

**A** *udit*



**R** *eport*

METEOROLOGICAL AND OCEANOGRAPHIC SUPPORT  
IN THE EUROPEAN THEATER

Report No. D-2001-152

June 28, 2001

Office of the Inspector General  
Department of Defense

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### **Acronyms**

METOC	Meteorological and Oceanographic
NEMOC	Naval European Meteorology and Oceanography Center
OWS	Operational Weather Squadron
SMO	Senior METOC Officer
USAFE	U.S. Air Forces in Europe
USEUCOM	U.S. European Command



INSPECTOR GENERAL  
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June 28, 2001

MEMORANDUM FOR COMMANDER IN CHIEF, U.S. EUROPEAN COMMAND

SUBJECT: Audit Report on Meteorological and Oceanographic Support in the  
European Theater (Report No. D-2001-152)

We are providing this report for review and comment. We considered comments from the U.S. European Command, the Assistant Secretary of the Navy (Installation and Environment), and the Air Force Deputy Chief of Staff for Air and Space Operations when preparing the final report. This report is one in a series about DoD meteorological and oceanographic support services.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. As a result of management comments, we deleted draft report Recommendation 3. and renumbered draft report Recommendation 4., now Recommendation 3. The U.S. European Command comments were partially responsive to Recommendation 1. and did not provide specific comments to Recommendations 2. and 3. We request that the U.S. European Command provide comments on Recommendations 1., 2., and 3. by July 27, 2001.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Ms. Evelyn R. Klemstine at (703) 604-9172 (DSN 664-9172) (eklemstine@dodig.osd.mil) or Mr. Gary R. Padgett at (703) 604-9632 (DSN 664-9632) (gpadgett@dodig.osd.mil). See Appendix B for the report distribution. The audit team members are listed inside the back cover.

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## Office of the Inspector General, DoD

Report No. D-2001-152

June 28, 2001

(Project No. D2000LG-0102.003)

### Meteorological and Oceanographic Support in the European Theater

#### Executive Summary

**Introduction.** This report is one in a series evaluating the effectiveness and efficiency of DoD meteorological and oceanographic support provided by the Military Departments to DoD and other governmental agencies.

The Navy and the Air Force provide meteorological and oceanographic support for Service-unique and joint operations in the European theater through fundamentally similar three-tier organizational structures. The Staff Oceanographer, U.S. Naval Forces Europe, is responsible for providing meteorological and oceanographic services, including forecasts and products tailored to specific maritime and littoral operating areas, in support of Navy and joint operations in the European theater. The Naval European Meteorology and Oceanography Center, Rota, Spain, is the primary meteorological and oceanographic center for U.S. Naval Forces Europe. The Director of Weather, U.S. Air Forces in Europe, is responsible for providing meteorological services, including forecasts and products tailored to specific air-land areas, in support of Army, Air Force, and joint operations in the European theater. The Operational Weather Squadron at Sembach, Germany, is the primary meteorological center for U.S. Air Forces in Europe.

**Objectives.** The overall objective of this self-initiated series of audits was to evaluate DoD meteorological and oceanographic services and support to determine whether the Military Departments were providing the most cost-effective and nonduplicative meteorological and oceanographic services and support to DoD and other governmental agencies. Specifically, this audit focused on evaluating Military Departments use of DoD resources to determine whether meteorological and oceanographic services were provided in the most effective and efficient manner in the European theater. We also evaluated the management control program as it related to the specific audit objective.

**Results.** The U.S. European Command did not have a dedicated functional manager for theater meteorological and oceanographic support. The addition of a dedicated functional manager would improve joint meteorological and oceanographic support provided by Navy and Air Force unilateral entities in the European theater. As a result of not having a dedicated functional manager, joint meteorological and oceanographic support in the European theater was not fully coordinated and integrated. See the Finding section for a discussion of audit results. See Appendix A for a discussion of our review of the management control program.

**Summary of Recommendations.** We recommend that the Commander in Chief, U.S. European Command, reestablish a dedicated joint billet position for a senior

meteorological and oceanographic officer; establish guidance for joint meteorological and oceanographic support; and establish a formal advisory group to coordinate and integrate meteorological and oceanographic support within the European theater.

**Management Comments.** The U.S. European Command agreed, stating that the senior meteorological and oceanographic officer should be a dedicated joint billet position on the U.S. European Command staff. However, the Command could not establish the billet unless a budget decision was reversed.

Although not required to comment, the Navy agreed that the U.S. European Command senior meteorological and oceanographic officer should be a joint billet position that is rotational between the Navy and Air Force. The Navy agreed that the U.S. European Command should provide specific guidance for theater meteorological and oceanographic responsibilities; however, the Navy stated that the recommendation as written infringes upon Service responsibilities and should be rewritten. The Navy also agreed that a formal joint meteorological and oceanographic advisory group should be established at the U.S. European Command.

The Air Force agreed that the U.S. European Command senior meteorological and oceanographic officer should be a joint billet position. The Air Force disagreed that the U.S. European Command should establish guidance to address specific roles and responsibilities of a dedicated senior meteorological and oceanographic officer. The Air Force stated that the Director, Joint Staff, should refine Joint Staff guidance to address the roles and responsibilities of meteorological and oceanographic positions and support across all combatant commands. The Air Force agreed that a formal joint meteorological and oceanographic advisory group should be established at the U.S. European Command. A discussion of management comments is in the Finding section of the report and the complete text is in the Management Comments section.

**Audit Response.** The U.S. European Command comments are partially responsive. Although the U.S. European Command stated that it has no joint billets available; during the mandated joint billet reduction of the U.S. European Command staff, the U.S. European Command chose to completely eliminate its joint billet meteorological and oceanographic staff while preserving, or slightly reducing, the number of joint billet staff positions in its other headquarter functions. The U.S. European Command should consider transferring a joint billet position from within its headquarters staff. The U.S. European Command did not provide comments for the other recommendations. We request the U.S. European Command provide comment on the final report by July 27, 2001.

