DEPARTMENT OF THE NAVY

VICE CHIEF OF NAVAL OPERATIONS 2000 NAVY PENTAGON WASHINGTON DC 20350-2000

IN REPLY REFER TO.

Ser N09/9U103035 30 Oct 09

MEMORANDUM FOR DISTRIBUTION

Subj: TASK FORCE CLIMATE CHANGE

Encl: (1) Task Force Climate Change Charter

- 1. Scientific evidence indicates that the Earth's climate is changing, and the most rapid changes are occurring in the Arctic. Because the Arctic is primarily a maritime environment, the Navy must consider the changing Arctic in developing future policy, strategy, force structure, and investment.
- 2. During the Chief of Naval Operations (CNO) Executive Board on 15 May 2009, CNO directed the Oceanographer of the Navy to establish and lead Task Force Climate Change (TFCC), supported by all Office of the Chief of Naval Operations N-codes and the Office of Naval Research. According to the charter in enclosure (1), TFCC will develop a comprehensive approach to guide our future public, strategic, and policy discussions. The primary deliverable of TFCC will be a holistic, chronological roadmap for future Navy action with respect to the Arctic that: (a) is synchronized with a science-based timeline, (b) provides a framework for how the Navy discusses the Arctic, and (c) includes a list of appropriate objectives tempered by fiscal realities.
- 3. In addition to the changing Arctic, there are other climate change implications for the Navy such as impacts on installations, acquisition, public relations, and inter-agency cooperation; these too will be addressed by TFCC.

J. W. GREENERT Admiral, U.S. Navy

Distribution:

DNS

OPNAV (OJAG, N2F, N31, N43/TFE, N45, N46, N51, N52, N6F, N81, N8F, N84, N85, N86, N87, N88)

USFF

CNR

PEO C4I, PEO IWS, PEO CARRIERS, PEO SHIPS, PEO SUBS, PEO LMW

Subj: TASK FORCE CLIMATE CHANGE

OSD QDR Integration Office

NOAA

HO USCG

HQ USMC

CNIC

NAVFAC ESC

CNA

CHINFO

National Ice Center

NPS

NWC

USNA

Naval Studies Board

NGA

NECC

NAVNETWARCOM

COMNAVSURFOR

COMNAVAIRFOR

COMNAVSUBFOR

CNMOC

NAVO

FNMOC

ASL

NAVFAC ESC

Task Force Climate Change Charter

Reference: (a) DNS End of Day, 15 May 09 re: ARCTIC CEB

1. **Purpose**. This charter defines the background, guidance, purpose, organization, and responsibilities of the Navy's Task Force Climate Change.

2. Background

- a. Scientific evidence indicates that the Earth's climate is changing, and the most rapid changes are in the Arctic. The Arctic is warming twice as fast as the rest of the globe, and sea ice extent is decreasing at the decadal rate of 11.3% in the summer and 2.8% in the winter. The summer ice cap is estimated to be only half the size it was 50 years ago, and the 2008 minimum extent of multi-year sea ice was the lowest on record down to 27% of all sea ice from 65% in 1990.
- b. The continuing loss of sea ice implies that an increasing extent of the Arctic will be navigable for longer durations during the summer. Consensus of many forecast models and researchers is that the Arctic will be "ice-free" for at least four weeks each summer sometime during the 2030's. Even though there is considerable uncertainty associated with the timing of this forecast, it is clear that the time period each year for easier Arctic access is increasing. Additionally, exploration for oil, natural gas, and minerals has increased in the region, and several countries have expanded survey efforts to request extensions of their continental shelf boundaries.
- c. The United States is an Arctic nation with strategic interests in this predominantly maritime environment. National policy was established in NSPD-66/HSPD-25. In light of these facts and the observed increasing access, interest, and resource extraction, the Navy must consider the Arctic and climate change in its future policy, strategy, force structure, and investments.

3. Guidance

a. As directed by the CNO Executive Board (CEB) on the Arctic of 15 May 2009 and documented in reference (a), Task Force Climate Change (TFCC) will address the emerging Navy need to develop a comprehensive approach about the Arctic to guide our future public, policy, and strategy discussions.

