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March 12, 2021

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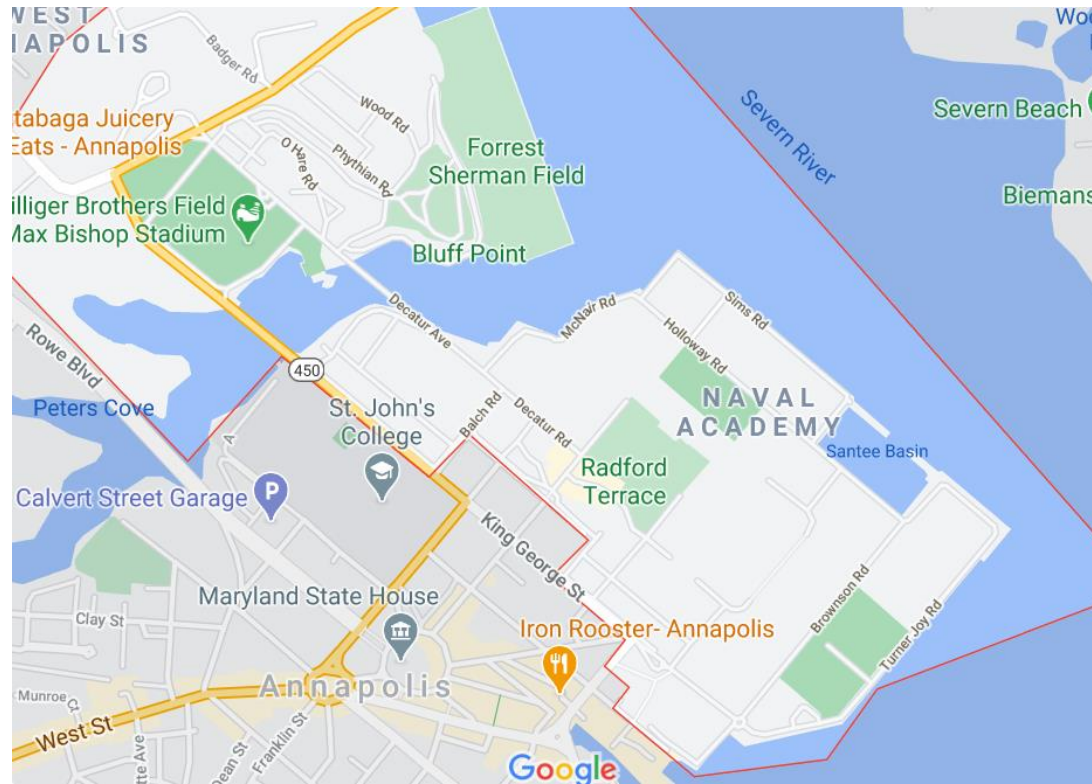
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Coronavirus Policies

- Access limited to Naval Academy personnel.
- According to Dec. 29, 2020 letter from U.S. Navy Superintendent Vice-Admiral Sara Buck, 200 upper class midshipmen may live with family, friends, or sponsors and commute to the academy during Spring 2021.
- Testing and quarantining protocols are being followed.
- 15% of brigade tested each week, fall semester positivity rate less than 1%; compared to 4-10% rate for Anne Arundel County.
- Phased Coronavirus vaccines began January 14, 2021
- Many employees telework
- Instruction is hybrid

Background information located at Annapolis, MD



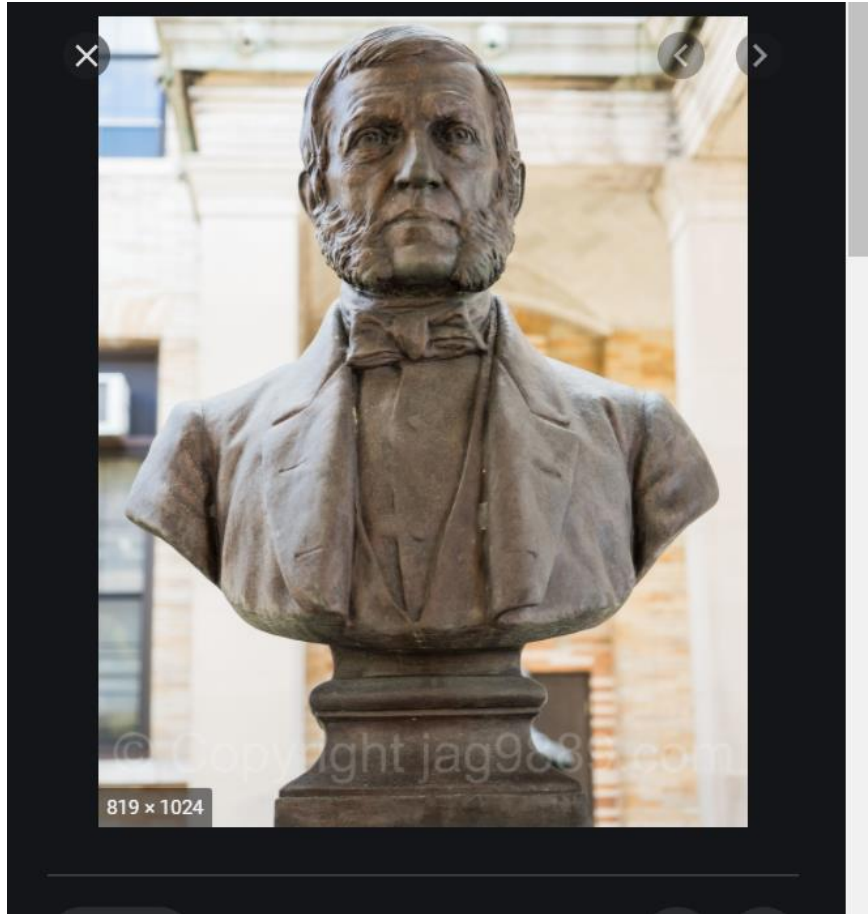
- The Naval Academy prepares young men and women to become professional officers of competence, character, and compassion in the U.S. Navy and Marine Corps. Naval Academy students are midshipmen on active duty in the U.S. Navy.
- They attend the academy for four years, graduating with bachelor of science degrees and commissions as ensigns in the Navy or second lieutenants in the Marine Corps. Naval Academy graduates serve at least five years in the Navy or Marine Corps.

USNA History



- 1825-President John Quincy Adams urges congressional establishment of Naval Academy “for the formation of scientific and accomplished officers.”
- Through efforts of Navy Secretary George Bancroft, an academy was established, without congressional funding, on 10-acre army post Fort Severn in Annapolis, MD on Oct. 10, 1845.
- Initial curriculum included mathematics and navigation, gunnery and steam, chemistry, English, natural philosophy, and French.
- 1850-Becomes U.S. Naval Academy. Midshipmen required to study for four years and train aboard ships each summer.
- Campus size increases from 10 to 338 acres; enrollment increases from 50 to 4,500+

George Bancroft 1800-1891



- Secretary of the Navy, 1845-1846; later served as U.S. Ambassador to United Kingdom, Prussia/Germany.
- Prominent historian whose works included a 10-volume history of the U.S. Placed importance on using original sources. Heavily influenced by German historical writing and methodology.
- USNA's Bancroft Hall named for him.

