

UNITED STATES COAST GUARD
AND
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION









# FLEET PLAN

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NOAA Ships BELL M. SHIMADA (left) and PISCES underway in the Gulf of Mexico.

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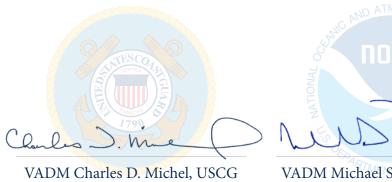
On the Cover: Coast Guard Seaman Craig Senczyszyn secures a NOAA buoy to the deck of USCG Cutter ALDER in western Lake Superior. ALDER is part of Operation Fall Retrieve, which switches vital buoys in the Great Lakes with more durable ice buoys before the winter freezes the Lakes.

Opposite Page: NOAA Ship OSCAR DYSON at anchor off the coast of Alaska.



Since the birth of our Nation the United States Coast Guard (USCG) and the National Oceanic and Atmospheric Administration (NOAA) have successfully and frequently supported each other's missions through cooperative efforts and joint operations. We do this to promote our Nation's economy, sustain our natural resources, and save lives from the perils of the sea. Our partnership must grow to keep pace with scarce federal resources and growing demands placed upon the maritime commons.

The USCG and NOAA best serve the Nation when we deliberately prepare and operate our fleets to support each other. This plan sets the course to achieve this goal. It provides direction and guidance for our Services to achieve commonality and interoperability. It strengthens the Nation's sea power by supporting the projection of soft power through maritime governance and sovereign presence. It also achieves strategic priorities promulgated by the United States Coast Guard and National Oceanic and Atmospheric Administration Cooperative Maritime Strategy.



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Deputy Commandant
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VADM Michael S. Devany, NOAA
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### **EXECUTIVE SUMMARY**

The USCG and NOAA share a legacy of collaboration stretching back to the beginning of our Nation. Over 207 years of mutual interests and intersecting missions have given rise to productive partnerships in the maritime and atmospheric domains. Common throughout these partnerships is reliance upon people and capital assets – uniformed service members and civilian personnel, ships, boats, aircraft, satellites, and autonomous and remotely piloted vehicles. These resources are employed to support our Nation's economic welfare and sustain our natural resources. They also form the basis of, and contribute to, the United States' ability to project soft sea power.

As demand increases on the oceans, Great Lakes, rivers, and coasts to provide transportation, energy, food, and recreation, the challenges faced by the USCG and NOAA to execute their missions will also increase. Scarce fiscal resources require Federal entities to find new and novel partnerships, and pursue cooperative endeavors where missions align across organizational boundaries. These cooperative relationships will gain efficiencies and allow USCG and NOAA to maintain mission excellence. This plan presents a framework to guide cooperation in the operation and maintenance of marine and aviation platforms. It provides the following focus areas for increased collaboration:

- **People:** Explore personnel exchanges for training, exercises, and professional or program development via temporary or permanent marine, aviation, or shore support assignments.
- Maintenance, Logistics, and Facilities: Examine commonality of ship and aircraft parts, warehousing nodes, and opportunities to coordinate maintenance and readiness sustainment work. Coordinate in the planning, design, construction and tenancy of home port and airport facilities to maximize utilization of existing and planned infrastructure.
- **Commonality:** Where feasibile, leverage buying power for common systems across assets.
- **Joint Operations:** Leverage and expand capacity through joint operations and information sharing between aligned programs.
- Research, Development, Test and Evaluation: Collaborate in research, development, test and evaluation activities. Transition research and development to operations and maintain strategic advantage.
- Coordinating Mechanisms: Engage leadership of each organization in strategic planning fora to share relevant challenges and opportunities, and set the course toward enhancing mutually beneficial cooperation. Promote regional coordination and operational leadership meetings.



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NOAA technicians and crewmembers from the USCG Cutter SPAR service a NOAA buoy in the Bering Sea.

