement on endurance, giving every possible advantage in the calculations for nuclear propulsion, and I, made it clear that our escort building program while producing 16 nuclear escorts should, at the same time, produce five times as many non-nuclear escorts. The nuclear number is probably higher than a more objective calculation might have deduced.)