

Y4
.Ar 5/3
P16/2

1034-A

Ar 5/3
P16/2

NOMINATION OF MELVYN R. PAISLEY, TO BE
ASSISTANT SECRETARY OF THE NAVY (RESEARCH,
ENGINEERING, AND SYSTEMS)

GOVERNMENT
Storage

DOCUMENTS
DOCUMENTS

JUN 1 - 1982
JUN 1 6 1982

HEARING

FARRELL LIBRARY
KANSAS STATE UNIVERSITY
KANSAS STATE UNIVERSITY

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

FIRST SESSION

ON

NOMINATION OF

MELVYN R. PAISLEY, OF WASHINGTON, TO BE AN ASSISTANT
SECRETARY OF THE NAVY (RESEARCH, ENGINEERING, AND
SYSTEMS)

NOVEMBER 18, 1981

Printed for the use of the Committee on Armed Services



U.S. GOVERNMENT PRINTING OFFICE

92-342 O

WASHINGTON : 1982

KSU LIBRARIES
629624 006TTA
A11900 477629 ✓

NY
8/13
8/13

COMMITTEE ON ARMED SERVICES

JOHN TOWER, Texas, *Chairman*

STROM THURMOND, South Carolina

BARRY GOLDWATER, Arizona

JOHN W. WARNER, Virginia

GORDON J. HUMPHREY, New Hampshire

WILLIAM S. COHEN, Maine

ROGER W. JEPSEN, Iowa

DAN QUAYLE, Indiana

JEREMIAH DENTON, Alabama

JOHN C. STENNIS, Mississippi

HENRY M. JACKSON, Washington

HOWARD W. CANNON, Nevada

HARRY F. BYRD, Jr., Virginia

SAM NUNN, Georgia

GARY HART, Colorado

J. JAMES EXON, Nebraska

CARL LEVIN, Michigan

RHETT B. DAWSON, *Staff Director and Chief Counsel*

JAMES F. MCGOVERN, *General Counsel*

CHRISTINE E. COWART, *Chief Clerk*

NOMINATION OF MELVYN R. PAISLEY TO BE AN
ASSISTANT SECRETARY OF THE NAVY (RESEARCH,
ENGINEERING, AND SYSTEMS)

WEDNESDAY, NOVEMBER 18, 1981

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

The committee met at 10:07 a.m., pursuant to notice, in room 212, Russell Senate Office Building, Senator Roger W. Jepsen presiding.

Present: Senators Jepsen and Jackson.

Staff present: Rhett B. Dawson, staff director and chief counsel; James F. McGovern, general counsel; Paul C. Besozzi, minority counsel; Christine E. Cowart, chief clerk; L. Wayne Army, Edward B. Kenney, José E. Martinez, Anthony J. Principi, and Carl M. Smith, professional staff members; Richard D. Finn, Mark B. Robinson, and Ralph O. White, Jr., research assistants; and Tamara L. Jones, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater; Jim Dykstra, assistant to Senator Cohen; Don Ingram, assistant to Senator Quayle; Robert Nichols, assistant to Senator Jackson; Frank Krebs, assistant to Senator Cannon; Gray Armistead, assistant to Senator Byrd; and Peter Lennon, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR ROGER W. JEPSEN, PRESIDING

Senator JEPSEN. We convene this morning to consider the nomination of Mr. Melvyn Paisley to be Assistant Secretary of the Navy for Research, Engineering, and Systems.

In addition, the committee will also consider various routine military nominations and proposed legislation regarding flag and general officer strengths.

Mr. Paisley, the committee welcomes you and congratulates you on your nomination to this very important position.

Before I invite Mr. Paisley to make his opening statement, I would like to advise the committee that Mr. Paisley has previously met with the committee staff and has agreed to take all actions necessary to comply with the committee's policies and procedures concerning personal financial disclosures and conflicts of interest.

At this time, I would like to recognize Mr. Paisley's wife, Vicki Ann Paisley, and his son, Bo.

Senator JACKSON. Mr. Chairman, may I make a statement?

Senator JEPSEN. Certainly.