The United States projects sea power through a National fleet of marine and aviation assets. Sea power is a continuum. It is comprised of commissioned ships capable of projecting hard and soft power throughout the world. The United States Navy (USN), USCG, and NOAA comprise the full spectrum of national sea power. The USN contributes hard power through ships that provide war fighting capability. The USCG operates in the realm between hard and soft power, operating as a specialized service in the Navy in times of war, supporting defense operations, and providing deterrence and maritime governance functions. NOAA's commissioned ships complete the continuum, projecting soft power through sovereign presence while collecting environmental intelligence around the world. Partnerships between all three services, as well partnerships between NOAA and USN in scientific and operational endeavors strengthen national sea power. This plan strengthens the projection of soft sea power by exploiting common interests, resulting in a stronger and more capable fleet.

## FLEET COORDINATION

Coordination between the USCG and NOAA fleets focusing on people; maintenance, logistics, and engineering; commonality; joint operations; research, development, test and evaluation; and strategic and operational coordinating mechanisms will benefit the Nation.

#### People

In August 2012, NOAA's officer accession program began the process of creating a Joint Officer Training Center at the USCG's Officer Candidate School. The resultant joint service officer training program is arguably the most powerful enabler of fleet coordination. The professional relationships, service mission understanding, and trust developed between USCG and NOAA Officer Candidates through the OCS curriculum has already begun to yield closer ties and unity of effort as the next generations of USCG and NOAA leadership embark upon their careers. Building upon the joint service officer training program concept, we will examine our training portfolios with an eye toward increasing the proficiency of our personnel by providing interagency training and developmental opportunities.



Rear Adm. Sandra Stosz, Superintendent of the U.S. Coast Guard Academy, and then Rear Adm. Michael Devany, Director of the NOAA Commissioned Officer Corps, signing the Interagency Agreement that created the Joint Service Officer Training Center at the Leadership Development Center on May 31, 2013.

USCG and NOAA have a long history of exchanging personnel for specific missions and for professional development with positive Opportunistic, results. operational-level temporary duty assignments have created tremendous value for our programs and for the professional development and expertise of our workforce. These opportunities are ripe for expansion to include long term details and permanent change of station assignments to activities and units afloat, ashore, or in the air.

#### Maintenance, Logistics and Facilities

The NOAA fleet and modern USCG buoy tenders and ice breakers share commonalities in command, control, and communication, as well as in power generation, machinery automation, and other primary ship systems. Ships require shore support facilities and aircraft require ground-based support to conduct preventive and corrective maintenance. These assets also require home port and airport facilities from which to operate. Commonalities in marine and aviation platforms and in the location and maintenance of home ports and airports are fertile ground to find efficiencies and leverage expertise. USCG and NOAA will investigate joint use, development and/or expansion, of ship home port and airport facilities. We will leverage best practices in supply chain management and maintenance and repair services.

#### Commonality

Enhanced interoperability between fleets is a desired outcome of collaboration as well as a focus area to advance fleet plan goals. We will explore common procedures and research standardized C4IT (Command, Control, Communications, Computers and Information Technology) and navigation systems aboard our platforms to enhance interoperability. Commonality of systems will support our ability to seamlessly exchange personnel when needed, collaborate on joint operations, and leverage each other's platforms for sensor deployment and data acquisition.



NOAA Ship OKEANOS EXPLORER, NOAA Survey Vessel BAY HYDROGRAPHER II and a CG Response Boat Medium in Baltimore Harbor.

#### **Joint Operations**

Opportunistic and low cost projects will form the majority of joint operations over the short term. Working together, the Coast Guard and NOAA are optimally positioned to address complementary emerging issues such as the Oceania Maritime Security Initiative; climate buoy array maintenance; fisheries enforcement and fisheries resource surveys; and bathymetric surveys/waterways management missions.

Achieving long term and substantial success in joint operations requires NOAA to invest resources and provide some multi-mission capabilities in the existing fleet, and to include common capabilities in ship requirements for the future. Facilities and equipment to handle classified information, secure communications, and re-establishment of armories and small arms training are critical and fundamental to supporting robust joint operations capability.