We disagree with the Air Force position and believe that it is the duty of the U.S. European Command is to establish the most effective support for its area of responsibility and to clearly outline and identify how it will execute operations from a unified command perspective. The role of the supporting Services is to execute the Commander in Chief, U.S. European Command, concept of operations. Although Joint Staff guidance exists for defining roles and assigning responsibilities for meteorological and oceanographic operations at unified commands, the Commander in Chief, U.S. European Command, needs to supplement the Joint Staff guidance by addressing theater-unique roles and responsibilities for meteorological and oceanographic support.

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## Background

**Unified Commands.** There are nine unified commands: the U.S. European Command, the U.S. Pacific Command, the U.S. Joint Forces Command, the U.S. Southern Command, the U.S. Central Command, the U.S. Space Command, the U.S. Special Operations Command, the U.S. Transportation Command, and the U.S. Strategic Command. Each unified command requires meteorological and oceanographic (METOC) support and services to meet mission objectives, as assigned by the Joint Chiefs of Staff. This report focuses on METOC support for the U.S. European Command (USEUCOM) and its associated subordinate commands—U.S. Army Europe, U.S. Naval Forces Europe, and U.S. Air Forces in Europe (USAFE).

The USEUCOM mission is to support and advance U.S. interests and policies throughout the assigned area of responsibility; provide combat-ready land, maritime, and air forces to Allied Command Europe (the North Atlantic Treaty Organization) and other U.S. unified commands; and conduct operations unilaterally or in concert with coalition partners. The area of responsibility of USEUCOM covers more than 13 million square miles and includes 91 countries and territories. The Navy and the Air Force provide METOC support for Service-unique and joint operations in the European theater through fundamentally similar three-tier organizational structures.

**Army.** Public Law 253, “National Security Act of 1947,” chapter 343, July 26, 1947, assigns the Air Force responsibility for providing METOC support for Army operations. In the European theater, the Commander, 7th Weather Squadron, Heidelberg, Germany, an Air Force element, is designated as the staff weather officer for U.S. Army Europe and is responsible for ensuring that meteorological support is provided to Army elements in the theater.

**Navy.** The Staff Oceanographer, Commander in Chief, U.S. Naval Forces Europe, is responsible for providing METOC services, including forecasts and products tailored to specific maritime and littoral operating areas, in support of Navy and joint operations in Europe. The Navy primarily provides METOC services through a three-tier organizational structure to the commanders in chief by disseminating METOC products through DoD-approved communication systems. Strategic-level centers in the continental United States provide global and fine-scale numerical models and real-time oceanographic products needed by the Naval European Meteorology and Oceanography Center (NEMOC), Rota, Spain, to initialize and create regional forecasts for the European theater. NEMOC tailors numerical models to ensure regional forecasts support operational requirements for the USEUCOM area of responsibility. Navy METOC personnel within the USEUCOM area of responsibility are under the command of Commander, Stennis Space Center, Mississippi.

**Air Force.** The Director of Weather, USAFE, is responsible for providing meteorological services, including forecasts and products tailored to specific air-land areas, in support of Army, Air Force, and joint operations in the European theater. USAFE, located at Ramstein Air Base, Germany, is the

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air component of USEUCOM and the U.S. air component of the North Atlantic Treaty Organization. The Air Force primarily provides meteorological services through a three-tier organizational structure to the commanders in chief by disseminating meteorological products through DoD-approved communication systems. Strategic-level production centers in the continental United States provide numerical models and accurate real-time meteorological databases needed by the Operational Weather Squadron (OWS) at Sembach, Germany (OWS Sembach), to generate regional forecasts for the European theater. The OWS concept is a result of U.S. Air Force Program Action Directive 97-10, "Reengineering Actions for Air Force Weather," December 1, 1997, which directs the end-to-end restructuring of Air Force weather to provide an improved mission focus; the establishment of numbered Air Force-aligned OWSs; and the improvement of Air Force weather capabilities. OWS Sembach tailors regional forecasts and uses products specific to the operating area to provide fine-scale meteorological forecasts needed for base resource protection and base-level support in the European theater. Air Force meteorological personnel within the USEUCOM area of responsibility are under the command of Commander, USAFE.

**Guidance.** Chairman of the Joint Chiefs of Staff Instruction 3810.01A, "Meteorological and Oceanographic Operations" (the Instruction), February 25, 1998, establishes policy and assigns responsibilities for conducting METOC operations at unified commands. In addition, the policy requires each commander in chief to designate a senior METOC officer (SMO). The Instruction and USEUCOM Directive 55-11, "Joint Task Force Headquarters Policies, Procedures, and Organization," January 15, 1999, state that the SMO will:

- coordinate all METOC operations within the area of responsibility;
- develop and execute a METOC concept of operations that is integrated with, and complements, the commander in chief's concept of operations;
- ensure that a METOC operations annex is developed for each commander in chief's operation order, operation plan, or concept plan, as required; and
- ensure all requirements for METOC personnel and equipment are included in the time-phased force and deployment data and that the requirements are validated.

In addition, U.S. Joint Forces Command, "Joint Meteorological and Oceanographic Handbook," May 1, 2000, states that the SMO will:

- assist the designated joint METOC officer and appropriate Service Components in the development and operation of Joint Task Force METOC operations in the theater;
- coordinate and assign METOC tasks to Service Component METOC assets to fulfill operational needs within the theater; and

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- act as a liaison with the Joint Staff, other unified commands, and the Services on joint support issues, including doctrine, tactics, techniques, and procedures; communications; and ongoing operations.