Bancroft Hall



- Residence for all 4,500+ midshipmen.
- 1,700 rooms
- 4.8 miles of corridors
- Midshipmen are grouped into companies of 150

Admissions Process

- Similar to West Point and other service academies. Going through Congress etc.
 - Approximately 3,000 students qualify annually for USNA, 1,400 receive appointments, and 1,200 become Midshipmen.
- Sample physical fitness test requirements:

Maximum Performance Scores by Event and Gender:

	B-Ball Throw	Pull-Ups	Shuttle Run	Crunches	Push-Ups	1-Mile
Male	102	18	7.8	95	75	5:20
Female	66	7	8.6	95	50	6:00

Prominent historical events

- 1853 Gas works construction completed. USNA becomes one of earliest U.S. institutions to have central heat and light.
- 1853 Dept. of Astronomy, Navigation, and Surveying established.
- 1861-1865 Academy relocated to Newport, RI.
- 1873 U.S. Naval Institute founded to advance naval literary, professional, and scientific knowledge.
- 1882 Graduates authorized to enter U.S. Marine Corps.
- 1906 John Paul Jones body moved to Dahlgren Hall
- 1930 Naval Academy curriculum accredited by Association of American Universities

Prominent Historical events

- 1945-Dept. of Aviation established
- 1949-Wesley Brown (1927-2012) becomes first African-American graduate. Served in Korea and Vietnam and in Navy's Civil Engineer Corps



- 1975 Engineering Studies complex completed and named for Admiral Hyman Rickover (1900-1986)- directed original development of naval nuclear propulsion.
- 1976-1st women admitted-27% of current midshipmen are women
- 1980 First woman graduates
- 2006 Arabic and Chinese become new academic majors
- 2012 Cybersecurity becomes new major
- 2018 Senator John McCain buried in Naval Academy cemetery. Class of 1958

Prominent Naval Academy Graduates

- President Jimmy Carter-Class of 1947
- Anthony Principi-Sec. Veterans Affairs 2001-2005 Class of 1967
- 5 Chairs of the Joint Chiefs of Staff
- Indiana U.S. Senator Todd Young-Class of 1995
- Numerous astronauts including Charles Bolden Class of 1968-NASA Administrator 2009-2017



- New Jersey U.S. Rep. Mikie Sherrill-Class of 1994



- Admiral Chester Nimitz-Class of 1905
- David Robinson-Class of 1987-NBA Center and philanthropist

Academics

- Core curriculum has three basic elements:
- Core requirements in engineering, natural sciences, the humanities and social sciences, to ensure that graduates are able to think critically
- Core academic courses and practical training to teach the leadership and professional skills required of Navy and Marine Corps officers
- An academic major that permits a midshipman to explore a discipline in some depth and prepare for graduate level work.
- Curriculum majors emphasize science, technology, engineering, & medicine (STEM)

USNA Majors

- [Aerospace Engineering](#) +
- [Arabic](#)
- [Chemistry](#) +
- [Chinese](#)
- [Computer Engineering](#) +
- [Computer Science](#) +
- [Cyber Operations](#) +
- [Electrical Engineering](#) +
- [English](#)*
- Foreign Area Studies
- [General Engineering](#) +
- [General Science](#) +
- [History](#)*
- [Information Technology](#) +
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- [Naval Architecture & Marine Engineerir](#)
- [Nuclear Engineering](#) +
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- [Oceanography](#)* +
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- [Physics](#) +
- [Political Science](#)*
- [Quantitative Economics](#)* +
- [Robotics and Control Engineering](#)* +

* = honors program available, + = STEM major

Course Requirements

The academic course requirements for midshipmen include both **Core Courses** (coursework required of all midshipmen regardless of academic major) *plus* **Majors Course** specific to each midshipman's selected [academic major](#).

Most midshipmen's academic courses are the same in their first (fourth class or plebe) year at the Naval Academy. The [courses taken in plebe year](#) are part of the core program. Selection of a major then takes place near the end of the plebe year. Midshipmen begin formal course work in their majors in the second (third class or youngster) year at the Academy. Majors programs may vary somewhat from one class year to the next.

The upper class years involve a mixture of core and majors courses. The core courses comprise the common center of the academic program. They provide the basis for a sound general education and strong professional development. It is the core program that allows any midshipman, regardless of major, to prepare for any warfare community in the Naval Service.

History Majors

The goals of the major include proficiency in historical methods, writing and analysis; awareness of historical context, causation and culture; understanding of the trends, forces, and individuals that shaped the past as well as the historical roots of contemporary affairs; appreciation of the diversity of the human experience across time and place; and understanding of the importance of history to the profession of arms. The major consists of ten courses beyond the three history courses in the core. These include two seminars: an introductory methodology seminar and a first-class capstone historiography seminar. Majors select upper-division courses from the following fields:

- American history
- European history
- Regional history
- Naval and military history
- Thematic history

In order to complete the distribution requirement for graduation, students must select eight courses in four of the five fields. In addition, all history majors are required to complete four semesters of a foreign language and two humanities electives in fields other than history.

The honors program in history offers high-performing students the opportunity to pursue a more challenging curriculum and earn a designated honors degree. Students who meet the CQPR

Naval Architecture & Marine Engineering (ENM)

The Discipline and the Major

Naval architecture and marine engineering (or ship design engineering) is one of the oldest and broadest engineering disciplines. Naval architects design the largest manmade objects (over 1500 feet long) that move, and design some of the most complex systems (aircraft carriers and nuclear submarines). Design projects that naval architects undertake include underwater vessels, warships, sailboats, unmanned robotic craft and advanced sea skimming vehicles. Naval architects have also been involved in the design of many other types of engineered systems, including land vehicles, airplanes and even spacecraft.

USNA's naval architecture & marine engineering major is well-regarded nationally and typically attracts 25-30 students each year. The major includes an honors program and offers a variety of concentration areas. The major's small size is one of its advantages, as this allows classes to be very hands-on with multiple design projects, labs and small class sizes. USNA's naval architecture and marine engineering program has world-class facilities and award-winning faculty, yet the major retains a close-knit atmosphere. In common with all majors at USNA, naval architects study the fundamental core subjects of calculus, chemistry, physics and the humanities. Along with the other engineering majors, students learn the engineering concepts of mechanics, fluids and materials. Naval architecture and marine engineering majors design, build and test projects every year, starting with the first course in 3/C year.

Oceanography (SOC)

The Discipline and the Major

The oceanography major is designed for the “hands-on” student with a strong interest in the physical and dynamic properties of the ocean and atmosphere. Oceanography majors reinforce knowledge gained in the classroom with underway and computer laboratories and conduct current and scientifically relevant research. The faculty includes tenure-track civilian professors, rotational military instructors with recent fleet experience and permanent military professors. Oceanography majors take 13 courses in oceanography, meteorology, and applied mathematics. Students in the honors program take 14. Oceanography attracts a diverse cross-section of midshipmen that has included a Rhodes Scholar, several Trident Scholars, varsity athletes, high-ranking members of the Brigade leadership and many students whose research work has been published in professional conferences and journals. A prospective major can expect to take two courses in general oceanography and a course on the dynamics of the atmosphere during third class year. The second class year builds on these introductory courses and includes courses on atmospheric thermodynamics, quantitative methods in the science of the ocean and atmosphere and research methods if selected for honors. The list of available electives is diverse and includes geological oceanography, geographical information systems, polar oceanography, near-shore oceanography, biological oceanography, marine mammal conservation, estuarine oceanography, global climate change, synoptic meteorology, tropical meteorology, and environmental remote sensing. The first class year includes required courses in

Course: HH104

Title: AMERICAN NAVAL HISTORY

Credits: 3-0-3

Description: This course examines the antecedents, origins and development of the United States Navy and Marine Corps within the framework of America's growth as a continental and, eventually, global power, with particular emphasis on the development of naval and maritime strategy.

