



Calhoun: The NPS Institutional Archive

DSpace Repository

Institutional Publications

Commencement Ceremony programs

1971-09

Naval Postgraduate School Graduation Exercises / Class of September 1971

Naval Postgraduate School (U.S.)

Monterey, California. Naval Postgraduate School

https://hdl.handle.net/10945/41114

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

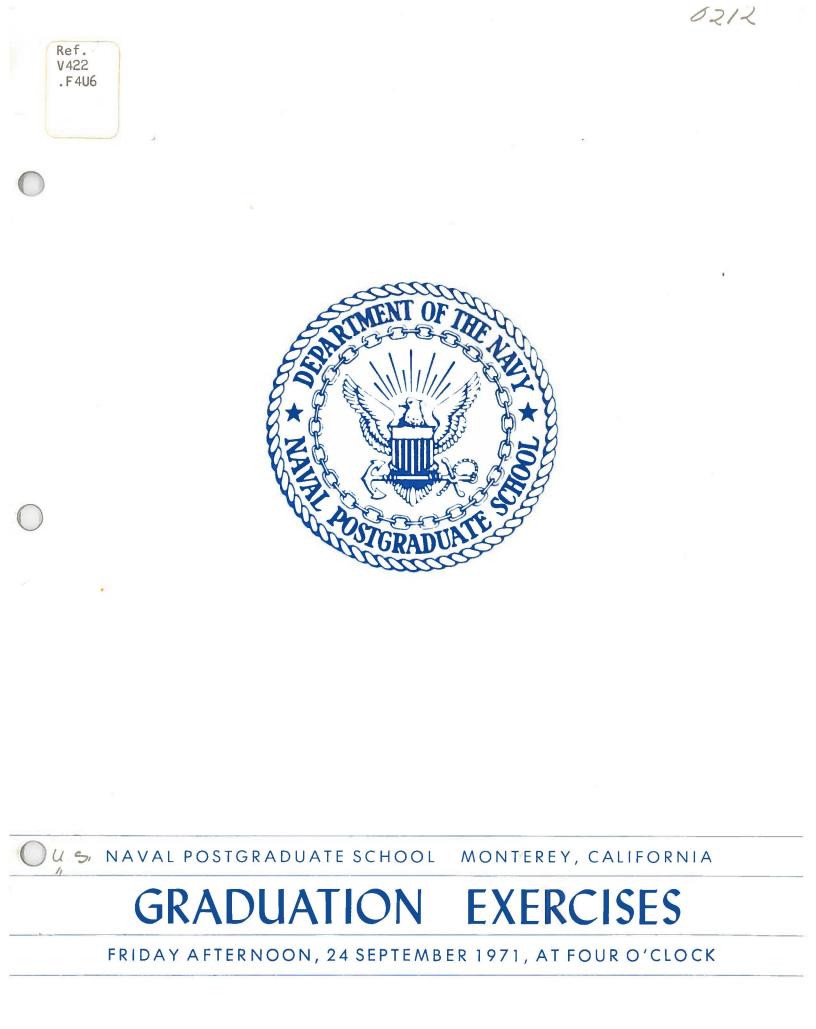
Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

> Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943

http://www.nps.edu/library



Ref. V 422 .F446

MONTEREY, CALIF. 93940

Superintendent A. SCOTT GOODFELLOW Rear Admiral, United States Navy

> Provost MILTON U. CLAUSER Doctor of Philosophy

Chief of Staff ROBERT Y. GAINES Captain, United States Navy

Director of Programs DONALD W. KILEY Captain, United States Navy Director of Military Operations and Logistics JOHN E. McQUARY Captain, United States Navy

Dean of Programs W. F. KOEHLER Doctor of Philosophy

MISSION

"To conduct and direct the Advanced Education of commissioned officers, and to provide such other technical and professional instruction as may be prescribed to meet the needs of the Naval Service; and in support of the foregoing, to foster and encourage a program of research in order to sustain academic excellence"

THE PROGRAM

PROCESSIONAL

Professor	MELVIN	F. REYI	NOLDS .					•			Grand	Marshal
Professor	ALFRED	W. M.	COOPER	ς.			a i		•			Marshal
Professor	RUSSEL	H. STO	LFI .									Marshal
Lieutenant	Colonel	JOHN	H. SMIT	H, U	.S. N	larine	Cor	os		. *		Marshal