Senator JACKSON. I am very delighted to present Mr. Paisley to the committee. He is a native of Portland, Oreg. He has, as the Chair is undoubtedly aware, a distinguished record from World War II where he was a fighter pilot with the 9th Air Force, and he is a member of the American Fighter Ace Association. He was credited with shooting down nine enemy aircraft. He was decorated 21 times, including the Distinguished Flying Cross, the Silver Star with 1 cluster, and 16 Air Medals.

Mr. Paisley is a graduate of the American Institute of Engineering and did graduate work in electrical engineering at MIT. He was with Boeing for 28 years and was involved in all of the key programs in the military area, Mr. Chairman. His special responsibility in getting Minuteman deployed in time was a major accomplishment.

I would point out he was, likewise, involved in the Bomarc program, the Bomarc air defense missile, and he has, in addition, worked on various other programs which will bring to his new position the experience and great management skills that are essential for research and development work for the Navy.

Senator JEPSEN. Thank you, Senator.

With all the things you describe that Mr. Paisley has done, it seems that he would have to be about 90 years old.

Senator JACKSON. Well, he is a fast mover.

Senator JEPSEN. Mr. Paisley, your nomination reference and biographical sketch will be entered in the hearing record.

[The nomination reference and biographical sketch follow:]

NOMINATION REFERENCE

AS IN EXECUTIVE SESSION,
SENATE OF THE UNITED STATES,

October 27, 1981.

Ordered, that the following nomination be referred to the Committee on Armed Services:

Melvyn R. Paisley, of Washington, to be an Assistant Secretary of the Navy, vice David Emerson Mann, resigned.

BIOGRAPHICAL SKETCH OF MELVYN R. PAISLEY

Mr. M. R. (Mel) Paisley joined the Boeing Company in 1954 directly from graduate school at the Massachusetts Institute of Technology. His education is in electrical engineering.

Mel Paisley has 28 years of Boeing military business experience. His last position before retiring from Boeing on October 1, 1981, was manager for International Operations with the Space and Information Systems Division of Boeing Aerospace Company, and vice president of Boeing International Corporation. Prior to that position, he was the International Plans and Operations manager for Boeing Aerospace Company. He structured Boeing Aerospace Company's first international military sales organization. A collaborative effort involving the Roland air defense system was Mr. Paisley's responsibility, and as a result of his initiative, this was the first major technology transfer from NATO to the United States. He was also responsible for what became the present NATO E-3A program.

On special assignment to the Defense Science Board in 1978, Mr. Paisley led the industry team which was instrumental in developing the Memoranda of Understanding for the Family of Weapons Concept in that year. His appointment to this assignment was based on his understanding of NATO military requirements and his established relationship with the NATO military community, industrialists, and Parliamentarians. This expertise was developed over a period of years through his involvement in negotiations with European government and industry representatives in response to requirements developed

by and with NATO governments. In addition, this activity has required him to work closely with NATO Armaments Directors, and has enabled him to establish collaborative efforts with European industry.

Mr. Paisley's career at Boeing developed through numerous positions of increasing responsibility. In 1954, he was responsible for the design and test on the BOMARC missile. He applied for over 15 patents in microwave instrumentation while on this program. In 1959, he became manager of the Electronics staff for the Minuteman missile system where he directed early development of a radio launch control system.

In 1961, Mr. Paisley was appointed Engineering manager of the Minuteman System at Wing I in Great Falls, Montana, where he was responsible for the engineering aspects of deploying, on schedule, the first Minuteman Wing.

Following this, he was manager of the Safeguard Anti-Ballistic Missile Implementation project and was then assigned as the B-1 Electronics proposal manager. The B-1 program evolved into one of Boeing's most successful avionics integration and implementation programs.

In 1971, Mr. Paisley became the 747 Tankers program manager; a program that was consummated in the delivery of the system to the Iranian government.

As Director of Planning for Boeing Aerospace Company, he was responsible for the operations planning for military and space systems involving 20,000 people and an annual base exceeding one billion dollars.

Mr. Paisley's 28 years with Boeing Aerospace Company provided him with all aspects of experience related to the development and production of major defense programs, as well as detailed familiarity with the U.S. Government's development and acquisition process. In addition, his responsibilities with The Boeing Company provided him the opportunity to establish relationships with military procurement management personnel in both the systems and laboratory communities within the U.S. as well as our Allied countries.

