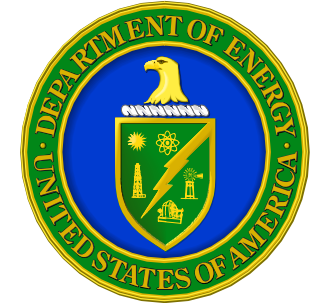




United States Naval Nuclear



Propulsion Program



U. S. NAVAL DISPATCH
INDEX-1007

FROM: USS NAUTILUS SSN 571 CLASSIFICATION UNCL

ACTION: COMSUBLANT

INFO:

NJOF DE NWCL
-T-YZZF
-R-171601Z -FM NWCL -TO YZZF GR 3 BT

UNDERWAY 1446R ON NUCLEAR POWER BT...

700 / 1133R WU/ELT
FL. / 24.16
HBR

1133 R 17 JAN 55



NAVAL NUCLEAR PROPULSION PROGRAM

FOCUSED MISSION

- **Provide militarily effective nuclear propulsion plants and ensure their safe, reliable, and long-lived operation**

CLEAR, TOTAL RESPONSIBILITY AND ACCOUNTABILITY FOR ALL ASPECTS

- **Research, development, design, construction**
- **Maintenance, repair, overhaul, disposal**
- **Radiological controls, environment, safety, and health matters**
- **Officer operator selection, operator training**
- **Administration (security, nuclear safeguards, transportation, public information, procurement and fiscal management)**
- **Centralized control of Program's Industrial Base/Vendors**
- **Spent fuel custody**

SIMPLE, ENDURING, LEAN STRUCTURE

- **Director tenure 8 years, 4-Star Admiral/Deputy Administrator in NNSA**
- **Dual agency structure with direct access to Secretaries of Energy and Navy**
- **Small headquarters, field activities**

EXECUTIVE ORDER 12344 SET FORTH IN PUBLIC LAW 98-525 AND 106-65

NAVAL NUCLEAR PROPULSION PROGRAM



REPORT TO DIRECTOR

- Ensures focus on mission
- Immediate identification of concerns



NUCLEAR POWERED FLEET

- 82 ships
- Over 40% of major combatants



DEDICATED LABORATORIES

- Bettis Atomic Power Laboratory
- Knolls Atomic Power Laboratory
- GOCOs



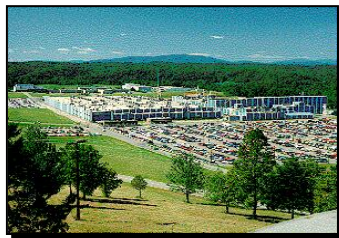
SHIPYARDS

4 Public / 2 Private



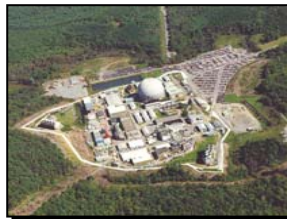
SCHOOLS

- Nuclear Power School
- Nuclear Field "A" School



SPECIALIZED INDUSTRIAL BASE

- 1 dedicated equipment prime contractor
- Hundreds of suppliers



R&D/TRAINING REACTORS

- Train 2500 students/year

103 reactors operating worldwide

LEAN, CENTRALLY CONTROLLED, DEDICATED, SUCCESSFUL

MASTERING NUCLEAR TECHNOLOGY

Defense in Depth

- Design: simple, rugged, redundant, fail-safe, conservative
- Rigorous quality control: on-site reps, detailed specs, HQ approval for deviations, separate logistics/supply, documentation (quality evidence)
- Comprehensive procedures and procedural compliance
- Oversight: NPEB, squadron, type commander, field office
- People: carefully selected; rigorous and continuous training



**THE KEY IS PEOPLE
CAREFULLY SELECTED, HIGHLY TRAINED, MOTIVATED**

OVER FIFTY YEARS OF UNPARALLELED SUCCESS

Open Record of Accomplishments

- Annual reports since 1965
- Cooperation at Federal, state, and local levels
- Ship/Facility orientation visits for public officials

Record Reflects Wisdom of the Law

- Over 128 million miles safely steamed
- Over 5,400 reactor-years of safe operations
- Leader in environmental performance
- 103 reactors operating worldwide