Offered: Spring 2020-2021

Requisites: Prereq: None.

Course: HH304

Title: HISTORICAL READINGS IN GRAND STRATEGY

Credits: 3-0-3

Description: A consideration of the theory and practice of grand strategy from a variety of perspectives in historical contexts ranging from Ancient Greece to the contemporary United States. Midshipmen learn to frame actions and decisions in the broadest possible framework of consequences and outcomes, and become sensitive to the logic and intellectual vocabulary of policy discourse at the highest levels of statecraft. Reading, writing, and discussion intensive.

Offered:

Requisites: Coreq: HH216

Course: HH361

Title: HISTORY OF EAST ASIA

Credits: 3-0-3

Description: An analysis of contemporary Asian problems which considers their cultural and institutional origins, their 19th-century development under the impact of western influence and their culmination in contemporary Asian nationalism.

Offered: Fall

Requisites: Prereq: None; Coreq: HH216.

Course: HH382

Title: WARFARE IN THE AGE OF SAIL, 1500-1815

Credits: 3-0-3

Description: This course examines the theory, practice, and nature of warfare on sea and land, both in Europe and European colonies, from about 1500 through the era of Napoleon. Tactical, logistical, technological, and professional developments of Western navies and armies are studied in their political, economic, social, and cultural contexts. The course particularly explores the fundamental questions: What role did Western weapons and warfare, particularly warfare at sea, play in the development of Europe's various empires and Europe's eventual global dominance? Important topics include the rise of gunpowder weapons, the "Military Revolution," the rise of national armies and navies, maritime empires, and the lives of sailors and soldiers.

Offered: Fall

Requisites: Prereq: None; Coreq: HH216.

Naval Architecture & Ocean Engineering Courses

Course: EN221

Title: ENGR MECH W/MARINE APPS I

Credits: 3-2-4

Description: First course in two-semester sequence covering the principles of engineering mechanics of rigid and deformable bodies for naval architecture students. Topics in the first course include forces, moments, static equilibrium, stress, strain, stress-strain relations and transformations, torsions in shafts, flexure in beams, column buckling, and temperature effects.

Offered: Fall

Requisites: Prereq: 3/C ENA major.

Course: EN245

Title: PRINCIPLES OF OCEAN SYSTEMS ENGINEERING

Credits: 2-2-3

Description: This course introduces new ocean engineering majors to the general problems and design practices in the areas of the ocean environment, coastal engineering, offshore structures, ocean materials, ocean acoustics, and underwater systems. Basic naval architecture principles are also covered, including hydrostatics, stability and buoyancy, and powering. The use of laboratory experiments and computer-aided drafting (CAD), are emphasized.

Offered: Spring 2020-2021

Requisites: Prereq: EOE major or approval of department chair.

Course: EN400

Title: PRINCIPLES OF SHIP PERFORMANCE

Credits: 3-2-4

Description: This course is an introduction to the applied science of ship systems. The course describes ships and submarines and how they remain afloat from a design and application perspective. Included are topics in hydrostatics, ship stability and operability, materials, fluid dynamics and propulsion. EN400 is an appropriate substitute for all majors where EN200 is required.

Offered: Spring 2020-2021, Summer 2021-2022

Requisites: Prereq: 2/C standing or permission of department chair.

Course: EN420

Title: COASTAL ENGINEERING

Credits: 2-2-3

Description: This course provides an overview of the methods used to design both shore protection systems and port and harbor structures. Topics include sea level fluctuations, wind-wave forecasting, shallow water wave transformation, sediment transport, littoral processes, "soft engineering" approaches like beach nourishment, and structural design of revetments, groins, jetties, and breakwaters. Emphasis is on the design process using Army Corps of Engineers design manuals.

Offered: Spring

Requisites: Prereq: EN475, 1/C EOE major or approval of department chair.

Oceanography Courses

Course: SO231

Title: GENERAL OCEANOGRAPHY I

Credits: 3-2-4

Description: A descriptive survey of and introduction to geological, chemical and physical oceanography. Course content spans subjects such as sea floor spreading, properties and composition of sea water and ocean currents and water masses. A historical perspective is provided. Laboratory exercises concentrate on Chesapeake Bay parameters as seasons change.

Offered: Fall, Spring

Course: SO251

Title: PHYSICAL OCEANOGRAPHY

Credits: 3-2-4

Description: This course serves as an introduction to Physical Oceanography. Topics include: Introduction to Geology, Plate Tectonics, Ocean Basins, Sediments and Stratigraphy, Geodesy and Ocean Bathymetry, Properties of Seawater, Ocean Structure, Ocean Heat Balance, Conservation Equations, Equations of Motion, Geostrophic Balance and Flows, Major Ocean Currents, Density Driven Flows, Waves and Tides, Coastal Ocean, and Ocean Optics and Acoustics. This 4-credit course has a laboratory component that provides a general introduction to field methods for collecting data related to Physical Oceanography and data analysis using statistical and graphical software programs.

Course: SO254

Title: INTRODUCTION TO METEOROLOGY

Credits: 2-2-3

Description: This course serves as an introduction to Meteorology. Topics include: Meteorological state variables, the equation of state for air, radiative balance, climate change and climate variability, atmospheric water vapor, cloud formation processes, and cloud microphysics, forces involved in atmospheric motion, geostrophic flow, atmospheric stability, surface and upper analyses and thermodynamic charts. This three credit course includes a laboratory component that involves the analysis and visualization of meteorological datasets with Matlab.

Offered: Spring 2020-2021

Course: SO381

Title: TACTICAL OCEANOGRAPHY

Credits: 1-0-1

Description: Oceanographic and bathymetric factors in the battle space play a significant role in mission planning and execution. The natural environment is an important consideration in the decision-making process regarding the timing of military operations and the employment of weapons, platforms, and tactics. This course provides an overview of oceanographic and bathymetric variability and the potential impact of surface and subsurface features on naval operations.

Political Science (FPS)

The Discipline and the Major

The political science major offers a full complement of undergraduate courses designed for midshipmen to learn how to study governments, governmental and non-governmental organizations and operations, public policies, political processes and behaviors. Midshipmen select from one of three concentrations, International Relations, Comparative Politics and American Politics and Law. These concentrations introduce midshipmen to the various subfields of the discipline which include regional studies (Asia, Latin America, Middle East, Africa and Europe), political theory, law, political institutions, public policy and political behavior.