## **Objectives**

This report is one in a series evaluating the effectiveness and efficiency of DoD METOC support provided by the Military Departments to DoD and other governmental agencies. The overall objective of this self-initiated series of audits was to evaluate DoD METOC services and support to determine whether the Military Departments were providing the most cost-effective and nonduplicative METOC services and support to DoD and other governmental agencies. Specifically, this audit focused on evaluating Military Departments use of DoD resources to determine whether METOC services were provided in the most effective and efficient manner in the European theater. As part of our objectives, we reviewed the METOC support requirements established by USEUCOM and how the supporting elements were fulfilling the requirements. We also evaluated the management control program as it related to the specific audit objective. See Appendix A for a discussion of the audit scope and methodology, our review of the management control program, and prior coverage.

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## DoD Meteorological and Oceanographic Support in Europe

USEUCOM did not have a dedicated functional manager for theater METOC support. USEUCOM eliminated its METOC joint billets and did not issue adequate guidance to provide a joint concept of operations for METOC support in the theater. As a result, joint METOC support in the European theater was not fully coordinated and integrated.

### Dedicated Functional Manager

USEUCOM did not have a dedicated functional manager for theater METOC operations. USEUCOM eliminated its joint METOC staff and did not issue adequate guidance to provide a joint concept of operations for METOC operations in the theater.

**Requirement for a Senior METOC Officer.** Chairman of the Joint Chiefs of Staff Instruction 3810.01A requires each commander in chief to designate a SMO to effectively integrate METOC operations with other joint operations and to coordinate Component command METOC operations. The Instruction states that the SMO will normally be assigned to a joint billet position on the unified command's headquarters staff; however, the Instruction does not require the position to be a joint billet. The following table shows the number of METOC joint billets that support each of the unified commands.

Unified Command METOC Billets	
<u>Unified Command</u>	<u>Billets</u>
U.S. European Command	0
U.S. Pacific Command	1
U.S. Joint Forces Command	2
U.S. Southern Command	2
U.S. Central Command	4
U.S. Space Command	1*
U.S. Special Operations Command	0
U.S. Transportation Command	3
U.S. Strategic Command	8

\*Civilian position.

**METOC Interoperability Study.** In 1992, the Joint Staff tasked the Military Departments and the Defense Information Systems Agency to form a joint working group to improve interoperability of military METOC services and support for joint operations. The Joint Interoperability of Military Weather

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Support Working Group identified shortfalls in joint weather planning during Operation Desert Storm. The group's "Joint Meteorological and Oceanographic Interoperability Team Functional Process Improvement AS-IS Modeling Report on Joint Meteorological and Oceanographic Operations," May 1995, included among its recommendations that the designated SMO position should be a joint billet on the unified command staff.

**Joint Duty Assignment.** DoD Instruction 1300.20, "DoD Joint Officer Management Program Procedures," December 20, 1996, states that joint matters are matters relating to the integrated employment of land, sea, and air forces, including matters related to national military strategy, strategic planning and contingency planning, and command and control of combat operations under a combatant command.<sup>1</sup> An assignment to a designated position in a multi-Service or multi-national command or organization that involves integrating land, sea, and air forces is considered to be a joint duty assignment. DoD Instruction 1300.20 also states that the preponderance of the assignment's duties must involve producing joint policy, strategic or contingency plans, or controlling operations under a combatant command. The SMO position qualifies as a joint duty assignment.

**USEUCOM METOC Joint Billets.** USEUCOM did not have a dedicated functional manager for theater METOC operations. USEUCOM eliminated its four METOC joint billets, to include the SMO, in response to Program Budget Decision No. 710, "Defense Reform Initiative (DRI) – Joint Programs," December 17, 1997. Program Budget Decision No. 710 required combatant command headquarters to eliminate 1,131 joint billets from their FY 1996 baseline. The four USEUCOM METOC joint billets were to be transferred to USAFE and USAFE was to maintain the four METOC billets to provide support for the theater. Of the four billets, three were transferred to USAFE and the remaining billet was transferred to the Navy. USAFE placed one billet at USEUCOM, one billet at Special Operations Command Europe, and one billet within USAFE. The Navy abolished its billet and claimed the reduction as savings. The Commanding Officer, NEMOC, provided USEUCOM a Service staff METOC officer; however, the USAFE and NEMOC Service staff officers are not integrated into USEUCOM operations and cannot effectively carry out the responsibilities of the SMO.

**Memorandum of Agreement.** As a result of eliminating the dedicated SMO position at USEUCOM, a memorandum of agreement (untitled and undated) between USEUCOM and USAFE was signed, designating the Director of Weather, USAFE, as the USEUCOM SMO. The Service staff METOC officer in the USAFE billet at USEUCOM serves as a liaison officer between USEUCOM and the SMO. The memorandum does not address the roles and responsibilities of the SMO and does not adequately address how the Director of

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<sup>1</sup> A combatant command is a unified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense, and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have a geographic or functional area of responsibility.

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Weather, USAFE, would fulfill the duties of the SMO while performing duties related to Service and joint responsibilities. In addition, the memorandum does not address NEMOC support.

**Multiple Roles of the USEUCOM SMO.** As of March 2001, the Director of Weather, USAFE, was designated as the USEUCOM SMO. The Director was also the senior weather officer for the Commander, Air Force North, North Atlantic Treaty Organization. As the Director of Weather, USAFE, the Director is responsible for providing weather support to the Army and Air Force elements in the European theater, which requires coordination of all weather operations, METOC personnel, and units. As the senior weather officer to the Commander, Air Force North, the Director is responsible for the Air Force North staff meteorological duties, to include coordinating meteorological operations for Air Force North. With the significant Service, joint, and allied roles and responsibilities, the designated SMO might not be able to effectively provide METOC support to all.