Recent External Interactions

2000: - **PA Governor's** Award for Environmental Excellence
- **Congressional** support in DOE realignment

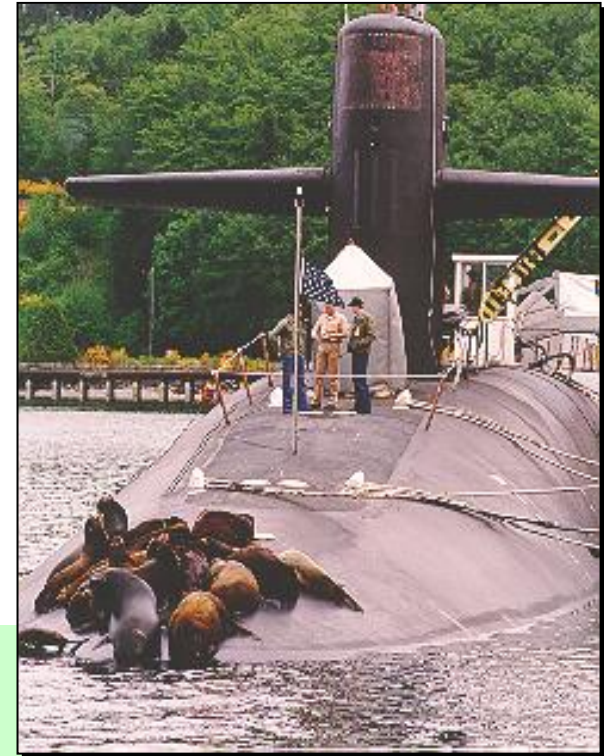
2001: - **GAO report** – “strong internal controls,” “culture that enhances accountability”

2002: - **NRC/ACRS** review of VIRGINIA

- **Secretary of Labor** – “nuclear-powered ships [are] now even more critical in defending our country...[the NR] program maintains readiness while controlling risks and enhancing a culture of responsibility and performance”

- **EPA** review of Windsor radiological survey report – “standard for the future”

- **OMB** 2003 budget report – “effective,” “key contributions to national security”



CONTINUED SUCCESS DEPENDENT ON MAINTAINING TECHNICAL EXCELLENCE

PROGRAM PHILOSOPHY

- **Centralized technical control of all aspects**
- **Personal responsibility for technical, safety, radcon, environmental**
- **In-depth technical understanding of all aspects of work at all levels**
- **HQ involvement in all aspects (design, procedures, operations)**
- Organization with internal checks to ensure thorough review
- **Prompt reporting, evaluation, and correction of problems**
- Rigorous theoretical and practical training; continuing training at all levels
- Conservative designs with ample safety margins; prevention first
- Rigorous quality assurance of all aspects
- Thorough testing of equipment prior to fleet application
- Formality, discipline, and precision
- **Emphasis on close, frequent technical oversight**
- Skepticism, frankness, self-criticism, integrity, & attention to detail.

PREVENT BIG PROBLEMS BY WORKING HARD ON THE SMALL ONES

CENTRALIZED TECHNICAL CONTROL

- Director responsible for all aspects of work
 - Frequent oral & written reports from all Program activities
- HQ
 - Outstanding personnel; management technically trained
 - Directly oversees adequacy of all technical requirements
 - Exercises technical approval over contractors, SYs, & vendors
 - Multiple reporting chains ensure problems promptly brought to attention of cognizant personnel
 - Oversees all personnel actions related to the Program
 - Directs and oversees all logistic support functions
 - Controls special nuclear material, including shipment
 - Responsible from R&D throughout life to final disposal
 - Periodic audits by cognizant technical personnel

KNOWLEDGEABLE AND DEMANDING CUSTOMER

CLOSE, FREQUENT TECHNICAL OVERSIGHT

- On-site field offices do surveillance, auditing
- Activity self-assessment capability reviewed
- Periodic HQ reviews (DOE labs) and audits (shipyards) by cognizant technical leads
- Regular letters to Admiral & top HQ staff on issues
- Reporting deviations from normal operation
- HQ technical approval for almost every design detail and procedure

ASSURING PERFORMANCE TO HIGH STANDARDS