The major consists of 30 credit hours in addition to the core course taken in the plebe year, *United States Government and Constitutional Development*. All majors take a survey course in international relations or comparative politics as well as political science research methods. In the first class year students write a capstone research paper supervised by a faculty seminar leader. This summative research project requires midshipmen to demonstrate knowledge of facts and method, much as you might be required to do in your professional career. For those interested in advanced studies, the department offers an honors program with a designated honors degree.

Political Science Courses

Course: FP310

Title: INTRODUCTION TO GLOBAL STRATEGIC STUDIES

Credits: 3-0-3

Description: Examination of the global international system from the strategic perspective to enhance our understanding of the processes and dynamics of global changes and their impact on professional careers in the naval service.

Offered: Spring

Course: FP311

Title: ETHICS AND INTERNATIONAL RELATIONS

Credits: 3-0-3

Description: At the outset, the focus is on a study of the dominant theories of international relations, particularly Bismarkian realism and Wilsonian idealism. Then, using historical and fictional cases, passages from literature, and guest speakers, this course explores case studies that illustrate the ethical dilemmas that arise in the relations between states. By contrast with courses that treat ethical issues for an individual, this course deals with the acts of states and of other groups such as insurgency movements, non-governmental organizations, and international affiliations.

Offered: Spring

Requisites: Prereq: FP130

Course: FP341

Title: POLITICAL PSYCHOLOGY

Credits: 3-0-3

Description: Introduction to psychological concepts and approaches used to analyze politics. Topics covered include acquisition of personal political attitudes and beliefs; the dynamics of public opinion; theories underlying PsyOp (Psychological Operations), riots, revolutions and wars; and psychological sources of effective and defective decisions in small group settings such as juries, military commands and policy settings.

Offered: Spring 2020-2021

Requisites: Prereq: FP130.

Course: FP476

Title: GRAND STRATEGY AND GREAT-POWER POLITICS

Credits: 3-0-3

Description: Grand strategy is a coherent statement of the state's highest political ends to be pursued globally over the long term. Its proper function is to prioritize among different domestic and foreign policy choices and to balance national means-diplomatic, economic, military- to achieve the articulated ends. The class will review the historical foundations of strategy, analyze the evolution of American strategy from the Founding Fathers to the current day (including current US National Security Strategy) and explore the foundations of strategy worldwide from a regional perspective with an emphasis on the roles of history, religion, culture and geography in shaping various countries and

Trident Scholar Program

- The Trident Scholar Program provides an opportunity for a select group of exceptionally capable midshipmen to engage in independent study and research during their senior year. Naval Academy faculty and other area specialists mentor the Trident Scholars helping them expand their knowledge and contribute to their fields of study.
- Website [Trident Scholar Program :: Trident Scholar Program... \(usna.edu\)](#) lists these scholars from 1964-present



MIDN 1/C Jamie W. Lee - 3rd Company

Oblivious k-Nearest Neighbors for Secure Map Applications

Advisers: Associate Professor Daniel S. Roche, Computer Science Department, Assistant Professor Travis Mayberry, Cyber Science Department

External Collaborators: Associate Professor Adam J. Aviv, George Washington University

Major: Computer Science

Description:

Cloud storage enables users to access and store large amounts of data on servers anytime and anywhere at little to no cost. Map applications are specific examples of cloud storage servers that allow users to query for nearby points of interest. Despite the many benefits offered by map applications, users are susceptible to data leakage through their access patterns, which is a significant security risk for these applications since the user's location and other sensitive data can be leaked.

In order to mitigate access pattern leakage and implement security in map applications, we have developed a novel remotely-stored network data structure, the ORAM-backed Hilbert B-tree. The novel data structure combines existing features such as the B-tree data structure, k-Nearest Neighbor (k-NN) search algorithms, Hilbert Curves, and Oblivious Random Access Memory (ORAM) algorithms, but ultimately allows users to make oblivious queries in map applications, a function that has not yet been conceived for such applications. This provides a significant improvement in security for map applications

View Midshipman Lee's Presentation

Outline

1. Problem Statement
2. Proposed Solution
3. Implementation Process
4. Demo
5. Results & Analysis

Trident Scholar Research can be viewed at
<http://discover.dtic.mil/>

**A TRIDENT SCHOLAR
PROJECT REPORT**

NO. 469

Persistent Target Detection and Tracking By An Autonomous Swarm

by

Midshipman 1/C John J. Gainer Jr., USN

12. DISTRIBUTION / AVAILABILITY STATEMENT

This document has been approved for public release; its distribution is UNLIMITED.

13. SUPPLEMENTARY NOTES

14. ABSTRACT

This paper presents an autonomous multivehicle control algorithm capable of persistently searching and tracking targets in a defined search area subject to operational endurance constraints of individual agents. A small-scale system serves as proof of concept for larger systems that are employed in operational environments. The underlying goal is to design a modular control architecture that can be modified to any type of autonomous vehicle, search area, or target. In practical application, a target can be anything from heat signatures to radioactive material; therefore, this project will simulate a generic emitter-detector pair as a placeholder relationship for real world applications. The control strategy accounts for the appearance, motion, and disappearance of multiple targets in the search space constituting the utility of creating a team of multiple search agents. When agent battery level drops below a predetermined threshold, the agent returns to a base station to recharge and be relaunched into the mission. Remaining agents must account for this loss and gain of other team members as they exit the search environment. The contributions of this work are 1) the design of search trajectories for autonomous vehicles with limited endurance, 2) incorporation of return-to-base and recharge time requirements, and 3) coordination of multiple vehicles by developing a decision-making model to and assign agents to operational modes. Each of these components enable persistent multivehicle operations. Simulation results are intended for implementation on a system of quadrotors complemented by a system capable of autonomously recharging vehicles to sustain a multivehicle team beyond the mission life of a single vehicle.

7 Conclusions and Suggestions for Future Work

The goal of this project is to develop, simulate, and experimentally validate a multivehicle control structure that accounts for the limited battery life of individual agents accomplishing a persistent search and track task. The control structure is developed independent of the hardware system employed for validation, but aims at mapping the relationships between control modes to increase the overall ability of a multivehicle team, or swarm. Therefore, this approach allows for scalability. Additionally, employing small, cost effective autonomous vehicles as a team increases their overall utility beyond the implementation of a single agent. Finally, current work completed supports the accomplishment of these goals and opportunities for future development.

The following subsections summarize the contributions of this work outlined in Section 1.

7.1 Designing Search Trajectories

In order to accomplish the search and track mission we designed search trajectories to enable reliable coverage of the entire search space, fully discussed in Section 3. These search trajectories took the form of lawn mower patterns sweeping back and forth across the search area. They trajectories are designed to be smooth, continuously differentiable, and evolve at a constant velocity. Each of these elements of the

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A TRIDENT SCHOLAR PROJECT REPORT

NO. 184

**OPEN-WATER RESISTANCE AND SEAKEEPING CHARACTERISTICS
OF SHIPS WITH ICEBREAKING BOWS**

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ABSTRACT

Most research conducted on icebreaking ships has concentrated on their performance in ice fields. One area of their operations which has been neglected is the performance of such ships during their transit from their homeport to the ice field. Powering requirements are dominated by resistance in ice, and, of course, seakeeping is of little importance in ice covered waters. The recent interest in "ice-capable" ships, with both a light icebreaking mission requirement and either a cargo-carrying or a research mission requirement, dictates that ships designed to meet such requirements have greater emphasis placed on their open-water transit characteristics.

