



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
1333 ISAAC HULL AVE SE
WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO
NAVSEAINST 1520.2C
Ser SEA 00PZ/062
04 OCT 02

NAVSEA INSTRUCTION 1520.2C

From: Commander, Naval Sea Systems Command

Subj: ENGINEERING DUTY (ED) OFFICER DOLPHIN PROGRAM

Ref: (a) Navy Personnel Manual, Article 1210-110

1. Purpose. To issue procedures for administration of the ED Dolphin Program.
2. Cancellation. NAVSEAINST 1520.2B of 8 December 1986.
3. Background. Engineering Duty (ED) officers (designators 144X and 146X) not previously qualified as officers in submarines are prepared for assignment to billets associated with the design, acquisition, construction, maintenance and modernization of submarines through the ED Dolphin Program. This voluntary program includes approximately two years of training and experience that leads to a designation as "Engineering Duty Officer Qualified in Submarines." Participation in this program does not obviate the need to complete the required Engineering Duty Officer Qualification Program. The Deputy Commander for Integrated Warfare Systems, Naval Sea Systems Command, SEA 05, serves as the sponsor for the ED Dolphin Program.
4. Program Requirements and Procedures. Unless otherwise indicated, there is no specific order in which the following requirements must be completed. Sequencing will be accomplished to fit each officer's and activity's situation. Generally, officers who are not assigned to a nuclear shipyard or nuclear Supervisor of Shipbuilding Office at the time they are selected to participate in the program will be ordered to such an assignment at their normal Projected Rotation Date (PRD). PRDs for officers already assigned to a nuclear shipyard or nuclear Supervisor of Shipbuilding Office will normally be extended as needed to permit completion of the program prior to rotation. All officers in the program will attend the Submarine Officer Basic Course and will be assigned to an SSBN or SSN for a patrol and associated refit period en route to the qualifying industrial activity duty station. Requirements for the program include:

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a. Radiation and Submarine Physical Examination. Upon selection for the program, an officer must arrange for, and satisfactorily complete the radiation and submarine physical examinations. Physical disqualification prior to the patrol or refit period will terminate the officer's participation in the program.

b. Submarine Officer Basic Course (SOBC). The SOBC course at Submarine School, New London, Connecticut, provides instruction in the basic elements of submarine equipment, systems and operations.

c. NAVSEA/Type Commander Indoctrination. Each candidate will travel to Washington, DC for a two-day briefing at the Naval Sea Systems Command (NAVSEA) and Chief of Naval Operations (N77), and to Norfolk, VA for a one-day briefing with Commander, Submarine Force, U.S. Atlantic Fleet, (COMSUBLANT). These briefings include submarine technical codes, program management offices, Naval Reactors and fleet maintenance personnel. The intent is to provide the candidate first hand exposure to the viewpoints of the key decision-makers of the Navy's submarine programs. While it is preferable to complete these briefings early in the qualification process, they may be completed immediately prior to the oral board if necessary.

d. Submarine Design Trends Course, Massachusetts Institute of Technology (MIT) Professional Summer. Each candidate will complete the Submarine Design Trends course presented each summer as part of the MIT Professional Summer curriculum. This course provides the candidate with submarine design information not available through any other forum, and includes history and trends, hydrostatics, speed and powering relationships, structures, hydrodynamics, systems design, acoustics and cost estimating.

e. SSBN/SSN Experience, Including Refit Period (or equivalent experience). Approximately 16 weeks are devoted to participation in submarine operations as an assigned member of ship's company in order to gain first-hand knowledge and experience in submarine systems, equipment and operations. During this time frame, the ED Dolphin candidate will observe and participate in the intensive pre-patrol industrial effort required to prepare the ship for sea. The patrol itself will afford the candidate first hand exposure to at-sea evolutions and operations of the ship and its systems as a weapons platform. As a minimum, the candidate will complete Diving Officer of the Watch qualification during the patrol. Additional