- b. TFCC will recommend policy, strategy, roadmaps, force structure, and investments for the Navy regarding the Arctic and Climate Change that are consistent with existing National, Joint, and Naval guidance, including National Security . Presidential Directive/Homeland Security Presidential Directive (NSPD-66/HSPD-25), Joint Vision 2020, and a Cooperative Strategy for 21st Century Seapower (CS21SP).
- c. The initial focus for TFCC will be the Arctic, and the primary deliverable will be a holistic, chronological roadmap for future Navy action with respect to the Arctic between now and 2040 that:
 - (1) Is synchronized with a science-based timeline.
- (2) Provides a framework for how the Navy discusses the Arctic.
- (3) Includes a list of appropriate objectives tempered by fiscal realities.
- d. TFCC's subsequent focus will be other climate change implications for Navy policy, strategy, investment, and force structure and will address the following:
- (1) Assessment and prediction of the extent, timing, and impacts of climate change.
- (2) The appropriate Navy role in adaptation to climate change impacts.
- (3) The appropriate Navy role in mitigation, prevention, and solution of climate change impacts.
- 4. **Organization.** TFCC will consist of a flag-level Executive Steering Committee (ESC), a Navy Climate Change Coordination Office (NCCCO), and seven Working Groups.
- a. Executive Steering Committee (ESC). The Oceanographer of the Navy (CNO N2/N6F5) will serve as the Director, TFCC, and chair the Executive Steering Committee, reporting to the following:
 - (1) CNO N8 for acquisition, analyses, & resources.
 - (2) CNO N3/5 for policy, strategy, missions & plans.

- (3) CNO N4 for installations and facilities.
- (4) CNO N2/N6 for command, control, communications, computers, intelligence, surveillance, and reconnaissance
- (5) DNS for strategic communications, outreach, and any other TFCC executive level issues.

Permanent ESC members shall include one- or two-star equivalent representatives from CNO N2/N6, N4, N3/5, N8, N00X, OJAG, QDR Integration Group, Chief Information Office (CHINFO), the Office of Naval Research (ONR), U.S. Fleet Forces Command (USFF), COMPACFLT, the U.S. Coast Guard, and the National Atmospheric and Oceanic Administration (NOAA). The Oceanographer of the Navy (CNO N2/N6F5) will assign an Executive Secretary to the ESC. Advisors to the ESC will include Center for Naval Analyses (CNA), Program Executive Offices (PEOs) for Ships, Submarines, Carriers, C4I, and Integrated Warfare Systems, the Office of Naval Intelligence (ONI), the U.S. Army and U.S. Air Force Staffs, the National Maritime Intelligence Center (NMIC), the National Ice Center, the Office of Secretary of Defense (OSD), the staff of the Chairman of the Joint Chiefs of Staff (CJCS), Naval Facilities Command (NAVFAC), Commander Naval Installations Command (CNIC), and any other additional members added by the Director.

- b. Navy Climate Change Coordination Office (NCCCO). OPNAV N2/N6F5 will lead the Navy Climate Change Coordination Office, who shall act as the coordination point to execute ESC guidance by developing plans, frameworks and tasking to the working groups.
- c. TFCC Working Groups. O6 chairs will lead the following TFCC Working Groups as indicated:
- (1) Strategy, policy, missions, and plans CNO N51 chair.
 - (2) Operations and training USFF N3/5 chair.
 - (3) Platforms, weapons, sensors CNO N8F.
- (4) Command and control, communications, computers, intelligence, surveillance, & reconnaissance (C4ISR)- CNO N2/N6 chair.

- (5) Installations and facilities CNO N46 chair.
- (6) Strategic communications and outreach CHINFO chair.
- (7) Environmental assessment and prediction CNO N2/N6F5 chair.