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9. SUGGESTIONS FOR FUTURE RESEARCH

Although the present systematic variation of a traditionally designed icebreaker has addressed the effect of varying the bow form angles, α and β , on calm water powering, and the seaway responses of pitch, heave, relative bow motion, and added resistance in waves, there is a need to continue this research into other aspects of icebreaker performance. Using the same models, analysis of other seakeeping responses such as slamming pressures and vertical accelerations at the center of gravity and at the bow would be useful in order to more fully describe the effects of the systematic variations on open-water seakeeping. Additionally, a series of variations using the same parent could be used to more effectively quantify methods to decrease deck wetness as the center of buoyancy moves forward and displacement increases.

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About SC&A

The Special Collections & Archives Department (SC&A) of Nimitz Library contains rare books, manuscripts, photographs, and other documents, as well as the official records (archives) of the U.S. Naval Academy. They are available for use by the midshipmen, faculty, and staff of the Naval Academy and by other researchers upon request.

SC&A is located on Nimitz Library's third deck where researchers may use the material in the 24-seat Annapolis Room (material cannot be checked out or leave the Annapolis Room). Staff will retrieve

Digital Collections

Only a small portion of SC&A's material has been digitized, but that material is available to everyone online. Select topics include

<p>Civil War letters & papers</p> <ul style="list-style-type: none">• Daniel D.T. Nestell Papers• Francis A. Osbourn Papers• John E. Hart Letters	<p>Midshipmen journals & letters</p> <ul style="list-style-type: none">• Josiah G. Beckwith Letters• Roscoe C. Bulmer Journal• William Frederick Durand Journal• John Porter Merrell Johnston Letters• Henry Mylin Kieffer Scrapbook• Richard Mueller Nixon Letters
<p>USNA publications</p> <ul style="list-style-type: none">• Official Register of the U.S. Naval Academy• Annual Register of the U.S. Naval Academy• Class Photograph Albums• The Lucky Bag (yearbook)• Naval Academy Catalog	<p>USNA photos</p> <ul style="list-style-type: none">• Buildings & Grounds• More Buildings & Grounds (1861-1904)• Midshipmen (including athletics)• More Midshipmen (1893)• Superintendents• Faculty & Staff
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Midshipmen Letters Josiah Beckwith 1838-1911

Born in Litchfield, CT. Admitted to Naval Academy on February 1, 1853 as member of class of 1858. Resigned March 21, 1855, due to increasing conduct offenses including intoxication. Attended Union College and Yale University Medical School. Practiced medicine in Charlston, NY 1866-1869 before returning to Litchfield to take over family drug store following father's in 1871. Married in 1873 and he and his wife had three children.

Beckwith Letters Sent April 1853

Annapolis. April
1853 (?)

Dear Father

Your very welcome letter of the 11th was duly received yesterday afternoon. I should have answered it yesterday but my time was so much occupied with my studies, &c. that I

Naval Academy Chapel Exterior 1873



Naval Chapel Interior 1874



Dec. 28, 2019 Naval Academy Chapel Wedding Photo of Henry Bond (2015 USNA Graduate) and Charlotte Pence Bond



charlottepencebond 
United States Naval Academy

[View Profile](#)



July 1982 Aerial Photo



Rickover Hall-January 1982



Admiral Chester Nimitz Bust-1980



Polar Exploration-Edwin Jesse DeHaven (1816-1865) Papers

The Edwin Jesse De Haven Papers, comprising ten linear inches of documents, spans from 1832 to 1928. The papers document, in varying levels of detail, the naval career of Edwin De Haven, with special focus on the Grinnell Arctic Expedition of 1850 to 1851 and De Haven's subsequent service with the Coast Survey until 1857.

The collection consists largely of correspondence and journals, with a smaller number of official navy records, reference materials, a single photograph, and a single publication.

The Edwin Jesse De Haven Papers are organized into five series based on document type. CORRESPONDENCE, 1835-1878, consists of incoming and outgoing letters of both a professional and personal nature. Absent from this series are any official orders, which despite their resemblance to general correspondence, are filed elsewhere with the official naval records. DIARIES AND JOURNALS, 1843-1926, consists of three diaries/journals originally written by Edwin De Haven, as well as excerpts from a journal by English explorer W. Parker Snow. U.S. NAVY FILES, 1832-1857, includes a sampling of De Haven's official orders, service record, reference material, and winter regulations aboard the U.S.S. Advance during the Grinnell Expedition. PHOTOGRAPHS contains a single portrait of Edwin De Haven, and PUBLICATIONS, 1928, contains a single issue of Proceedings of the United States Naval Institute.

1850 Arctic Expedition Letters-Part 2

BY THE COMMISSIONERS FOR EXECUTING THE OFFICE
OF LORD HIGH ADMIRAL OF THE UNITED
KINGDOM OF GREAT BRITAIN AND IRELAND,
&c. &c.

1. Her Majesty's Government having determined that further endeavours shall be made to trace the progress of Her Majesty's ships "Erebus" and "Terror", under the command of Sir John Franklin, and to resume the search after that Expedition,- and, having resolved to employ you in the command of the two vessels, the "Lady Franklin" and "Sophia" which have been equipped for that service- you are hereby required and directed, so soon as the said vessels shall be in all respects ready for sea, to proceed with them with all due dispatch to Davis's Strait.

2. In entrusting you with the above command, We do not deem it advisable to furnish you with minute instruc-

October 7, 1851 DeHaven Letter to Navy Dept.