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qualifications such as Officer of the Deck are encouraged. This period, while assigned to the submarine, also affords an excellent opportunity to complete the majority of the ED Dolphin Qualification Journal. Finally, it is expected that the candidate will assist in the preparation and initiation of the post-patrol refit work package. Specific ship assignment for candidates will be arranged by Navy Personnel Command, NAVPERSCOM (PERS-445) for both TAD and PCS funded patrols.

f. Nuclear Assistant Project Superintendent Course. This three-week school at Puget Sound Naval Shipyard provides essential training in the design, maintenance and modernization of submarine nuclear propulsion systems. When accomplished incident to a normal PRD, this course will be scheduled for the candidate by NAVPERSCOM (PERS-445). Officers attending under temporary additional duty (TAD) orders will schedule this course through their parent command.

g. ED Dolphin Qualification Journal. Each candidate is required to complete a written journal that will be provided to the candidate upon selection for the program, by SEA 00PZ with SEA 05 concurrence. The journal consists of four sections; Pre-patrol, Refit, Patrol, and Industrial. Each section has a set of assigned questions and a set of practical factors. The candidate will forward the completed journal via his commanding officer to Commander, Naval Sea Systems Command, SEA 00PZ, 1333 Isaac Hull Avenue S.E., Washington Navy Yard, Washington, DC 20376, who will arrange for NAVSEA review and approval.

h. Industrial Period. Successful performance for one year in a submarine-related assignment at a nuclear shipyard or nuclear Supervisor of Shipbuilding Office is required. During this assignment the candidate will have the opportunity for training and experience that will provide exposure to all local aspects of submarine design, construction, maintenance and modernization including quality assurance, combat systems, nuclear and non-nuclear systems testing, safety, watertight integrity control, design and engineering, and dry-docking evolutions. Certification by the commanding officer to SEA 00PZ of one year of successful performance by the candidate is required. This certification can be included in the commanding officer's recommendation noted in paragraph 4k. SEA 00PZ will forward the commanding officer's certification to SEA 05 and NAVPERSCOM (PERS-445) for approval.

i. Walk-through examination. Prior to the candidate's local and NAVSEA oral boards, a walk-through examination will be

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conducted aboard a submarine with a submarine qualified officer from the candidate's command. (Note: the candidate's commanding officer may delegate the walk-through examination to the commanding officer of a locally available submarine.) The walk-through examination will permit the candidate to demonstrate his knowledge of submarine systems, components, and operational concepts in a shipboard environment. When the candidate's commanding officer is satisfied that the candidate has successfully completed the walk-through examination, a local oral board examination will be conducted.

j. Local Oral Board Examination. The purpose of the local oral board examination is to provide the candidate experience in relating his knowledge in an oral board environment and to ensure that the candidate is fully prepared and knowledgeable on a broad range of topics likely to be asked during the oral examination at NAVSEA. The local oral board members will be assigned from the candidate's command or a tenant command at the discretion of the commanding officer. The board will consist of a minimum of two officers qualified in submarines, preferably ED officers (144X), who have experienced the content and nature of an oral examination. It is recommended that one member of the board be a qualified submarine unrestricted line officer (1120) to ensure that operational aspects of submarine operation are adequately covered. Certification of successful completion of the walk-through and local oral board examinations will be included in the commanding officer's recommendation noted in paragraph 4k.

k. Oral Board Examination. When the above requirements are completed and the commanding officer is satisfied that the candidate is ready, the commanding officer will recommend him to SEA 00PZ for qualification. SEA 00PZ will forward this recommendation to SEA 05 and NAVPERSCOM (PERS-445) to obtain concurrence for scheduling of the oral board. The commanding officer's recommendation will include certification of satisfactory completion of all requirements for the ED Dolphin Program (SOBC, NAVSEA/Type Commander indoctrination, Submarine Design Trends Course, SSBN/SSN experience, Nuclear Assistant Project Superintendent Course, Qualification Journal, industrial period performance, walk-through examination, and local oral board). The candidate will travel to NAVSEA for an oral examination by a board appointed by SEA 05 and concurred with by NAVPERSCOM (PERS-445), comprised of two ED captains qualified in submarines (144X) and one unrestricted line captain qualified in submarines (1120 - post command). The examination will cover all aspects of the program. Upon completion of the examination, the