**Navy and NEMOC Support.** The memorandum of agreement does not discuss significant theater METOC support capabilities. Specifically, the memorandum does not specify NEMOC support provided to USEUCOM and joint operations. NEMOC and OWS Sembach are two separate unilateral METOC entities within USEUCOM. Although the memorandum includes USAFE weather support, it does not include NEMOC support. In addition, the memorandum was not approved or signed by a representative from U.S. Naval Forces Europe. U.S. Naval Forces Europe and USAFE are the only two USEUCOM Components responsible for providing METOC products to USEUCOM operations. USAFE, through OWS Sembach, provides meteorological support. NEMOC provides both meteorological and oceanographic support. U.S. Naval Forces Europe should have been a signatory to the memorandum of agreement, and NEMOC support, specifically oceanographic support, should have been addressed in the memorandum.

**Concept of Operations Guidance.** USEUCOM did not issue adequate guidance to provide a joint concept of operations for METOC support in the theater. Specifically, the SMO did not issue adequate METOC guidance as part of the concept of operations for Operation Northern Watch, as required by Chairman of the Joint Chiefs of Staff Manual 3122.03A, "Joint Operation Planning and Execution System, Volume II - Planning Formats and Guidance," December 31, 1999. In addition, as discussed in our audit report, Report No. D2001-133, "Deliberate Planning for Meteorological and Oceanographic Operations (U)," June 1, 2001, the METOC operations portion for the USEUCOM deliberate plans was not fully developed.

METOC support for Operation Northern Watch requires coordination and integration of NEMOC and two OWSs that support different unified commands. METOC support for aircraft sorties generated from Incirlik Air Base, Turkey, must be periodically coordinated with OWS Sembach and the 28th OWS at Shaw Air Force Base, South Carolina,<sup>2</sup> as well as with NEMOC. Because a

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<sup>2</sup> The 28th OWS provides meteorological support for the 9th Air Force and for the U.S. Central Command area of responsibility.

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Joint METOC Forecasting Unit was not established for Operation Northern Watch, the Incirlik Air Base combat weather team<sup>3</sup> coordinates with each individual METOC center to help unify the air effort of the joint and combined operation. To ensure unity of effort, the METOC portion of the contingency or concept plan for Operation Northern Watch should be revised to clearly articulate the roles and responsibilities of OWS Sembach, the 28th OWS, and NEMOC. The USEUCOM SMO must periodically coordinate with the U.S. Central Command SMO and issue the appropriate guidance to the Component commander staff weather officers to ensure that deliberate or contingency plans can be effectively executed. Delays in issuing METOC support guidance could hinder operations of subordinate commands. However, the multiple roles of the USEUCOM SMO could prevent adequate planning and execution of the joint METOC concept of operations.

## METOC Support in Theater

METOC support in the European theater was not fully coordinated and integrated. Chairman of the Joint Chiefs of Staff Instruction 3810.01A requires, when possible, that the Military Departments assist each other in accomplishing METOC support in an efficient manner and avoid duplication. The USEUCOM SMO did not initially integrate Navy and Marine Corps METOC weather forecasters into the METOC operations portion of the concept of operations plan for Operation Noble Anvil.<sup>4</sup> As a result, NEMOC and USAFE developed and executed their own unique METOC support plans rather than follow a joint theater concept of operations.

**Expanded Maritime Area of Responsibility.** The Chairman of the Joint Chiefs of Staff expanded the USEUCOM area of responsibility as of October 1, 2000. The expansion of the USEUCOM area of responsibility included transferring responsibilities for the waters off the east coast of Africa from the U.S. Pacific Command to USEUCOM and for the waters off Europe and west coast of Africa from the U.S. Joint Forces Command to USEUCOM. As a result, USEUCOM maritime responsibilities expanded to include additional ocean areas and the coastline of the African continent. As of March 2001, additional plans had been initiated, but not approved, to further expand USEUCOM maritime responsibilities during FY 2002. The increased maritime

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<sup>3</sup> A combat weather team is an umbrella term covering any military weather organization that provides direct operational support at the tactical level.

<sup>4</sup> Operation Noble Anvil was the U.S. portion of Operation Allied Force, a North Atlantic Treaty Organization contingency response aimed at ensuring full compliance with United Nations Security Council Resolution 1199 (September 23, 1998). The purpose of the operation was to promote regional stability, cooperation, and security by ensuring a verifiable stop to all military action and the immediate ending of violence and repression in Kosovo.

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area of responsibility increases the necessity of oceanographic products<sup>5</sup> from NEMOC and the necessity for NEMOC to be integrated into the USEUCOM METOC concept of operations.

The SMO did not consider or plan for the need to address the expanded USEUCOM area of responsibility. USEUCOM, NEMOC, and USAFE senior Service METOC officers were aware that the area of responsibility had expanded. However, as of October 2000, USEUCOM, NEMOC, and USAFE personnel could not address how the expansion would affect overall theater METOC support. USEUCOM and USAFE also did not have a transition plan for the assumption of METOC responsibilities from the U.S. Pacific Command and the U.S. Joint Forces Command. NEMOC had developed a transition plan to assume METOC responsibilities from the U.S. Pacific Command and the U.S. Joint Forces Command; however, the USEUCOM SMO was unaware of the NEMOC plan.

**Integrating Joint METOC Support.** The USEUCOM SMO did not initially integrate Navy and Marine Corps METOC weather forecasters into Operation Noble Anvil. During Operation Noble Anvil, the SMO designated OWS Sembach as the Joint METOC Forecasting Unit and an Air Force officer as the joint METOC officer. However, Operation Noble Anvil was led by naval forces and had the Joint Task Force headquarters in Naples, Italy. The METOC Letter of Instruction for Operation Noble Anvil did not incorporate METOC support capabilities of NEMOC, the Commander Sixth Fleet, or the II Marine Expeditionary Force into the concept of operations. The METOC support provided by OWS Sembach was primarily in support of Army and Air Force units. As a result, the initial Joint METOC Forecasting Unit did not include Navy and Marine Corps weather forecasters and could not provide oceanographic impacts to conditions in the joint operational area. In addition, on-site METOC support for the Joint Task Force commander in Naples did not exist; however, at a later date, an ad hoc group of Air Force and Navy personnel was formed to provide direct support to the Joint Task Force commander. Joint Publication 3-59, "Joint Doctrine, Tactics, Techniques, and Procedures for Meteorological and Oceanographic Operations," March 23, 1999, states that the Joint METOC Forecasting Unit should be collocated with Joint Task Force headquarters and the joint METOC officer should normally be the weather officer from the staff of the officer appointed to serve as the Joint Task Force commander. As a result of the SMO Letter of Instruction not properly establishing guidance and incorporating NEMOC into the concept of operations, the METOC support provided to the Joint Task Force commander for Operation Noble Anvil was initially fragmented and unorganized and required the Service METOC centers to expend extra effort to support the Joint Task Force.