A native of Portland, Oregon, Mel Paisley graduated from the American Institute of Technology in 1953 and completed graduate work at MIT in 1954. He was a fighter pilot with the 9th Air Force during WW II and is a member of the American Fighter ACE Association. He was credited with shooting down nine enemy aircraft, and was decorated 21 times—including the Distinguished Service Cross, the Silver Star with one Cluster, the Distinguished Flying Cross, and 16 Air Medals.

Mr. Paisley presently resides with his wife, the former Vicki McKim, at their home in McLean, Virginia. He has four children, one of whom resides at home. Mr. Paisley was born in October 1924.

Senator JEPSON. You may proceed, Mr. Paisley.

STATEMENT OF MELVYN R. PAISLEY, OF THE STATE OF WASHINGTON, NOMINATED TO BE AN ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH, ENGINEERING, AND SYSTEMS

Mr. PAISLEY. I have been working with the Navy and the Pentagon for about 3 months now. I think I am getting close to 90 years old. It is a busy schedule up there.

I reviewed the testimony of Secretaries Weinberger, Carlucci, and Lehman before this committee for their confirmation to get a better understanding of what the committee is interested in, and also to get a better insight into what the Secretaries' views were on some of these issues, including the defense issues at hand.

I have submitted a statement, and I would like to make a 2- or 3-minute summary of a couple of points that are in the statement.

Senator JEPSEN. Your statement will be entered into the record as if read, if that is what you desire.

Mr. PAISLEY. If you will just enter it and I will give you a couple of comments.

Senator JEPSEN. It will be entered into the record as if read. The Chair hears no objection; it is so ordered.

[The prepared statement of Mr. Paisley follows:]

PREPARED STATEMENT OF MELVYN R. PAISLEY

Mr. Chairman. It is a pleasure and honor to appear before this committee and submit this statement associated with my seeking confirmation as the Assistant Secretary of the Navy for Research, Engineering, and Systems.

I have reviewed with great interest the confirmation testimony of Secretaries Weinberger, Carlucci, and Lehman to this committee. I did this not only to understand the Committee's interests, but also to get a good insight into the Secretaries' views. My review of these testimonies indicated a desire on the part of this committee to have forthright and expeditious testimony from Department of Defense witnesses. I would like to state that I clearly understand the assurances made by each Secretary, and I give this committee the same commitment.

If confirmed in this position, I will concentrate on implementing the defense procurement policy discussed during the Secretaries' testimony. These policies have more recently been formulated into what are referred to as the Weinberger-Carlucci initiatives. I summarize them here into five categories:

1. Improve the planning and execution of acquisition programs.
2. Reduce administrative requirements that add unnecessarily to time and cost of acquisitions.
3. Increased delegation of authority and responsibility.
4. Increase the reliability, readiness, and supportability of new acquisitions.
5. Strengthen the industrial base.

In this regard, I believe that I can make an important contribution to the shortening of the procurement cycle from the start of R. & D. to the start of production. I would concentrate on reducing the number of programs being pursued in R.D.T. & E. because I believe we are stretched too thin to be able to carry out all these programs both efficiently and effectively with the resources we can reasonably hope to obtain in the years ahead. However, I am well aware of the fact that this is not going to be an easy task because it is not, in my opinion, a matter of cutting out "fat" but of deciding what important programs to stop so that available resource can be concentrated upon the most critical and promising programs.

An area of importance associated with the selection of the R.D.T. & E. programs to be pursued is that of not reaching out so far on technology on the initial production configuration of the system. If product improvements are well planned to take advantage of the more advanced technological capabilities, they can be implemented as the threat evolves. This results in lower risk with lower cost and overall earlier operational capabilities.

At the same time I recognize the need for a strong well-balanced program of work in research and exploratory development to maintain our technological superiority in areas critical to the Department of the Navy. I believe that we can and must do a better job of screening, selecting, planning, executing, and transitioning research and exploratory development projects; of coordinating these plans and efforts with the other Services, other government agencies, and with our allies; and of shortening the time and reducing the costs of translating new discoveries and new technologies into new systems for the Navy and the Marine Corps.