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board will submit a written recommendation to NAVPERSCOM (PERS-445) for final determination. Upon formal notification by NAVPERSCOM (PERS-445) of his designation as "Engineering Duty Officer Qualified in Submarines", the officer is authorized to wear the ED Dolphin breast insignia.

1. Validation. Validation of specific paragraph four requirements may be requested if, in the opinion of his commanding officer, the candidate's training and experience prior to program selection fulfill the intent of that specific requirement. Requests must be submitted in writing by the commanding officer to SEA 05, via SEA 00PZ. Approval will be granted only by written concurrence of the ED Dolphin Program Sponsor.

5. Application for the ED Dolphin Program

a. Interested ED officers (designators 144X or 146X) may apply in writing to the Chief of Naval Personnel (PERS-445), Engineering Duty Officer Assignments, Navy Personnel Command, 5720 Integrity Drive, Millington, TN 38055-4450, copy to Commander, Naval Sea Systems Command, SEA 00PZ, 1333 Isaac Hull Avenue S.E., Washington Navy Yard, Washington, DC 20376, in accordance with reference (a). Candidates are selected by an administrative board appointed by NAVPERSCOM (PERS-445). Selection is based on past performance, academic ability, service potential and the needs of the service. Applicants will be notified of their selection by NAVPERSCOM (PERS-445), copy to SEA 05 and SEA 00PZ. SEA 05 will forward a copy of the requirements for qualification and a copy of the ED Dolphin Qualification Journal to selectees.

b. ED officers who have prior officer or enlisted submarine experience and who completed patrol or cruise requirements for qualification in submarines but were physically disqualified prior to receipt of Dolphins are encouraged to apply.

c. Female ED officers are eligible for the Program. Their completion of the onboard SSBN/SSN patrol and refit qualification requirements will be addressed on an individual basis.

6. Responsibilities and Actions

a. The Deputy Commander for Integrated Warfare Systems, Naval Sea Systems Command, SEA 05, is the ED Dolphin Program Sponsor. He will periodically review the status and structure of

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the program to ensure it continues to support the needs of the Fleet and the ED community. SEA 05 will designate, in writing, a submarine qualified ED captain and an alternate who will act as the senior oral board examination member. The senior oral board member will be responsible for ensuring the proper conduct, content, and administration of the oral board examination, and will serve as the principal assistant to SEA 05 in administration of technical aspects of the program.

b. The Director for ED Plans and Policies, SEA 00PZ, administers the program. This includes scheduling the NAVSEA, Chief of Naval Operations and Type Commander briefings and the oral examination, preparation of correspondence, budgeting funds for travel of candidates for the briefing and oral examination, budgeting funds for the Submarine Design Trends Course, monitoring the progress of candidates, selecting submarine qualified captains to act as oral board members, assigning officers for ED Dolphin Qualification Journal review, and maintaining close liaison with the ED detailer, NAVPERSCOM (PERS-445).

c. Captains assigned in accordance with paragraphs 4k and 6a, as members of the oral examination board, will give this duty high priority. High priority will also be given to ED Dolphin Qualification Journal review by those officers assigned.

d. Activity commanding officers will budget for costs associated with the Nuclear Assistant Project Superintendent Course when candidates are assigned TAD from their activity. When accomplished incident to a normal rotation, these costs will be budgeted for by NAVPERSCOM (PERS-445).



P. E. SULLIVAN
Deputy Commander
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