TFCC Working Group chairs will determine representation at the working groups from 05/06-level action officers representing organizations within the ESC and any others as required. The TFCC Working Group chairs will report findings and recommendations to the ESC. TFCC Working Groups may be disestablished, combined, or new working groups established upon approval by the Director, TFCC. For working groups with multiple chairs, any issues that cannot be resolved by the chairs will be submitted to the ESC through the NCCCO for resolution.

5. Roles and Responsibilities

- a. The Executive Steering Committee shall:
- (1) Review and approve or forward as appropriate Navy Arctic and climate change policy, strategies, plans, and recommendations for investment.
 - (2) Approve strategic communications.
- (3) Set Navy goals and objectives for responding to the changing Arctic and Earth's climate.
- (4) Advocate for Navy Arctic and climate change goals, Objectives, and funding.
 - (5) Conduct semi-annual meetings.
 - (6) Review and approve updates to the charter.
- (7) Direct the Navy Climate Change Coordination Office and working groups in the execution of ESC responsibilities.
 - (8) Approve requests to CNO N81 for resources.
 - b. The Navy Climate Change Coordination Office shall:

- (1) Develop metrics, processes, tools, and a framework for the working groups.
- (2) Develop and implement a Strategic Communication Plan in concert with the Strategic Communication and Outreach working group.
- (3) Provide coordination, integration and oversight of working groups and products.
- (4) Coordinate Arctic and climate change issues with, and communicate TFCC deliverables to inter-agency international, DoD partners, academic, and scientific community partners.
- (5) Implement an online Navy Arctic and climate change information repository and on-line collaborative workplace.
 - (6) Conduct monthly meetings.
 - (7) Identify resources.
 - (8) Update the TFCC Charter as necessary.
- (9) Coordinate any Navy tasking related to the Arctic and climate change.
 - c. The TFCC Working Groups shall:
 - (1) Identify membership.
 - (2) Identify resources to execute tasking.
 - (3) Develop plans to achieve goals set by the ESC.
- (4) Assist with developing Arctic and climate change roadmaps.
- (5) Develop and submit to the ESC proposed Arctic and climate change policy, strategy, roadmaps, implementation plans, studies, assessments, and recommendations for investment.
- (6) Conduct meetings as required by the working group chair.
 - (7) Provide status reports to the ESC as required.
 - (8) Perform any other tasking as the ESC directs.

- 6. Specific Working Group Responsibilities: In addition to the roles and responsibilities listed in paragraph 5.c. above, the working groups shall:
 - a. Policy, strategy, missions, and plans.
- (1) Assess the current and potential National Security threats in the Arctic.
- (2) Review current threat assessment information, information from the Environmental Assessment and Prediction working group, CS21SP, and supporting national and DoD guidance, and recommended changes to existing Navy strategy and policy related to the changing Arctic environment and Earth's climate as an element of the Navy Arctic Roadmap.
- (3) Using threat assessment information, information from the Environmental Assessment and Prediction working group, CS21SP, and supporting guidance, recommended changes if any to existing Navy missions and plans world-wide that may be affected by the changing Arctic or Earth's climate.
- (4) Consider cooperative partnerships in developing new or revised Navy strategy, policy, missions, and plans as they relate to the changes in the Arctic or Earth's climate.
 - b. Operations and training.
- (1) Communicate operational and training plans in the Arctic to TFCC for inclusion in the Navy's Arctic Roamdap and subsequent revisions.
- (2) Identify required capabilities and resources to adapt to the Arctic and global climate change and forward these to TFCC.
- (3) Support other TFCC working groups by making recommendations concerning policy, strategy, plans, force structure, future investments, and strategic communication.
 - c. Platforms, weapons, sensors.
- (1) Using information from the Environmental Assessment and Prediction and Policy, Strategy, Missions, and Plans working groups, recommended future Navy investments in platforms,

weapons, and sensors as related to the changing Arctic and Earth's climate.