**Providing Coordinated and Integrated METOC Support.** To assist the SMO in providing effective coordinated and integrated METOC support within the theater, USEUCOM should establish a formal joint METOC advisory group, as outlined in Joint Publication 3-59. A formalized METOC advisory group could

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<sup>5</sup> Oceanographic products include oceanographic data such as salt haze, water turbidity, surface temperatures, and acoustical propagation.

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serve as a force multiplier to ensure unity of METOC efforts supporting diverse joint and allied operations within the European theater. In addition, a formal METOC advisory group could coordinate multi-Service METOC matters and requirements; make recommendations for development and acquisition of facilities and capabilities to meet common Component operational needs; and discuss METOC matters of significance to USEUCOM Component commanders. For example, a formal METOC advisory group could coordinate multi-Service matters such as development of a Joint METOC Forecasting Unit for an operation. Also, a formal METOC advisory group could coordinate multi-Service and joint METOC support issues.

## Conclusion

The complexity and tempo of joint USEUCOM operations are high. USEUCOM averages 25 operations each year. Joint task forces depend on accurate METOC information to plan and direct operations. METOC information influencing a commander's warfighting decisions usually cannot be derived from a single source of data. METOC data from regional METOC centers and tactical sources must be assembled into a database containing a complete and integrated summary of METOC conditions affecting the warfighter. Effective joint METOC support occurs when integrated METOC information is delivered to a commander in time to consider the operational impact of the weather.

## Management Comment to the Finding and Audit Response

The Air Force provided the following comments on the finding. For the full text of Air Force comments, see the management comments section of the report.

**Air Force Comments.** The Air Force disagreed with the reported deficiencies with the memorandum of agreement between USAFE and USEUCOM. The Air Force stated that the memorandum of agreement was in accordance with DoD Instruction 4000.19, "Interservice and Intergovernmental Support," August 9, 1995, which states that memorandums of agreement are memorandums that define general areas of conditional agreement between two or more parties. Further, the Air Force stated that the memorandum of agreement is between Air Force and USEUCOM and does not need Navy signatory authority to designate the function of the SMO. Also, the Air Force stated that the report does not mention memorandums of agreement or understanding, or host tenant support agreements between NEMOC and U.S. Naval Forces Europe, NEMOC and USEUCOM, or NEMOC and OWS Sembach.

**Audit Response.** In accordance with DoD Instruction 4000.19, two or more parties can be a signatory of a memorandum of agreement. The USEUCOM memorandum of agreement is deficient in that the Air Force is the only signature, even though oceanographic support for the theater is provided by

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NEMOC. The intent of the memorandum of agreement was to establish an effective METOC support structure for USEUCOM, given that the USEUCOM METOC staff had been eliminated. Our intent is that the memorandum of agreement should address the issue of providing USEUCOM with effective METOC support by outlining the roles and responsibilities of the ad hoc Service members residing at USEUCOM headquarters and the two primary meteorological and oceanographic support organizations, OWS Sembach and NEMOC. During our audit, we were unable to identify that any memorandums of agreement or understanding, or host tenant support agreements between NEMOC and U.S. Naval Forces Europe, NEMOC and USEUCOM, or NEMOC and OWS Sembach existed. However, we did identify that NEMOC has a host tenant agreement with Commander, Naval Activities, for base operation support. That host tenant agreement includes the Navy command structure that establishes NEMOC as a functional USEUCOM METOC asset.

## **Recommendations, Management Comments, and Audit Response**

**Deleted and Renumbered Recommendations.** As a result of management comments, we deleted Recommendation 3. to acknowledge that an on-site Air Force meteorological element is not needed to augment Air Force aviation units at Rota Naval Station, Spain. Accordingly, draft report Recommendation 4. was renumbered as Recommendation 3.

**We recommend that the Commander in Chief, U.S. European Command:**

**1. Reestablish a dedicated joint billet position for a U.S. European Command senior meteorological and oceanographic officer at U.S. European Command headquarters.**

**Management Comments.** The USEUCOM agreed, stating that the senior METOC officer should be a dedicated joint billet position on the USEUCOM staff. However, USEUCOM stated that it could not establish a joint billet position without a reversal of the Program Budget Decision. The Navy agreed and stated there is a need for a joint billet senior METOC officer in USEUCOM and the joint billet should rotate between the Navy and the Air Force. The Air Force also agreed and stated that this is a USEUCOM issue to decide.

**Audit Response.** The USEUCOM comments are partially responsive. During the mandated joint billet reduction of the USEUCOM staff, the USEUCOM chose to completely eliminate its joint billet METOC staff while preserving, or slightly reducing, the number of joint billet staff positions in its other headquarter functions. The USEUCOM should consider transferring a joint billet position from within the headquarters staff to the role of senior METOC officer. We request that the USEUCOM provide additional comments to the final report.

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**2. Establish meteorological and oceanographic guidance that addresses the:**

**a. Specific roles and responsibilities of a dedicated senior meteorological and oceanographic officer.**

**b. Specific roles, responsibilities, and meteorological and oceanographic support of the Service Components.**

**c. Procedures for coordinating a concept of operations for joint meteorological and oceanographic support within the European theater, to include Operation Northern Watch.**

**3. Establish a formal joint meteorological and oceanographic advisory group with defined roles and responsibilities to coordinate and integrate meteorological and oceanographic support within the European theater.**

**USEUCOM Comments Required.** The USEUCOM did not provide comments to Recommendations 2. and 3. We request that the USEUCOM provide comments to the final report.