#### Research, Development, Test and Evaluation (RDT&E)

New technologies serve to provide strategic advantage and advance the missions of the USCG and NOAA. Whether applied to the interdiction of dangerous drugs at sea or to the collection of environmental intelligence in the Arctic to prepare for oil spills, RDT&E collaboration has the potential

to reap substantial benefits for each organization.

NOA A's research and development activities have a track record of producing novel solutions to complex ocean and atmosphere monitoring requirements. Creative solutions and unique approaches are integral to the pursuit of environmental The discoveries intelligence. made and the knowledge gained from basic research can have profound impact on the efficacy of at-sea missions.



NOAA Corps Ens. Kevin Doremus launching the first Puma unmanned aviation system flight from the deck of the USCG Cutter HEALY during Operation Arctic Shield in 2013.

Additionally, the employment of autonomous and remotely piloted systems, the miniaturization and development of new sensors, and the application of NOAA's remote sensing tools have, and are poised to continue to enhance USCG missions. Similarly, the availability of each other's assets as platforms of opportunity to observe and collect data or deploy instruments can and has served as force multipliers for both organizations.



NOAA Research Vessel LAURENTIAN moored alongside USCG Cutters MACKINAW and MOBILE BAY in Grand Haven, Michigan.

#### **Strategic and Operational Coordination Mechanisms**

Awareness of each other's priorities and challenges is required to identify opportunities for mutually beneficial collaboration. Processes and forums to manage operations and set priorities exist within USCG and NOAA The nature of this cooperative plan encompasses a wide array of operations – human resources, marine and aviation operations, engineering, information technology, training, and research and development. Interagency engagement must be coordinated and focused across multiple areas of responsibility and orchestrated at senior levels of leadership to maintain strategic direction. Commanders, Office Directors, and Program Managers must be engaged to provide vision and direct their staff and resources to pursue meaningful collaboration and achieve success.

Recognizing the tremendous value of partnerships generated from disciplined initiative at the operational level, NOAA and USCG operational commanders are encouraged to engage with their interagency partners through participation in Command Conferences, Aviation Safety Conferences, Cutter Roundups, and other events where organizational accomplishments, challenges, and lessons learned are shared.



Looking forward, USCG and NOAA will face future challenges to continue providing services that support our Nation's economic success while safeguarding our natural resources. Thoughtful and deliberate action to find and act upon opportunities and expand upon our legacy of cooperation will assist us in meeting future challenges and demand for services while we enhance our Nation's ability to project soft sea power in an increasingly complex global landscape.



Scientists from the NOAA Ship OSCAR DYSON transit back after conducting research in the Arctic Circle.





#### **USCG and NOAA ACRONYM GLOSSARY**

AA – Assistant Administrator

ACO – Association of Commissioned Officers

ACOE - Army Corps of Engineers

ACPARS - Atlantic Coast Port Access Routing Study

AFSC - Alaska Fisheries Science Center

AGO - Acquisition and Grants Office

AIS - Automatic Identification System

ALCON - All Concerned

AMAP - Arctic Monitoring and Assessment Programme

AOC - Aircraft Operations Center

AOML - Atlantic Oceanographic and Meteorological Laboratory

AOOS - Alaska Ocean Observing System

ATON - Aids to Navigation

AWS - Alert Warning System

BCA - Business Case Analysis

BLUF - Bottom Line Up Front

BOTC - Basic Officer Training Class

BSEE - Bureau of Safety and Environmental Enforcement

CAMSLANT - Communications Area Master Station Atlantic

C&GS - Coast and Geodetic Survey, predecessor organization of the NOAA Corps

CASP - Center for Arctic Study and Policy

CCG - Commandant of the Coast Guard

CENCOOS - Central and Northern California Ocean Observing System

CFSAC - Commercial Fishing Safety Advisory Committee

CHOW - Capitol Hill Ocean Week

CIO - Chief Information Officer

CG-711 – Office of Aviation Forces (Capabilities)

CG-721 - Office of Specialized Capabilities

CG-731 – Office of Boat Forces (Capabilities)

CG-741 – Office of Shore Forces (Capabilities)

CG-751 – Office of Cutter Forces (Capabilities)