NATIONAL ANTHEM

INVOCATION Captain WILLIAM R. SAMUEL, CHC, U.S. Navy

INTRODUCTION OF SPEAKER Rear Admiral A. SCOTT GOODFELLOW, U.S. Navy

ADDRESS TO GRADUATES Vice Admiral RAYMOND E. PEET, U.S. Navy Commander, First Fleet

PRESENTATION OF NAVY LEAGUE OF MONTEREY AWARD FOR ACADEMIC IMPROVEMENT

PRESENTATION OF CNO COMMUNICATIONS AWARD

ANNOUNCEMENT OF DEGREES . Rear Admiral A. SCOTT GOODFELLOW, U.S. Navy Provost MILTON U. CLAUSER

For the Degree of:

Presentation of Candidates by Department Chairman:

Bachelor of Arts with Major in Government /International Relations . Professor BOYD F. HUFF
Bachelor of Science in Aeronautical Engineering Professor RICHARD W. BELL
Bachelor of Science with Major in Business Administration . Professor JACK R. BORSTING
Bachelor of Science with Major in Computer Science Dean BROOKS J. LOCKHART
Bachelor of Science in Engineering Science Dean BROOKS J. LOCKHART
Bachelor of Science in Electrical Engineering Professor CHARLES H. ROTHAUGE
Bachelor of Science in Meteorology Professor GEORGE J. HALTINER
Bachelor of Science with Major in Oceanography Professor DALE F. LEIPPER
Bachelor of Science in Physics Professor OTTO HEINZ
Master of Science in Aeronautical Engineering Professor RICHARD W. BELL
Master of Science in Computer Science Dean BROOKS J. LOCKHART
Master of Science in Engineering Acoustics Dean BROOKS J. LOCKHART
Master of Science in Electrical Engineering Professor CHARLES H. ROTHAUGE
Master of Science in Management Professor JACK R. BORSTING
Master of Science in Operations Research Professor JACK R. BORSTING
Master of Science with Major in Mathematics Professor ROBERT E. GASKELL
Master of Science in Mechanical Engineering Professor ROBERT H. NUNN
Master of Science in Meteorology Professor GEORGE J. HALTINER
Master of Science in Oceanography Professor DALE F. LEIPPER
Master of Science in Physics Professor OTTO HEINZ
Electrical Engineer Professor CHARLES H. ROTHAUGE

BENEDICTION Captain WILLIAM R. SAMUEL, CHC, U.S. Navy

RECESSIONAL

AL POSTGRADUATE SCHOOL MATEREY, CALIF. 93940

PLATFORM PARTY

First Row (left to right)

Second Row

Provost Milton U. Clauser Provost, Naval Postgraduate School

Captain Edward T. Alberta, U.S. Navy Assistant Commander for Operations and Readiness Naval Communications Command

Colonel William L. Webb, Jr. U. S. Army

Brigadier General Paul G. Graham U. S. Marine Corps

Rear Admiral A. Scott Goodfellow, U.S. Navy Superintendent, Naval Postgraduate School

Vice Admiral Raymond E. Peet, U.S. Navy Commander, First Fleet

Mr. Gordon K. Reid, President Monterey Peninsula Council of the Navy League

Captain Donald W. Kiley, U.S. Navy Director of Programs Naval Postgraduate School

Captain William R. Samuel, CHC, U.S. Navy Chaplain, Naval Postgraduate School Professor Robert H. Nunn Department of Mechanical Engineering

Professor Robert E. Gaskell Department of Mathematics

Professor Otto Heinz Department of Physics

Professor Dale F. Leipper Department of Oceanography

Professor George J. Haltiner Department of Meteorology

Professor Charles H. Rothauge Department of Electrical Engineering

Dean Brooks J. Lockhart Dean of Curricula

Professor Jack R. Borsting Department of Operations Research and Administrative Sciences

Professor Richard W. Bell Department of Aeronautics

Professor Boyd F. Huff Department of Government and Humanities

AWARDS

Recipient of the Navy League of Monterey Award for Academic Improvement Lieutenant Commander CORAL V. SCHUFELDT, U.S. Navy

Recipient of the CNO Communications Award Lieutenant ROBERT E. MOLLET, U.S. Navy

Recipient of the CNO Communications Certificate Commander JOHN P. McNICHOLS, JR., U.S. Navy