- (2) Using information from the Environmental Assessment and Prediction and Strategy, Policy, Missions, and Plans working groups, recommended future Navy research and development in platforms, weapons, and sensors as related to the changing Arctic and Earth's climate.
- d. Command and control, communications, computers, intelligence, surveillance, & reconnaissance (C4ISR).
- (1) Using information from the Environmental Assessment and Prediction and Strategy, Policy, Missions, and Plans working groups, recommended future Navy C4ISR investments as they relate to the changing Arctic environment and Earth's climate.
- (2) Using information from the Environmental Assessment and Prediction and Strategy, Policy, Missions, and Plans working groups, recommended future Navy research and development in C4ISR as related to the changing Arctic and Earth's climate.
 - e. Installations and facilities.
- (1)Using information from the Environmental Assessment and Prediction and Strategy, Policy, Missions, and Plans working groups, recommended future Navy investments in installations and facilities as they relate to the changing Arctic and Earth's climate.
- (2) Using information from the Environmental Assessment and Prediction and Strategy, policy Missions, and Plans working groups, recommended future Navy research and development in installations and facilities as related to the changing Arctic and Earth's climate.
 - f. Strategic communications and outreach.
- (1) Develop and implement Navy Strategic Communications and Outreach Plans for the Arctic As part of the Navy Arctic Roadmap.
- (2) Develop and implement a Navy Strategic Communications and Outreach Plan for Climate Change as part of the Navy Climate Change Roadmap.

- (3) Guide Navy public discussion regarding the changing Arctic environment and Earth's climate through engagement in meetings, publications, maintenance of an on-line presence, and other media.
- (4) Develop and maintain talking points for senior Navy leadership regarding the changing Arctic and Earth's climate.
 - g. Environmental assessment and prediction.
- (1) Engage scientific, academic, industry, other DOD, and interagency and international partners to determine the state of accepted scientific consensus regarding observations and predictions of changes to the Arctic physical environment and the Earth's climate.
- (2) Continuously inform all other working groups on the state of accepted scientific consensus regarding observations and predictions of changes to the Arctic physical environment and the Earth's climate.
- (3) Develop recommended actions to improve the Navy's capability to observe and predict changes to the Arctic physical environment and the Earth's climate, and to characterize and reduce uncertainties in these observations and predictions for inclusion in the Navy Arctic roadmap and a follow-on roadmap for climate change adaptation.
- (4) Develop cooperative partnerships to improve the Navy's capability to observe, predict, and characterize uncertainties of these observations and predictions of changes to the Arctic physical environment and the Earth's climate.
- (5) Develop recommendations for future Navy science, technology, research, and development in observation and prediction of the changing Arctic environment and climate change in general.

7. Plan of Actions and Milestones

Although TFCC will be a permanent OPNAV organization, the nearterm plan to complete a Navy Arctic Roadmap and begin addressing the broader climate change issue is as follows:

POC ACTION DATE

NCCCO - Submit Arctic Roadmap to DNS

Complete

TFCC	- Develop a Navy Arctic Strategic Communication Plan	Complete
TFCC	- TFCC CMM	11/02/09
TFCC	- Conduct Arctic TTX	11/13/09
NCCCO	- Identify TFCC costs	11/16/09
NCCCO	- Identify metrics to assess execution	11/20/09
TFCC	- Determine Navy Strategic Objectives for	12/10/09
	the Arctic	
TFCC	- Develop a Navy Arctic Strategic Outreach	12/20/09
	Plan	
NCCCO	- Provide 1 st quarterly report of Arctic	12/31/09
	Roadmap execution	
TFCC	- Develop classified roadmap annex	12/31/09
N2/N6C2	- Describe the Strategic Environment of	02/04/10
	the Arctic	
TFCC	- Participate in NORTHCOM-sponsored	02/10/10
	Arctic LOE	
NOOX	- Conduct mission analysis for the Arctic	03/30/10
N3/5	- Evaluate existing agreements with	03/30/10
	interagency & international Arctic	
	stakeholders	
TFCC	- Develop a Navy climate change strategy	03/30/10

8. Cancellation

This charter will remain in effect until superseded by a Navy Arctic/Climate Change Policy Instruction or dissolved by the Executive Steering Committee.