Copy 8.11.83

Navy Department
October 7. 1851

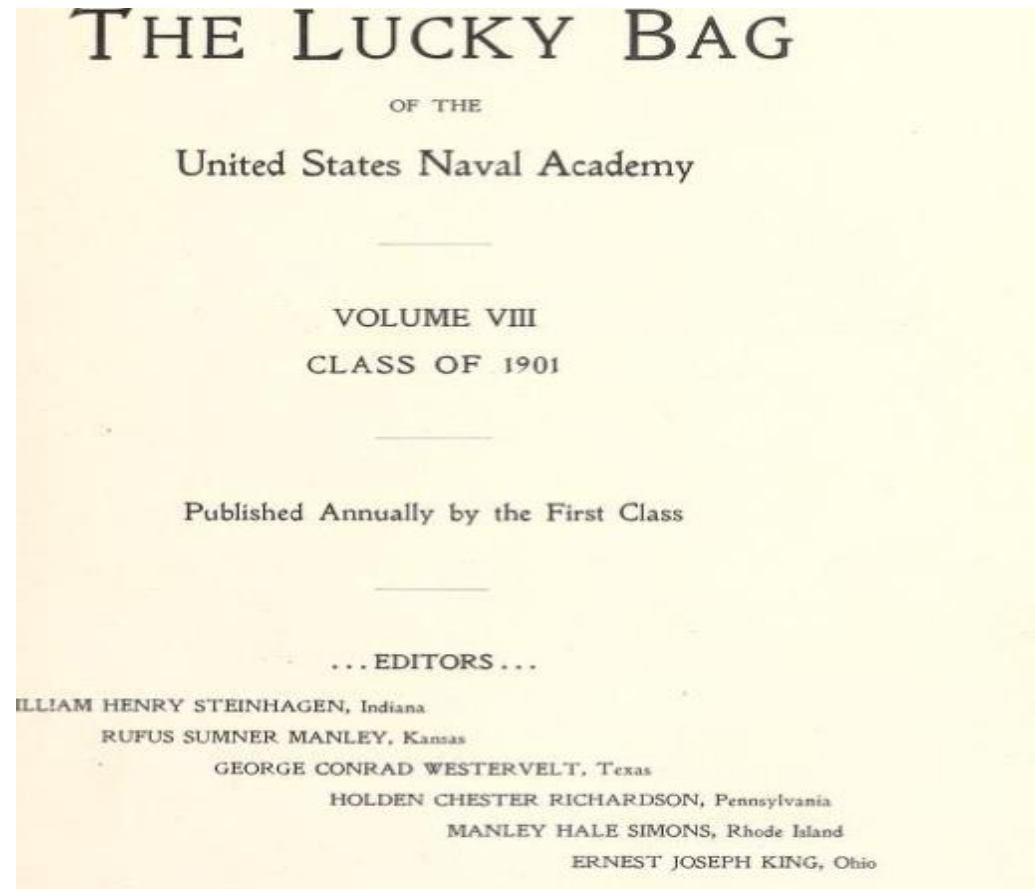
Sir

Your letter of yesterday's date, with enclosure, has been received.

Seth Ackley (1845-1908) 1866 Class Photograph Album



1901 *The Lucky Bag*-Student periodical
published from 1894-1970



Head of Department,

PROFESSOR N. M. TERRY.

Assistants,

Lieutenant J. A. HOOGEWERFF,

Lieutenant A. H. ROBERTSON,

Lieutenant W. J. TERHUNE,

Lieutenant (junior grade) R. STONE,

Professor P. J. DASHIELL.

MATHEMATICS.

Head of Department,

PROFESSOR W. W. HENDRICKSON, U. S. N.

Assistants,

Professor P. R. ALGER, U. S. N.,

Lieutenant H. KIMMELL,

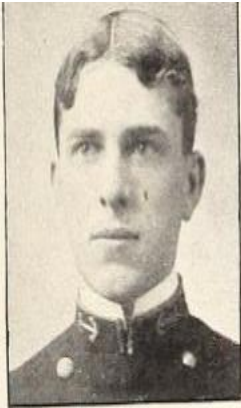
Lieutenant A. H. SCALES,

Lieutenant M. L. MILLER,

Lieutenant W. V. PRATT,

Lieutenant G. R. MARVELL,

Lieutenant (junior grade) J. F. H. G.



Bass, Ivan Ernest, "Ptolemy."
Four Buttons, Mississippi.



*"The light of forty centuries looks down upon
us."—NAPOLEON.*

Bachelor's Club.

A man of few words whose motto is "Silence is golden;" a direct descendant of the Ptolemies of Egypt. Now the legal agent for Egyptian pressed bricks, and other presses. Made a clean sleever by request, and, consequently, is not down on the "Striper Brigade."



CADET'S ROOM.

U.S. Naval Academy Museum [Museum Home](#) [Museum :: USNA](#)

MUSEUM



Model no. 3. English 20-Oared Admiral's Barge, c1695-1705
Scale: 3/5in = 1ft-0in (1:20). Large, opulent barges were routinely provided to Admirals in the Royal Navy following the successful conclusion of the War of the English Succession, also called King William's War (1689-97). They were used to ferry flag officers and their guests between ships and from ship to shore. Each admiral paid for the design and upkeep of his crew's uniforms. Here the principal passenger is not present; he (or she) would normally be seated in the "stern sheets" just forward of the helmsman.

The Museum's holdings include: [ship models](#), [paintings](#), [prints](#), flags, uniforms, swords, firearms, medals, sculptures, manuscripts, rare books, photographs, ship instruments and gear, and a wide variety of personal memorabilia. Several of our special collections are particularly noteworthy:

- [The Beverley R. Robinson Collection](#) contains 6000 prints that reflect the naval history of Europe and the New World from 1514 through World War II.
- The United States Navy Trophy Flag Collection was begun by an Act of Congress in 1814 and given to the care of the Naval Academy in 1849. It currently totals more than 600 historic American and captured foreign flags. Among them are the famous "Don't Give Up the Ship" battle flag flown at the Battle of Lake Erie during the War of 1812, the first American ensign flown in Japan (1853) as well as flags and banners that have been to the Moon. The flags are supplemented by a collection of books on the subject, many of which are rare and valuable hand-illustrated editions.
- Our Malcolm Storer Naval Medals Collection is also a valuable historical reference. Donated in 1936, it is composed of 1,210 commemorative coin-medals gathered from thirty countries and dating from 254 BC to 1936.

Our Collections also contain other significant groups of objects and documentary materials related to many famous Naval heroes including: John Paul Jones, Edward Preble, Stephen Decatur, Oliver H. Perry, Matthew C. Perry, David G. Farragut, Chester W. Nimitz, William F. Halsey, and other significant



Model No. 39. ROYAL WILLIAM, British First Rate, 100 guns (1719) Detail
Scale: 1/4in = 1ft-0in. A close-up view of the model's elaborate double equestrian figurehead. It represents the ship's namesake, King William III, clothed as a Roman Emperor and trampling asunder England's enemies, here represented by a Gorgon with snaky hair.

×

The Naval Academy Art Collection contains more than 1200 paintings and pieces of sculpture representing the work of many notable artists. Among the artists whose works are represented in the collection are Michel F. Corn, Robert Salmon, Edward Savage, Gilbert Stuart, John Wesley Jarvis, Thomas Sully, N.C. Wyeth, and the sculptors Jean Antoine Houdon and Felix DeWeldon. The subjects are primarily naval ships, battles, and portraits. Often the paintings are contemporary with the ships or events that they depict, which adds historical interest to their artistic value.

When the Brooklyn Naval Lyceum and the Boston Naval Library and Institute were disbanded in 1888 and 1921 respectively, their accessions were donated to the Naval Academy and formed the nucleus of the present Museum Collection. Another notable collection, presented to the Naval Academy in 1940, is the thirteen Historical Marine Paintings of Edward Moran, some of which can be seen on the first deck of the Museum.