One of the results of focusing more attention upon the coordination of our plans and programs in the early phase of our R.D.T. & E. programs should be a reduction in the proliferation of functionally similar systems among the Services and our Allies. I will fully support the Weinberger-Carlucci initiatives to achieve this reduction by striving for standardization of such components, and systems whenever and wherever this makes sense.

I believe the Defense Department can effectively use the approaches and philosophies developed in the industrial sector where readiness and sustainability are a prime consideration. I would hope to instill this philosophy into the R. & D. phase of our Navy and Marine Corps programs.

Finally, I would like to give you my personal reasons for wanting to serve as the Assistant Secretary of the Navy for Research, Engineering, and Systems. While I totally agree with Secretary Lehman's reasons for wanting to serve in his capacity, and if I may quote him, "I think we now have in hand the people,

the circumstances, and the will of the American people to change course and to really change the course of history, and to be able to have the honor to participate in that kind of an understanding which is very humbling and exciting at the same time," I put my response on a more fundamental basis. George Washington once said "that every citizen who enjoys the protection of a free government, owes not only a portion of his property, but even of his personal service to the defense of it." I believe the personal service that I would bring to this office is a capability developed over many years of experience in the research, development, and production of defense systems.

I would look forward to a continuing relationship with this committee, and to working for Secretary John Lehman, a man I hold in the highest regard from every point of view. In the simplest words of the patriot that I am, I stand ready to serve my country again.

Mr. Chairman, that concludes my statement.

Mr. PAISLEY. I notice that there is a concern on the part of the committee about the willingness of nominees to give very forthright, straightforward testimony during such hearings. I agree with all of the assurances that were given by the three Secretaries, and I would like at this time to give the committee exactly the same assurance on my part in terms of giving forthright testimony.

A second point that comes up during confirmation hearings centers on the candidate's willingness to participate in this kind of job and why he might want to do it. Secretary Lehman, I think, gave a very good answer to that question. He is more articulate on this subject than I am. I would like to put my response to that in a more basic fashion:

George Washington said that "Anybody who lives in a free democracy should be willing to give some part of his personal property and some part of his personal service to the defense of that society."

I think the personal service that I bring to this position is one of 28 years working in R. & D. and an understanding of military requirements.

If confirmed to this position, I look forward to working with this committee. I particularly look forward to working with Secretary Lehman, a man I hold in the highest regard from every view.

With that, I would like to close my statement.

Senator JEPSEN. Thank you.

Senator JACKSON. I don't have any questions. I think the Chair is hoping that the statement covers his previous service. As I understand it, he sold off, or is in the process of selling, his Boeing stock. He had a nonvested pension which has been converted into a vested one with an insurance company, so there are no possible conflicts of interest in that regard.

Senator JEPSEN. Mr. Paisley, when you compare the U.S. Navy and the Soviet Navy, in what areas do we seem to have a technological advantage, and in what areas, also by the same token, do we have a disadvantage?

Mr. PAISLEY. As I mentioned, I like to give straightforward testimony here. I do not know the capabilities of the Soviet Navy. I have not been briefed on it and I don't know what their capabilities are.

I could talk about where I think our capability lies, and I might say a little bit about that.

I am very familiar with the Air Force labs in this country and the Army labs, so the first thing I did when I became a consultant for the Navy was to go to the R. & D. labs that the Navy has. I might say

I have gone to 7 out of the 11 Navy labs. I will finish up going to the rest of them by Christmas.

I feel that the R. & D. capabilities of the Navy labs are better than those of any other laboratories in the United States, including those I have seen in industry, so we have a very broad technical capability in the Navy labs.

I think that what I would do, if confirmed to this position, is give the technical capability in those labs a stronger position in judging technical risks associated with programs. That is one of the things that we have to do in a continuing review of the R. & D. programs in the Navy.

I think that we should move in a positive and faster fashion to get systems fielded and the way to do it with lower risk is not to reach out so far with technology. The labs can assist us in this, if we place them in a position to judge the risks associated with various technologies.

I think that the Navy's ability to develop air-to-air missiles is an outstanding example of what I have in mind. I think if the Navy had not developed that capability, we would be far behind where we are today, but I have no way of judging that capability compared with the Russians. I have not had a briefing on it.