CG-761 – Office of C4 & Sensors Capabilities

CGA - Coast Guard Academy

CGC - Coast Guard Cutter

CG-CPE – Office of Crisis & Contingency Planning and Exercise Policy

CGDN - Coast Guard Data Network

CG-FAC – Office of Port & Facility Compliance

CG-MLE - Office of Law Enforcement Policy

CGMS - Coast Guard Messaging System

CG-MSR - Office of Maritime Security Response Policy

CG-NAV - Office of Navigation Systems

CGPAAS - Coast Guard Personnel Accountability and Assessment System

CGSW - Coast Guard Standard Workstation

CG-WWM – Office of Waterways and Ocean Policy

CGOA - Coast Guard Officers Association

CIMES - Center for Island, Maritime and Extreme Environment Security, http://www.cimes.hawaii.edu/

CMTS – U.S. Committee on the Marine Transportation System

COI - Certificate of Inspection

CONOPS - Concept of Operations

COOPSTRAT - Cooperative Strategy

COP - Common Operational Picture

CPC - Commissioned Personnel Center

CRADA - Cooperative Research and Development Agreement

DAA – Deputy Assistant Administrator

DART – Deep-ocean Assessment and Reporting of Tsunamis (global buoy array used to detect and predict tsunamis)

DCO - Deputy Commandant for Operations

DCO-X - Emerging Policy Staff

DoS - Department of State

DSC – Digital Selective Calling (radio communications technology)

DUS - Deputy Under Secretary

DUS-O - Deputy Under Secretary for Operations

ECDIS - Electronic Chart Display and Information System

ECS - Extended Continental Shelf

ECS - Electronic Charting System

EIS - Environmental Impact Statement

ENC - Electronic Navigational Chart

**ENS – Emergency Notification System** 

ERMA - Environmental Response Management Application

ESRL - Earth System Research Laboratory

ETO - Emerging Technologies Office

F/V - Fishing Vessel

FDCC - Facilities Design and Construction Center

FEI - Front-End Analysis

FMS – Foreign Military Sales

FORAC - For Action

FR – Federal Register

FSV - Fisheries Survey Vessel

FUT - Full-time University Training

GC - General Counsel

GLERL - Great Lakes Environmental Research Lab

GMATS - Global Marine and Transportation School

HCHB - Herbert C. Hoover Building, Department of Commerce Headquarters

HPR – Health and Physical Readiness

IAA – Interagency Agreement

ICCOPR - Interagency Coordinating Committee on Oil Pollution Research

ICCP - Impressed Current Cathodic Protection

IHO – International Hydrographic Organization

IMD - Information Management Division

IPS - International Port Security

IPT - Integrated Product Team

IVO - In Vicinity Of

JAWS - Joint Advanced Warfighter School

JFSC - Joint Forces Staff College

LDC - Leadership Development Center

LMR - Living Marine Resource

LNM - Local Notice to Mariners

LNO - Liaison Officer

LOA - Length Over All

LODO - Line Office Diving Officer

MAR - Mission Analysis Report

MARPOL - International Convention for the Prevention of Pollution from Ships

MDA - Maritime Domain Awareness

MERPAC - Merchant Marine Personnel Advisory Committee

METOC - Meteorology/Oceanography, Meteorological/Oceanographic

MIST - Mobile Integrated Survey Team

MFCMA - Magnuson-Stevens Fishery Conservation and Management Act

MHP - NOAA's Maritime Heritage Program

MIZOPEX - Marginal Ice Zone Observations and Processes Experiment

MNS - Mission Needs Statement

MOA – Memorandum of Agreement

MOC-A – Marine Operations Center – Atlantic (NOAA's "LANTAREA")

MOC-P – Marine Operations Center – Pacific (NOAA's "PACAREA")