Naval Postgraduate School Curricular Officers

Commander JOHN D. HARTLEY, U.S. Navy Operation Research /Systems Analysis

Commander DONALD W. MATHEWS, U.S. Navy Aeronautical Engineering

Commander JOE M. JAMES, U.S. Navy Electronics and Communications Engineering

Commander GEORGE C. SUP, U.S. Navy Ordnance Systems Engineering

Captain JOHN R. WALES, U.S. Navy Naval Engineering

Commander JAMES J. DADIGIAN, U.S. Navy Environmental Sciences

Commander WINDOM L. ESTES, U.S. Navy Management/Computer Science

Lieutenant Commander PHILIP J. O'CONNELL, U.S. Navy Engineering Science

> Commander LLOYD T. ZUEHLKE, U.S. Navy Baccalaureate Programs

THE GRADUATES

Those officers whose names are preceded by an \star are being given their degrees in absentia

Diploma of Completion

Computer Science

***DONALD R. PENNINGTON, LCDR, USN**

Engineering Science *FREDERICK M. WISSING, LT, USN

*GARY R. KAMP, LT, USN

Oceanography

***HARRY F. BALL, JR, LCDR, USN**

Bachelor of Arts with Major in Government/International Relations

ALLAN W. ANDERSON, LT, USN VERNON R. BUSSARD, CDR, USN WILLIAM E. DENNISON, CDR, USN BENJAMIN F. FOLSOM, JR, LT, USN RONALD V. HILL, LCDR, USN CLARENCE H. JUHL, LT, USN *ROGER P. McTIGHE, CDR, USN KEITH O. NYMAN, LT, USN HAROLD T. NICKS, LT, USN *RICHARD A. WILEY, LT, USN

Bachelor of Science in Aeronautical Engineering

THOMAS F. DOYLE, JR, LCDR, USN GARY W. FISKE, LT, USN THOMAS R. GREEN, LCDR, USN RUSSELL W. HARRISON, JR, LT, USN MATTHEW T. MAXWELL, III, CDR, USN DONALD O. TAYLOR, LT, USN *ROBERT L. VENABLE, LCDR, USN ROBIN C. WOOD, LT, USN

Bachelor of Science with Major in Business Administration WILFRED J. BERGERON, CDR, USN *THOMAS J. MOORE, LCDR, USN

*BURTON L. BENSON, LT, USN WILLIAM E. SMITH, LCDR, USN

Bachelor of Science with Major in Computer Science SON, LT, USN SUPRAPTO, MAJ, Indonesian Navy

Bachelor of Science in Engineering Science

GREGORY S. BOOTH, LT, USN RICHARD S. BUTTERFIELD, LT, USN *THOMAS K. DAVIS, LT, USN HENRY R. DOMBROWSKI, LCDR, USN FREDRIC A. DUNBAR, CDR, USN *MALCOLM E. FITZGERALD, LCDR, USN DANIEL E. JOHNSON, LT, USN HALVOR N. PETERSEN, LCDR, USN

Bachelor of Science in Electrical Engineering

*SEYFETTIN ENGINLER, LTJG, Turkish Navy *TAHSIN KARAN, LTJG, Turkish Navy JEFFREY S. PATTERSON, LCDR, USN WILLIAM W. POSENECKER, LT, USN *DAVID A. VETTER, LCDR, USN ROLAND L. WEIDT, LT, USN THOMAS R. WORTHAM, JR, LT, USN

Bachelor of Science in Meteorology

RICHARD C. CORKRUM, LCDR, USN

Bachelor of Science with Major in Oceanography BARRY L. DOLGOW, LT, USN

Bachelor of Science in Physics

LEROY R. BANNACH, LCDR, USN

DONALD L. COVER, LCDR, USN

Master of Science in Aeronautical Engineering

MERLIN R. HUCKEMEYER, CAPT, USMC JOHN A. BURT, LCDR, USN LEWIS L. COBURN, LT, USN JOSEPH J. DANTONE, JR, LT, USN MARLE D. HEWETT, LCDR, USN ARNE E. JOHNSON, LCDR, USN JAMES N. KRAFT, LT, USN RONALD J. LAIB, LT, USN MICHAEL H. MERRITTS, LT, USN RICHARD J. MILES, LCDR, USN ARTHUR W. NELSON, III, LT, USN CARL S. PARK, JR, LT, USN EDGAR D. PRIEST, JR, LT, USN CORAL V. SCHUFELDT, LCDR, USN WILLIAM J. TINSTON, JR, LT, USN ROBERT A. WILDMAN, LT, USN