Senator JEPSEN. What do you think are the most significant long-term problems that are facing the Navy today?

Mr. PAISLEY. I will tell you from an R. & D. viewpoint—The Secretary, I think, is a good tactician and understands the Navy's problems from that viewpoint, so let me talk about it from an R. & D. viewpoint. We have too many programs in R. & D. that do not get into production. It is very difficult to select those programs that are going to continue into production, and I think we have to improve that process.

Having selected a program, we must move it rapidly into the fleet. It takes much too long to put a program into the fleet; it just takes too long. In fact, I thought I had been close to this kind of activity, but I was surprised by the length of time it takes to get a system in. It just surprised me.

Senator JEPSEN. Thank you. I have no further questions.

Senator JACKSON?

Senator JACKSON. No questions.

Senator JEPSEN. The Chair will entertain a motion.

Senator JACKSON. I move that the nomination be reported favorably.

Senator JEPSEN. The motion has been made that the nomination be reported favorably. All those in favor of that signify by saying "aye".

[Chorus of ayes.]

Senator JEPSEN. Opposed, "no."

[No response.]

Senator JEPSEN. The Chair will advise that the record will remain open until 5 p.m. and all the members will be polled.

[Questions submitted by Senator Jepsen, answers supplied by Mr. Paisley:]

Senator JEPSEN. Mr. Paisley, what do you consider are the basic goals for the Navy's R&D Program?

Mr. PAISLEY. The three basic goals of the Navy's R&D program, broadly stated, are to improve and upgrade existing operational systems as soon as possible; to acquire the new systems required to meet the challenges and demands of the near future; and to pursue a broad spectrum of research and exploratory

development work to meet the longer term needs of the Navy and Marine Corps. We must strive to do all of these things more efficiently, more economically, and more quickly.

We must also strengthen our efforts to screen-out, periodically, less promising and slower moving R&D programs, so we can properly support the more promising ones and explore other new ideas.

Senator JEPSEN. Mr. Paisley, when you compared the United States and the Soviet Navies, in what areas do we seem to have a technological advantage? In what areas do we have a disadvantage?

Mr. PAISLEY. I believe that today we still have the technological advantage in most areas of comparison. However, the Soviets have obviously narrowed the technological gap in many areas during recent years, and they have continued their numerical build-up. We cannot go into much more detail concerning such comparisons without getting into classified matters. I hope it will suffice to say that I generally concur with the recent technological assessments and comparisons provided by Dr. DeLauer and others.

Senator JEPSEN. Mr. Paisley, what do you think are the best ways to encourage the innovation necessary to keep our military technology ahead of that of the Soviets?

Mr. PAISLEY. First, I think we must continue to support a vigorous program of research and exploratory development in a wide variety of areas. There are, of course, some areas of work that we should pursue more intensively than others, because we can already foresee some of the implications and applications of certain developments. Examples include the VHSIC and fiber optics. Experience indicates that we should continue to probe and explore on a broad front because we cannot predict where or when the next important discovery will be made or who will make it. Unfortunately, this also makes it difficult to terminate programs, because there is always the hope that if we will only continue to support R&D effort a little while longer it will bear fruit. However, I think we can increase the rate of innovation by periodically screening out the less promising, less rapidly moving programs so we can initiate new work, explore new ideas, and accelerate the more promising programs.

The second point I would make is that if we are to keep our military technology ahead of the Soviets, we should be more careful about the information we publish, and about the technology we transfer or export.

The third and final point I would make is that from a military viewpoint technical innovations in weapon systems do not pay off until they reach the forces that may have to use them. If acquisition times are excessive, the technologies may be obsolete by the time a new system reaches the fleet. Moreover, if the new systems are unreliable, unsupportable, or if our sailors and marines do not know how to operate and maintain them, the innovations may be of little or no benefit to the fleet. Consequently, we must support the Weinberger-Carlucci initiatives to reduce acquisition times, and to develop and produce new systems that not only exploit the latest technology but are more reliable, supportable, easier to use, and more affordable than those delivered to the fleet in the past.

Senator JEPSEN. Mr. Paisley, there are a lot of items in the Navy RDT&E program. When you review this complicated and important account what methods will you rely upon to assure yourself that you have chosen the best way in which to spend this money?