MOC-PI - Marine Operations Center - Pacific Islands

MOU - Memorandum of Understanding

MSO - Marine Science Officer

MSO - Marine Safety Office

MSR - Mandatory Ship Reporting

MSRT - Marine Security Response Team

MTS - Marine Transportation System

MXAK - Marine Exchange of Alaska

NAIS – National Automatic Identification System

NAVAIR - Naval Air Systems Command

NAVSAC - Navigation Safety Advisory Council

NC - NOAA Corps

NCDC - National Climatic Data Center

NCOTC - NOAA Corps Officer Training Center

NDBC - National Data Buoy Center

NDC - NOAA Diving Center

NDP – NOAA Diving Program

NDSB - NOAA Diving Safety Board

NEFSC - Northeast Fisheries Science Center

NESDIS - National Environmental Satellite, Data, and Information Service

NGA – National Geospatial-Intelligence Agency

NGDC - National Geophysical Data Center

NHC - National Hurricane Center

NHHC - Naval History and Heritage Command

NIU - National Intelligence University

NMC - National Maritime Center (CG Merchant Mariner Credentialing Center)

NMFS - National Marine Fisheries Service

NMML - National Marine Mammal Laboratory

NODC – National Oceanographic Data Center

NWFSC - Northwest Fisheries Science Center

NOP - National Observer Program (a NMFS Science Program)

NOS - National Ocean Service

NOSC - NOAA Observing Systems Council

NOTAM - Notice to Airman

NOTC - NOAA Officer Training Center

NRT - Navigation Response Team

NSC - National Security Cutter

NTM - Notice to Mariners

OAA - On or About

OAR - Office of Oceanic and Atmospheric Research

OCMD - Officer Career Management Division

OCS - Officer Candidate School

OCS - Office of Coast Survey

OCS - Outer Continental Shelf

OER - Officer Evaluation Report

OER - Office of Ocean Exploration and Research

OES - Officer Evaluation System

OMAO - Office of Marine and Aviation Operations

ONMS - Office of National Marine Sanctuaries

OOA - On Or About

ORR - Office of Response and Restoration

OSPO - Office of Satellite Products and Operations

OST - Office of Science and Technology

PCO – Program Coordination Office

PCO - Prospective Commanding Officer

PHB - Pacific Hydrographic Branch

PIB - Polar Ice Breaker

PIE - Partners in Education

PLAD - Plain Language Address

PMEL - Pacific Marine Environmental Laboratory

PMO – Port Meteorological Officer

POAM - Plan of Action and Milestones

PSC - Personnel Service Center

PXO – Prospective Executive Officer

QLT – Quick Look Tool (an operational risk assessment)

RCN – Royal Canadian Navy

RDC - USCG Research and Development Center

RDT&E - Research, Development, Test, and Evaluation

REC – Regional Examination Center

RTCM - Radio Technical Commission for Maritime Services

SAR – Survey Acceptance Report (Hydrographic Survey)

SAR - Search and Rescue

SCCOOS - Southern California Coastal Ocean Observing System

SCS - Scientific Computing System

SECO - Safety and Environmental

SEFSC - Southeast Fisheries Science Center

SLEP - Service Life Extension Program

SOLAS - International Convention for the Safety of Life at Sea

SPAWAR - Space and Naval Warfare Systems Command

STT - Small Tactical Terminal

sUAS - Small Unmanned Aerial Systems (for example, AeroVironment's Puma)

SWFSC - Southwest Fisheries Science Center

TAO - Tropical Atmosphere Ocean Project (global buoy array used to monitor El Nino/La Nina

T&E - Test and Evaluation

TISCOM - Telecommunication and Information Systems Command

TPIO – Technology, Planning and Integration for Observation

TRB – Transportation Research Board (of the National Academies)

UAF - University of Alaska - Fairbanks

UAS - Unmanned Arial Systems

UNCLOG - USCG-NOAA/NWS Coordination Liaison Group

USG - United States Government

USMMA - United States Merchant Marine Academy

USNHHC - United States Navy History and Heritage Command

USV - Unmanned Surface Vehicle

UUV - Unmanned Underwater Vehicle

VCG - Vice Commandant of the Coast Guard

VOS - Voluntary Observing Ship Program

VMS - Vessel Monitoring System

WASC - Western Administrative Support Center

WHOI - Woods Hole Oceanographic Institution

WWM - Waterways Management

XMIT - Transmit