— LANTERN SLIDES. A BRIEF HISTORY

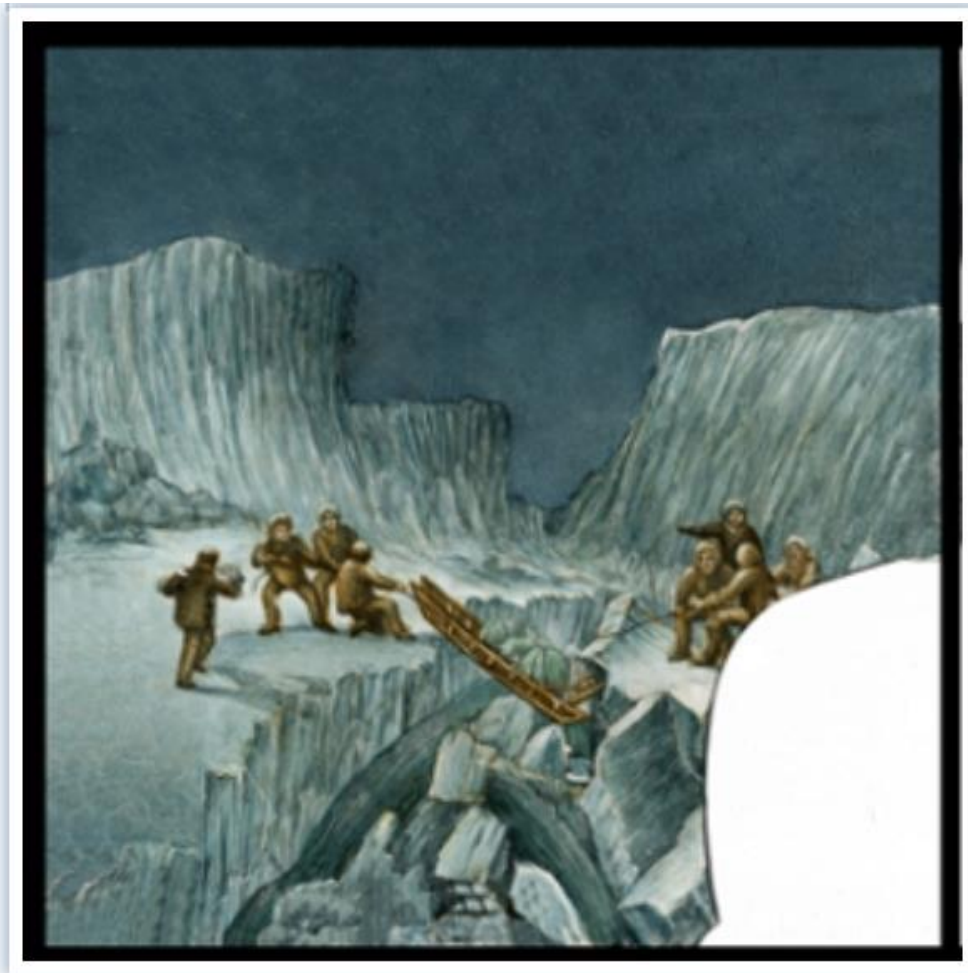
The Magic Lantern slide is a small pane of glass with an either hand-painted or a photographic image on it. The slide is placed into a Magic Lantern projector, in which, light is projected through the slide and out the front of the projector. This produces a large image of the slide on a nearby wall or backdrop, making it feasible for people to view the images in groups instead of individually. Images of Kane's exploits were very popular and widely shown.

The Magic Lantern slides depicting Kane's Arctic voyage were hand drawn and colored. The images on them came from steel plate etchings that were based on sketches by Kane himself. To create slides like those showing Kane's expedition, an artist would first outline the scene onto a pane of glass. Then the artist would color the slide using watercolor paints, which allow for transparency. Once the paint dried, the artist finished the slide with either a coat of varnish or by covering the paint with a second pane of glass to protect the image.

Elisha Kent Kane (1820-1857) Commanded Arctic Exploration Expeditions in 1850s-Lantern Slides



Kane's ship stuck in an ice pack



Kane's crew working together on their long march

Birds Eye View of Annapolis, MD (1864)



U.S.S. Vincennes and Columbus in Japan's Bay of Edo (1846) Note Japanese ships blocking them.



Battle of Manila (1898)



Museum Exhibits

First Deck

Follow the story of the United States Navy from its inception during the Revolutionary War to today's modern fleet. Learn how Naval Academy graduates have led our nation's armed forces in times of war, explored remote areas of the globe, and advanced our scientific knowledge. Interactive battle maps are placed throughout the first deck which illustrate the tactics used in many of America's major naval battles. The central of the gallery focuses the history of the Academy and shows how it has changed both as an academic institution and a military post. Highlights of the first deck include Oliver Hazard Perry's famous "Don't Give Up the Ship" flag from the Battle of Lake Erie, a piece of USS *Monitor*, and a display illustrating the attack on Pearl Harbor. The First Deck also contains the James W. Cheevers Gallery, home to our temporary exhibitions.



Suddenly, a second wave of planes sweeps in, targeting the Navy Yard.

OAHU

0855-7 December, 1941
A second wave attacks dry docks

December 1941

...

...

...





Preble Hall Podcast Interview[s] historians, practitioners, military personnel, and other experts on a variety of naval history topics from ancient history to more current events. SuDoc: D 214.513:AM 7

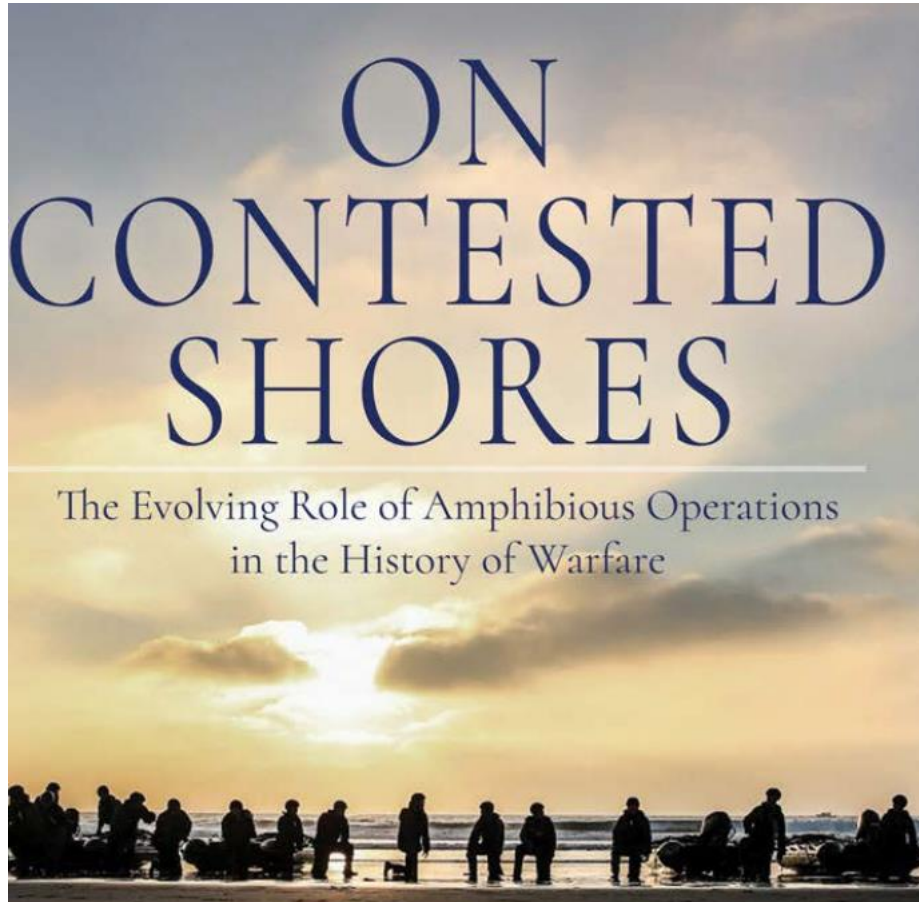
EP99: On Contested Shores: The Evolving Role of Amphibious Operations in the History of Warfare