**Management Comments.** The Navy and Air Force stated that an Air Force meteorological element was not required at Rota Naval Station, Spain, to augment the existing naval METOC support.

The Air Force disagreed that USEUCOM should establish guidance to address specific roles and responsibilities of a dedicated SMO. The Air Force disagreed that USEUCOM should provide specific guidance on the roles, responsibilities, and METOC theater support. The Air Force stated that the Director, Joint Staff, should refine Joint Staff guidance to address the roles and responsibilities of METOC positions across the unified commands.

The Navy and Air Force agreed that the USEUCOM should establish a formal joint METOC advisory group and stated that a request exists for revision of the Joint Staff instructions to require the unified commands to establish a joint METOC advisory group.

**Audit Response.** We disagree with the Air Force position and believe it is the duty of USEUCOM is to establish the most effective support for its area of responsibility and to clearly outline and identify how it will execute operations from a unified command perspective. The role of the supporting Services is to execute the Commander in Chief, USEUCOM, concept of operations. Although Joint Staff guidance exists for defining roles and assigning responsibilities for METOC operations at unified commands, the Commander in Chief, USEUCOM, needs to supplement the Joint Staff guidance by addressing theater-unique roles and responsibilities for meteorological and oceanographic support.

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## Appendix A. Audit Process

### Scope

We reviewed and evaluated whether DoD, Joint Staff, and Military Department guidance and memorandums implemented from July 1947 through January 2001 were adequate to ensure that the Military Departments provided METOC support efficiently and effectively. We reviewed “Joint Vision 2020,” June 2000; the “Naval Meteorology and Oceanography Command Strategic Plan,” May 1997; Program Budget Decision No. 710, “Defense Reform Initiative (DRI) – Joint Programs,” December 17, 1997; the “Navy-Air Force Cooperation Implementation Action Memorandum,” January 13, 1993; the “Air Force Weather Strategic Plan,” June 28, 2000; the Air Force Program Action Directive 97-10, “Reengineering Actions for Air Force Weather,” December 1, 1997; and the USAFE Programming Plan 5005-97, Creek Cyclone - Draft, “Reengineering Actions for Air Force Weather,” January 10, 2001. We reviewed the processes used by the Military Departments to align METOC support with their primary customers. In addition, we reviewed inter-Service agreements to identify METOC services needed to support the warfighter in the European theater.

**DoD-Wide Corporate Level Government Performance and Results Act Coverage.** In response to the Government Performance and Results Act, the Secretary of Defense annually establishes DoD-wide corporate level goals, subordinate performance goals, and performance measures. This report pertains to achievement of the following goal:

**FY 2001 DoD Corporate Level Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **(01-DoD-2)**

**High-Risk Area.** The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the DoD Infrastructure Management high-risk area.

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## Methodology

We analyzed METOC requirements and inter-Service memorandums used by the Navy and the Air Force to identify METOC products and services needed to support the warfighter in the European theater by:

- conducting interviews with officials from USEUCOM; U.S. Naval Forces Europe; USAFE; the Office of the Army Deputy Chief of Staff for Intelligence; the Oceanographer of the Navy; the Air Force Director of Weather; the Air Force Weather Agency; and the Joint Staff;
- visiting the USEUCOM Operations Branch; the Naval Meteorology and Oceanography Command; the Staff Oceanographer, U.S. Naval Forces Europe; NEMOC; Director of Weather, USAFE; and OWS Sembach;
- reviewing personnel statistics to determine the distribution of METOC personnel at each of the locations visited in USEUCOM;
- identifying communication systems needed to transmit accurate, reliable, and timely METOC products required to support the warfighter; and
- evaluating methods used by the Navy and the Air Force to align theater METOC support centers with their customers.

**Audit Type, Dates, and Standards.** We performed this program audit from September 2000 through March 2001 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary. We did not use computer-processed data to perform this audit. Although we did our work in accordance with generally accepted Government auditing standards, we were unable to obtain an opinion on our system of quality control. The most recent external quality control review was withdrawn on March 15, 2001, and we will undergo a new review.

**Contacts During the Audit.** We visited or contacted individuals and organizations within DoD. Further details are available on request.

## Management Control Program Review

DoD Directive 5010.38, "Management Control Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of those controls.

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**Scope of Review of the Management Control Program.** We reviewed the adequacy of management controls at USEUCOM related to METOC support in the European theater. Specifically, we reviewed the accuracy and reliability of the processes to identify, coordinate, validate, and revalidate METOC support provided to USEUCOM. In addition, we reviewed management's self-evaluation applicable to METOC support.

**Adequacy of Management Controls.** We identified material management control weaknesses, as defined by DoD Instruction 5010.40, within USEUCOM. USEUCOM did not adequately review the effectiveness of the METOC support provided. Without adequately reviewing the METOC support provided to ensure that deficiencies impacting mission accomplishment are eliminated, USEUCOM might not adequately accomplish its assigned missions. Recommendations 1. and 2.c., if implemented, will help ensure effective METOC support. A copy of the final report will be provided to the senior official in charge of management controls in the Joint Staff.

**Adequacy of Management's Self-Evaluation.** USEUCOM did not identify METOC support as an assessable unit and, therefore, did not identify or report the material management control weaknesses identified by the audit.

## **Prior Coverage**

This report is one in a series of Inspector General, DoD, reports discussing meteorological and oceanographic support. Unrestricted Inspector General, DoD, reports can be accessed over the Internet at <http://www.dodig.osd.mil/audit/reports>.