Master of Science in Computer Science

THOMAS A. BARRY, LT, USN JOHN N. McKAY, JR, LCDR, USN

ALFRED H. SPRUELL, JR, LCDR, USN

Master of Science in Computer Systems Management *WALTER A. PEZET, III, LCDR, USN

Master of Science in Engineering AcousticsLEE H. HENDERSON, LCDR, USNPETER A. TRUMP, LT, USN

Master of Science in Electrical Engineering

EVAGELOS BACOPOULOS, LCDR, Hellenic Navy RAYMOND L. BELANGER, LCDR, USN ÖZDEN BERKAN, LTJG, Turkish Navy BRADFORD HUMPHREY, JR, LT, USN *JACK U. KLAAS, LT, USN *GUY R. KNIERIEM, ENS, USN ROBERT E. MOLLET, LT, USN *DENNIS R. OLDSON, LT, USN MAURO CESAR R. PEREIRA, CDR, Brazilian Navy MARVIN J. WENIGER, LT, USN

Master of Science in Management

LOREN L. CLARK, CDR, USN JOHN C. COGSWELL, III, LT, USN RONALD A. COLE, LT, USN *JOSEPH I. CONVERSE, JR, LCDR, USN ERICH H. CRAMER, CDR, USN JAMES A. DENNIS, JR, LCDR, USN *PREBEN E. EBBESEN, LT, USN PHILIP S. GUBBINS, LCDR, USN ALAN L. HEISIG, LT, USN WILLIAM A. HIMCHAK, LCDR, USN *EDWARD B. HUBBARD, JR, LT, USNR DEAN R. LARSON, LT, USN DANIEL B. LEAR, LT, USN *JOHN P. McNICHOLS, JR, CDR, USN MICHAEL G. MESZARØS, GDR, USNR PATRICK A. PANCOAST, LCDR, USN PATRICK J. SHEEDY, JR, LT, USN ROBERT H. SISSON, LCDR, USN PETER K. STEVENSON, CDR, USN JOE L. WILKINS, LT, USN MARTIN J. EGAN, LCOL, USN

Master of Science in Operations Research

LARRY D. BACHELOR, MAJ, USA ***PETER M. BENTSON, MAJ, USA** JAMES H. CAPPS, CPT, USA THOMAS P. CARNEY, MAJ, USA PHILLIP A. COSTAIN, MAJ, USA ROBERT D. EVANS, MAJ, USA RALPH E. HAYES, MAJ, USA ANSEL L. HUGGINS, JR, MAJ, USA ***WILLIAM M. KNAUER, MAJ, USA** THOMAS F. REESE, MAJ, USA STEPHEN SILVASY, JR, MAJ, USA RAY D. SPINOSA, CPT, USA WILLIAM J. WALLACE, JR, LCDR, USCG RANDALL W. AUSTIN, MAJ, USMC THEODORE T. BEAN, CAPT, USMC WILLIAM A. DAVIDSON, III, CAPT, USMC ROBERT W. G. JONES, LCOL, USMC HAROLD J. KEELING, LCOL, USMC ***WILLIAM G. KEMPLE, CAPT, USMC** LOUIS T. NAPPI, MAJ, USMC JAMES A. BIGGINS, LCDR, USN WAYNE H. BOSTIC, LT, USN JAMES D. BUTTINGER, LT, USN DAVID R. CAMPBELL, LT, USN

***GEORGE F. CHRISTIAN, LT. USN** OREN B. COOKE, LCDR, USN TEDDY G. DAVIDSON, LT, USN GERALD W. DUNNE, LCDR, USN EUGENE S. DVORNICK, LCDR, USN ERNEST F. GALE, JR, LT, USN RICHARD L. GATES, CDR, USN LEE F. GUNN, LT, USN HOWARD H. HAMILTON, LT, USN CHARLES S. HYATT, LCDR, USN PHILIP R. JACOBS, LCDR, USN CHARLES W. JONES, LT, USN ' BJORNAR J. KIBSGAARD, LCDR, Royal Norwegian Navy KERRY E. KIRK, LCDR, USN JOHN W. McKINNEY, LT, USN RICHARD W. MISTER, LCDR, USN HANS-DIETER MUELLER, LCDR, Federal German Navy TOR M. NIKOLAISEN, CDR, Royal Norwegian Navy TANER OZBAYKAL, LTJG, Turkish Navy RICHARD S. PARODI, LT, USN RICHARD H. PHELAN, LCDR, USN ROBERT T. PROBUS, LT, USN