43:28

Feb 16th, 2021

Major Tim Heck is the co-editor of a new book by Marine Corps University Press, "On Contested Shores: The Evolving Role of Amphibious Operations in the History of Warfare." J. Overton is one of the books contributors. The book can be found at

<https://www.usmcu.edu/Portals/218/OnContestedShores>



Listen Now

EP91: Academy Graffiti: Cultural Anthropology at the U.S. Naval Academy (39:49)

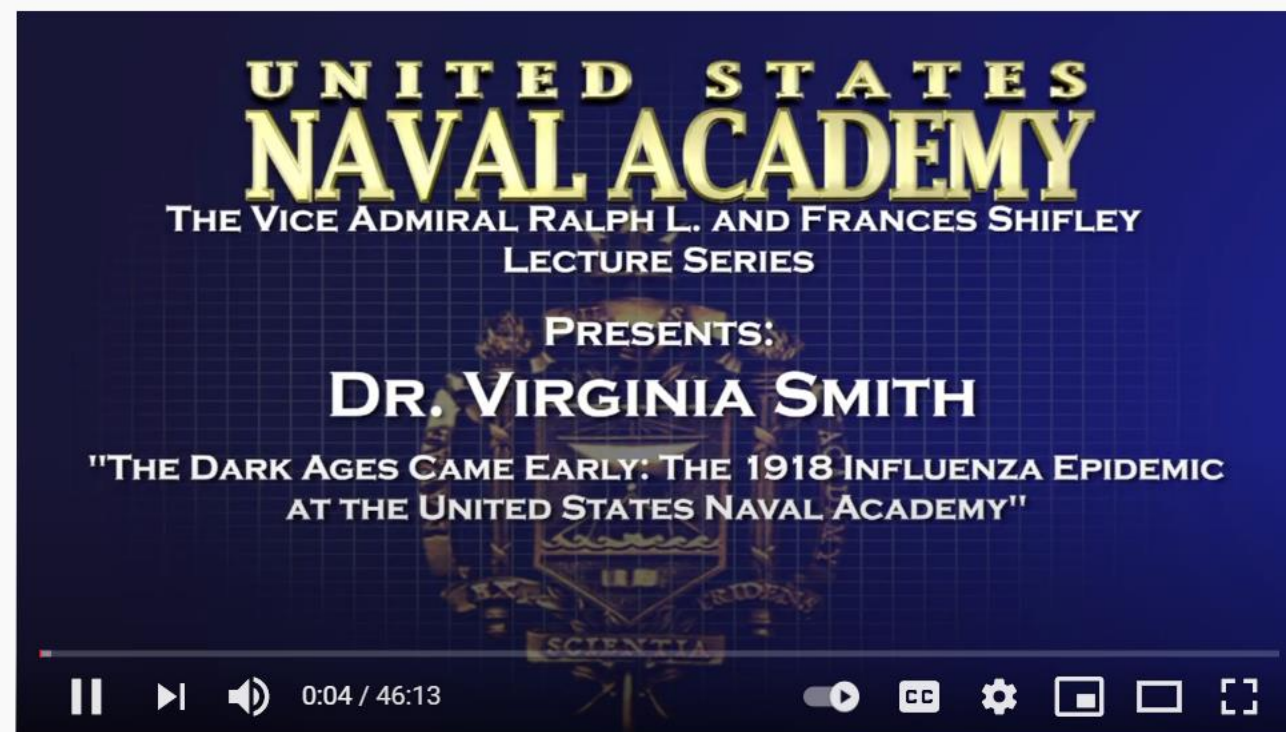
Visitors to the Naval Academy wouldn't see the graffiti but Midshipman Parker Ellis conducted a historical survey of graffiti at several sites for Professor Clementine Fujimura's Cultural Anthropology class. On this episode, they discuss the project and graffiti's significance, even at the Naval Academy. Some of the photos he took will be posted on the Museum's Facebook page and Twitter on December 3, 2020. Links to those sites are in the Episode Notes.

[Listen Now](#)

Shifley Lecture Series-Endowed lecture series with webcasts from 2013-2014 to present-October 17, 2019 Dr. Salvatore Mercogliano "Sealift: The Evolution of American Military Sea Strategy"



Sealift: The Evolution of American Military Sea Strategy



Shifley Lecture: Dr Virignia Smith

517 views • Dec 8, 2018

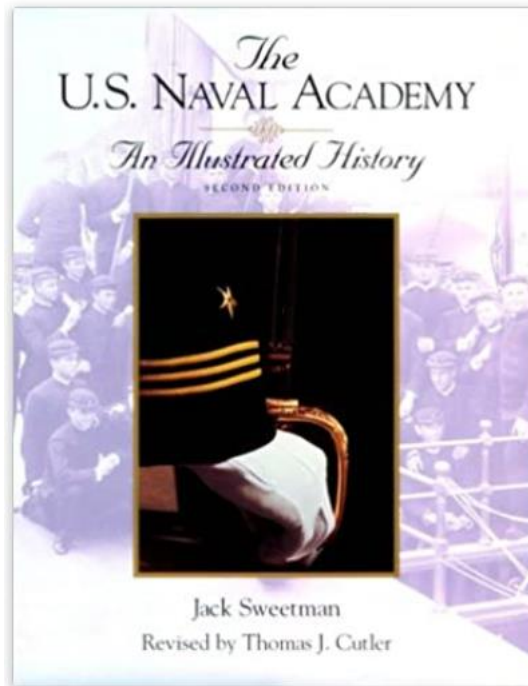
👍 4 💬 0 ➦ SHARE ≡+ SAVE ⋮

Sports

The logo for the Navy sports team, featuring the word "NAVY" in a bold, white, serif font with a blue outline, set against a dark blue rectangular background.

- Both men and women participate in a variety of intercollegiate and club sports.
- Navy Football participates in the American Athletic Conference. Plays iconic annual game with Army and competes for Commander-in-Chief trophy
- 2019 football team went 11-2 and beat Kansas State in AutoZone Liberty Bowl
- Joe Bellino (1960) and Roger Staubach (1963) won Heisman Trophy.
- Men's and women's basketball teams play in the Patriot League. Has made 11 NCAA tournament appearances with the most recent being 1998. Made elite 8 in 1986 before losing to Duke.

Additional Reading



- Jack Sweetman. Revised by Thomas J. Cutler
- Naval Institute Press, 1995
- ISBN 13: 978-1557501431
- 311 pages

Benefits of Using U.S. Naval Academy Information Resources

- Learning how to be appointed to the U.S. Naval Academy.
- Gaining enhanced understanding of the historical and contemporary significance of this institution in American life and culture.
- Learning about this institution's current educational and research activities.
- Gaining enhanced understanding and appreciation of individual USNA attendees and graduates.
- Learning about the experiences of relatives and friends who attending here.
- Understanding USNA's physical environment and surroundings.
- Learning how USNA individuals and units are contributing to debate on issues affecting naval and maritime aspects of national security policy.

Questions?



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