Mr. PAISLEY. First, I intend to strengthen the role of our in-house laboratories in assessing both the promise and the technical risks of the various items and programs. Second, I intend to review and revise our policies for the training, selection, and rotation of Program Managers and other key personnel who have been delegated much of the responsibility for screening R&D proposals and for selecting the projects we pursue. Third, I intend to make more effective use of such independent groups as the Naval Research Advisory Committee to obtain objective assessments of the various alternatives. And, fourth, with respect to joint programs and programs of mutual interest, I intend to work more closely with my counterparts in the other two Services, in DARPA, in OSD, and in allied countries to assure that we choose the best way in which to allocate and spend our RDT&E funds.

Senator JEPSEN. Mr. Paisley, why do you think it is difficult to estimate costs of R&D programs for Navy weapon systems? What can or should be done to correct this program?

Mr. PAISLEY. It is always going to be difficult to estimate costs of R&D programs accurately, because by their very nature we are always trying to do

something that has never been done before. The more ambitious the goals and the greater the technical risks, the more uncertainty is involved in the cost estimates. However, we also know of some things that can be done to improve both our cost estimates and our control of costs. Many of these actions have been spelled out in the Weinberger-Carlucci initiatives. For example, I believe we can do a better job of planning at the outset; we can improve the stability of our R&D programs and avoid stretch-outs that result from budget cuts; we can include the higher risk work in parallel or follow-on "preplanned product improvement" programs; we can improve our cost estimating and cost control capabilities; and we can motivate our contractors to do a better job of making our cost predictions come true, I believe, by improving their incentives to do so—for example, by negotiating award fee type contracts for the final phase(s) of their R&D work, with the award fee being tied, (at least in part), to the unit production costs agreed upon for the first production buy.

Senator JEPSEN. Mr. Paisley, what do you think are the most important areas of research in which we could exert more effort in cost reduction?

Mr. PAISLEY. If I understand your question correctly, I would say in the areas of expanding the utility and use of computers for ship design, aircraft design, and weapon system design. I know of no other area that promises so large a reduction in the engineering manpower and costs required to carry through a development. However, our efforts to realize a distributed architecture for major new weapon systems should also result in substantial cost reduction. The basic idea is to realize system designs that will allow incremental improvements to be introduced in these systems without having to make extensive changes either in their software or hardware. Examples of these R&D programs include the Submarine Advanced Combat System (SUBACS) program, and the DDGX-Combat System.

I believe we can also reduce our program costs by transitioning to production more sensibly in the future by allowing somewhat more concurrency of the R&D and the initial production effort. Strictly speaking we cannot regard any design as proven, acceptable and satisfactory until we have verified its producibility. Furthermore, it should be kept in mind that the production line itself usually requires substantial engineering effort. Experience suggests that additional early planning and investment in this area is likely to pay off significantly in reducing acquisition times, in improving the quality of new systems delivered to the fleet, and in longer term cost savings.

Of all the things we can do to reduce program costs, the most important appear to be those that cut years off the length of the development cycle. My number one goal, therefore, is to reduce the average time it takes to carry out such developments.

Senator JEPSEN. Mr. Paisley, do you think it is necessary to create more accountability in the Navy's R&D bureaucracy, and if so, how?

Mr. PAISLEY. Yes, I do, and I think that one of the best ways to accomplish this is to shorten acquisition times and lengthen the tours of duty of our Program Managers so that they more nearly coincide or match. I also think that the programming and scheduling of proposed changes, modifications, and improvements to occur in well defined "blocks" will help us to identify and judge system growth, benefits, costs, and those who are responsible for them.

Senator JEPSEN. Thank you, Mr. Paisley, the committee will proceed to the consideration of other matters.

[Whereupon, at 10:16 a.m., the committee proceeded to the consideration of other matters.]

[The nomination of Melvyn R. Paisley to be Under Secretary of the Navy for Research, Engineering, and Systems, and routine military nominations were reported to the Senate by Senator Jepsen on November 18, 1981, with the recommendation that the nominations be confirmed. The nominations were confirmed by the Senate on November 23, 1981.]