Master of Science in Operations Research (Continued)

EARNEST W. RICHARDSON, LCDR, USN ROBERT E. RINKER, LT, USN JAMES W. ROONEY, LT, USN *JOHN D. SCHOENFELD, LTJG, USN NICHOLAS J. STASKO, LCDR, USN BILLY W. SURLES, LCDR, USN ALEXANDER A. TADAY, LT, USN PETER TOCHA, LCDR, Federal German Navy DAVID G. WILLINGHAM, LCDR, USN GEORGE E. WILSON, LT, USN MICHAEL G. WILSON, LCDR, USN

Master of Science with Major in Mathematics WILLIAM K. TERRELL, CAPT, USMC JAMES N. SWAN, LT, USN

Master of Science in Mechanical Engineering EDWARD J. CARLSON, LT, USN + ERCAN TURKEN, LTJG, Turkish Navy

Master of Science in Meteorology

STEPHEN G. COLGAN, LT, USN LEINO B. CORGNATI, JR, LT, USN ALLEN J. FRANK, LCDR, USN LARRY L. GIAUQUE, LCDR, USN PAUL B. KNOSTMAN, LCDR, USN *JAMES C. KRAFT, LT, USN

JOHN J. KRALL, LCDR, USN

ROBERT P. KURTH, LT, USN THOMAS J. MANTEI, LCDR, USN CHARLES G. STEINBRUCK, LCDR, USN GEORGE VARGA, LCDR, USN CHARLES E. WORKMAN, LCDR, USN *JOHN R. WRIGHT, LT, USN

Master of Science in Oceanography

RAYMOND C. ANDERSON, LCDR, USN WILLIAM C. BARNEY, LCDR, USN GEORGE E. BOLLOW, LT, USN MARK F. CRANE, LCDR, USN

*THOMAS W. CREWS, III, LT, USN ROBERT E. DELGADO, LT, USNR M. YAVUZ ERGENGIL, LT, Turkish Navy FRANK M. HUNT, JR, LCDR, USN MARIA KAZANOWSKA, LT, USN MICHAEL J. LIEMANDT, LT, USN WILLIAM J. LOUNSBERY, LCDR, USN ALEXANDER MARATOS, LT, Hellenic Navy RAYMOND T. MICHELINI, LT, USN CHARLES S. MINTER, III, LCDR, USN AUSTEN M. OAKE, CAPT, Canadian Armed Forces WILLIAM REVEZ, JR, LCDR, USN JOSE M. SALDANHA, LT, Portuguese Navy JAMIE SANCHEZ C., LCDR, Colombian Navy *RICHARD H. SCHAUS, LCDR, USN BRIAN H. SHOEMAKER, LCDR, USN HARRO H. SIEBERT, LT, USN GARY W. WILSON, LCDR, USN RALPH A. ZARDESKAS, LT, USN

Master of Science in Physics

*LEWIS P. GABY, II, CAPT, USAF

DONALD L. COVER, LCDR, USN

Electrical Engineer

ÖZDEN BERKAN, LTJG, Turkish Navy BRADFORD HUMPHREY, JR, LT, USN *DENNIS R. OLDSON, LT, USN MAURO CESAR R. PEREIRA, CDR, Brazilian Navy MARVIN J. WENIGER, LT, USN

Mechanical Engineer

*ERCAN TURKEN, LTJG, Turkish Navy

ACADEMIC DRESS

The cap and gown and colorful hood so prominent in commencement ceremonies resemble to some extent articles of dress worn by church and university dignitaries in the Middle Ages. The cap and gown indicate that the wearer is a member of a university or college. The hood shows the degree the wearer holds.

The gown for the bachelor's degree has pointed sleeves and is designed to be worn closed. The master's gown has closed sleeves, square at the end, the arms coming through a slit at the elbow; it may be worn open or closed. The doctor's gown has bell-shaped sleeves and may be worn open or closed. Down the front the doctor's gown has a facing of velvet and three bars of the same material on each sleeve. The facing and bars may be either black or the color distinctive of the subject to which the degree pertains. The cap is worn for all degrees; the doctor may wear a golden tassel.