## **Inspector General, DoD**

Inspector General, DoD, Report No. D-2001-151, "Meteorological and Oceanographic Support in the Pacific," June 28, 2001

Inspector General, DoD, Report No. D-2001-0133, "Deliberate Planning for Meteorological and Oceanographic Operations (U)," June 1, 2001

Inspector General, DoD, Report No. D-2001-018, "Management and Oversight of the DoD Weather Program," December 14, 2001

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## **Appendix B. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Technology, and Logistics

Director, Defense Research and Engineering

Under Secretary of Defense (Comptroller)

Deputy Chief Financial Officer

Deputy Comptroller (Program/Budget)

Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)

### **Joint Staff**

Director, Joint Staff

### **Department of the Army**

Deputy Chief of Staff for Intelligence

Auditor General, Department of the Army

### **Department of the Navy**

Commander in Chief, U.S. Naval Forces Europe

Naval Inspector General

Auditor General, Department of the Navy

Oceanographer of the Navy

Commander, Naval Meteorology and Oceanography Command

Commanding Officer, Naval European Meteorology and Oceanography Center

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)

Auditor General, Department of the Air Force

Commander, U.S. Air Forces in Europe

Director of Weather

Commander, Air Force Weather Agency

Director of Weather, U.S. Air Forces in Europe

Commander, Combat Air Force Command and Control System Program Office

### **Unified Commands**

Commander in Chief, U.S. European Command

Commander in Chief, U.S. Pacific Command

Commander in Chief, U.S. Joint Forces Command

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## **Unified Commands (cont'd)**

Commander in Chief, U.S. Southern Command  
Commander in Chief, U.S. Central Command  
Commander in Chief, U.S. Space Command  
Commander in Chief, U.S. Special Operations Command  
Commander in Chief, U.S. Transportation Command  
Commander in Chief, U.S. Strategic Command

## **Other Defense Organizations**

Director, Defense Information Systems Agency

## **Non-Defense Federal Organizations**

Office of Management and Budget

## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on National Security, Veterans Affairs, and International Relations  
Committee on Government Reform  
House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations  
House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

# U.S. European Command Comments

Final Report  
Reference



ECCS

UNCLASSIFIED

HEADQUARTERS  
UNITED STATES EUROPEAN COMMAND  
UNIT 30400  
APO AE 09131

24 May 01

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Draft Proposed Audit Report on Meteorological and Oceanographic Support in the European Theater (Project No. D2000LG-0102.003), Your E-mail 29 Mar 01

1. Reference: Draft of a Proposed Audit Report, Meteorological and Oceanographic Support in the European Theater, 29 Mar 01
2. We appreciate the opportunity to review your draft audit report. We agree establishing a joint Senior Meteorological and Oceanographic (METOC) Officer (SMO) position at EUCOM would provide much of the guidance and oversight you recommended and would be in the best interest of EUCOM. We are unable to establish a new METOC SMO position without a reversal in the Presidential Budget Decision. We will continue to use our recently added METOC augmentees to improve our oversight of METOC functions until we can establish a joint METOC billet. Our augmentees will work closely with the designated SMO to ensure EUCOM METOC operations are consistent with guidelines outlined in Joint Pub 3-59, Joint Doctrine, Tactics, Techniques, and Procedures for Meteorological and Oceanographic Operations.
3. We did find three administrative errors. First, as of 1 Oct 00, the EUCOM AOR includes 91 countries vice the 89 stated in the draft report. Second, plans to expand EUCOM maritime responsibilities during FY02 have been tabled vice initiated as of March 2000 as stated in the draft report. Third, NEMOC's AOR does not match the EUCOM AOR. NEMOC submitted a preliminary draft plan through Navy METOC channels to match the EUCOM AOR. Regardless, both NEMOC and the OWS will provide support to US forces in the EUCOM AOR. If you have any questions, please contact my POC Maj Robert E. Hardwick, DSN 430-8145.

DANIEL J. PETROSKY  
Lieutenant General, U.S. Army  
Chief of Staff

Revised

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# Department of the Navy Comments

Final Report  
Reference



DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
2000 NAVY PENTAGON  
WASHINGTON, D.C. 20350-2000

IN REPLY REFER TO  
5410  
Ser N096/1U5705701  
20 May 01

From: Chief of Naval Operations (N096)  
To: Assistant Inspector General for Auditing,  
Office of the Inspector General, Department of Defense  
via: Assistant Secretary of the Navy (Installation and Environment)  
Subj: DOD IG DRAFT AUDIT REPORT, METEOROLOGICAL AND OCEANOGRAPHIC  
SUPPORT IN THE EUROPEAN THEATER (PROJECT NO. D2000LG-0102.003)  
Ref: (a) DOD IG Project NO. D2000LG-0102.04, Meteorological and  
Oceanographic Support in the European Theater, 29 Mar 01

1. In response to reference (a), I concur with comment to  
recommendations 1, 2, and 4, and non-concur to recommendation 3.  
Specifically:

a. Concur with comment to recommendation 1 that a dedicated joint  
billet for a Senior Meteorological and Oceanographic (METOC) Officer  
(SMO) be assigned at USEUCOM headquarters. Ideally, the billet should  
be reestablished as rotational USN/USAF on a three-year basis.

b. Concur with comment on recommendation 2 for EDCOM to establish  
specific guidance for theater responsibilities. This is seen as a  
logical progression to the assignment of a SMO from recommendation 1.  
Recommend, however, changing the text of recommendation 2b "for the  
Service Components" to "of the Service Components" to prevent  
misinterpretation or infringement on Service Title 10 organize, train,  
and equip responsibilities.

c. Non-concur with recommendation 3. Under a Navy-Air Force  
METOC cooperative agreement, METOC support at Rota, Spain is currently  
aligned to reduce duplication of effort. Under the agreement, the  
Navy provides all-service aviation weather support. Additionally,  
under the Air Force Weather reengineering concept, the Naval European  
METOC Center, Rota, Spain, can reach back to the Sembach, Germany  
Operational Weather Squadron to obtain Air Force Service-unique  
support to enhance aviation support.

d. Concur with comment on recommendation 4 that a Joint Military  
Advisory Group (JMAG) should be formed to assist the SMO. A change to  
CJCSI 3810.01A has been submitted to require all unified commands  
establish a JMAG.