Hoods are normally black with a colorful lining rolled outward. Bachelor's hoods are three feet long, master's three and one half feet, and doctor's four feet.

For all academic purposes, including trimmings for the doctor's gown, edgings of hoods, and tassels of caps, the colors associated with the different subjects are as follows:

Agriculture Maize	Library Science Lemon
Arts, Letters, Humanities White	Music
Business, Commerce Drab	Pharmacy Olive Green
Education Light Blue	Philosophy Dark Blue
Engineering Orange	Physical Education Sage Green
Forestry Russet	Science Golden Yellow
Home Economics Maroon	Theology Scarlet
Law Purple	Veterinary Science Gray

The silk or satin lining of the hood is the color or colors of the university or college which conferred the degree. Some have a slash or chevron of contrasting color. For example:

University Granting Degree							Lining Slash or Chevron
University of Wisconsin .							. Bright Red
University of Minnesota .							. Old Gold Maroon
Yale University							. Blue
University of California .			×				. Gold Yale Blue
University of Washington							. Purple Above Gold
University of Oregon .							. Lemon Yellow Dark Green
New York University .			•				. Violet
Stanford University							. Cardinal
Columbia University .							Light Llub White
University of Michigan .							. Maize Blue
University of Texas		ġ.		•	•		. White Above Orange Burnt Orange
Duke University							. Royal Blue White
Cornel University							. Cardinal
Harvard University		19	•		•	•	. Crimson
Michigan State University							. Green White
Iowa State University .							. Gold Above Cardinal
State University of Iowa .							. Old Gold
Oregon State University .							. Burnt Orange
Lewis and Clark College .						•	. Princeton Orange Black, Orange
University of Denver .							. Cardinal Gold

The Naval Postgraduate School hood has a satin lining of dark blue with a gold chevron.

THE NAVAL POSTGRADUATE SCHOOL

The United States Naval Postgraduate School had a modest beginning at the Naval Academy at Annapolis in 1909, at which time the first class of ten officers enrolled in the School of Marine Engineering. In 1912, the School was designated the Postgraduate Department of the Naval Academy, and the scope of its engineering curricula was broadened to include Ordnance, Naval Construction and Civil Engineering.

After a suspension of operations during World War I, the Postgraduate Department resumed operations in 1919; two years later it was officially designated the "United States Naval Postgraduate School." A further extension of its curricula and the growth of its enrollment took place in the years between the two World Wars.

In 1927, the General Line Course was started within the Postgraduate School to acquaint junior line officers with modern developments taking place in the Navy and to broaden their professional knowledge by means of integrated courses in naval science.

World War II caused an increase in enrollment in the Engineering curricula from about 125 to over 600 and a tremendous expansion of activity in contrast to the complete suspension of operations during World War I. After hostilities ceased in 1945, a program was initiated to relocate the Postgraduate School and improve its professional status. Between 1945 and 1948, legislation was passed establishing the School as a separate activity under its own Superintendent; creating the office of Academic Dean; granting the Superintendent the right to award Bachelor's, Master's and Doctor's degrees; authorizing the re-establishment at Monterey, California, and purchasing the Del Monte site. The move to Monterey was commenced in 1948 and completed in 1951.

In 1956, the Navy Management School was established as a component of the Postgraduate School. Its mission was to provide graduate education for Naval officers in the theories, philosophies and application of scientific methods of management specifically oriented to the Navy in order to advance efficiency and economy of operation afloat and ashore. In August 1960, the Management School curriculum was lengthened from a five- to a ten-month course leading to a Master's degree for those who could meet the requirements for such a degree.

In 1958, the General Line School was redesignated as the General Line and Naval Science School and a Bachelor of Science curriculum was offered to meet the educational and career requirements of selected officers who did not have baccalaureate degrees. Further developments in the undergraduate program resulted in recognition of the need for a Bachelor of Arts curriculum, which was subsequently inaugurated in the General Line and Naval Science School in August 1961.

A major internal reorganization was approved by the Chief of Naval Personnel and became effective on 3 August 1962. The three component schools were consolidated into a single unified Postgraduate School, with academic operations under the direction of a Deputy Superintendent for Programs (military) and a Dean of Programs (civilian). The reorganization in no way changes the curricula of courses offered, but achieves unity of policy and gives emphasis to the educational programs required of the Navy.