2. If you have questions, please contact me at (202) 762-1020 or my  
Action Officer CDR Steve Warren at (202) 762-0261.

  
R. D. WEST  
Oceanographer of the Navy

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Renumbered  
draft recom-  
mendation  
4. as  
Recommen-  
dation 3.

# Department of the Air Force Comments

Final Report  
Reference



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON DC

25 MAY 2001

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING  
OFFICE OF THE INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE

FROM: HQ USAF/XO  
1630 Air Force Pentagon  
Washington, DC 20330-1630

SUBJECT: Draft DoD IG Report, Project Code D2000LG-0102.003, Meteorological and  
Oceanographic Support in the European Theater, 4 April 2001

The Air Force has reviewed the subject draft audit report. The Air Force concurs with comment on Recommendations 1 and 4 and non-concurs with Recommendations 2 and 3. Additional specific comments are attached.

The report's recommendations for CINC USEUCOM to reestablish a Joint Senior Meteorological and Oceanographic (METOC) Officer (SMO) billet at USEUCOM has merit but it is a USEUCOM issue to decide. Recommendations to establish guidance in the theater fail to take account of existing Joint Doctrine and CJCS guidance. The recommendation to evaluate whether an Air Force meteorological team should be placed at Rota, Spain to enhance the Navy's support to aviation shows a fundamental lack of understanding of Air Force Weather reengineering and attempts to put a Navy template on Air Force operations. Air Force agrees that a Joint METOC Action Group (JMAG) is a good idea and we have already recommended changes to CJCS guidance to require all unified commands have a JMAG.

I am concerned about audit inconsistencies. In the Pacific report, the audit team identified problem areas and identified the Services' failure to coordinate as the cause. However, in this report, your report made no mention of the Services failure to coordinate but instead identified the designated SMO as the cause. Additionally, the draft Pacific report makes recommendations to study the consolidation of several units but this report does not. An objective audit, produced by the same auditors, should develop consistent approaches for similar problems.

This report, again, shows a lack of understanding of AF CONOPS. We note with interest that the audit report failed to cite the economies and efficiencies the Air Force gained by leveraging resources from outside of DoD. An excellent example is the Air Force's use of the community atmospheric model called Mesoscale Model 5 (MM5). A community atmospheric model is an approach where governments, industry, academia and other stakeholders leverage each other's complementary talents and resources in order to develop and apply environmental models. This sound, innovative business practice of using suitable existing open systems, optimizes total system performance and minimizes the cost of ownership.

Deleted  
Recommendation 3.  
and  
renumbered  
draft recommendation 4. As  
Recommendation 3.

In the tri-Service response to your first audit report (Reference (c)), the Services made the offer to work with your staff and ASD(C3I) to resolve disputed recommendations so as to avoid mediation per DoD Directive 7650.3, "Follow-up on General Accounting Office, DoD Inspector General, and Internal Audit Reports." There are still unresolved issues and we are still waiting for the mediation process to begin with OAIG-AFU.

Detailed comments are provided under a separate covers.

This is a coordinated Air Force and Army position.



ROBERT H. FOGLESONG, Lt Gen, USAF  
Deputy Chief of Staff  
Air and Space Operations

Attachments:

1. AF Position on Recommendations
2. Specific Comments

cc:

ASD(C3I)	OAIG-AFU	Dep Asst SecNav (Env & Safety)	
DAMI	CNO(N096)	SAF/IGI	SAF/SX
SAF/AG	SAF/FM	SAF/LLR	SAF/PA

## Meteorological and Oceanographic Support in the European Theater AF Position on Recommendations

1. We recommend that the Commander in Chief, U.S. European Command reestablish a dedicated joint billet position for an U.S. European Command senior meteorological and oceanographic officer at U.S. European Command headquarters.

AF Position: Concur with comment.

Comment: This is a Combatant Command issue to decide. CINCUER decided to transfer the EUCOM SMO billet to USAFE and EUCOM has a designated SMO.

2.a. We recommend that the Commander in Chief, U.S. European Command establish meteorological and oceanographic guidance that addresses the specific roles and responsibilities of a dedicated senior meteorological and oceanographic officer.

AF Position: Non-concur. Change Recommendation 2 to read: "We recommend that the Director, Joint Staff, refine the guidance in Joint Pub 3-59 and CJCSI 3810.01A to clarify METOC roles and responsibilities across the Combatant Commands. Specifically, the guidance should clarify the roles and responsibilities of a dedicated senior meteorological and oceanographic officer, the specific roles, responsibilities, and meteorological and oceanographic support provided by the Service Components, and procedures for coordinating a concept of operations for joint meteorological and oceanographic support."

Rationale: Establishes consistent policies and procedures across all Combatant Commands.

2.b. We recommend that the Commander in Chief, U.S. European Command establish meteorological and oceanographic guidance that addresses the specific roles, responsibilities, and meteorological and oceanographic support for the Service Components.

AF Position: Non-concur.

Rationale: See rationale for 2a. We believe there is opportunity for better integration -- a good first step would be for tenant Navy METOC units to accomplish MOAs and MOUs to establish their role in the theater.

2.c. We recommend that the Commander in Chief, U.S. European Command establish meteorological and oceanographic guidance that addresses the procedures for coordinating a concept of operations for joint meteorological and oceanographic support within the European theater, to include Operation Northern Watch.

AF Position: Non-concur.

Rationale: See rationale for 2b above. The contribution of Navy METOC units should be specified in MOAs or MOUs between NEMOC, the theater naval component - NAVEUR, and EUCOM.

3. We recommend that the Commander in Chief, U.S. European Command evaluate whether

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Recommendation 3.

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Recommen-  
dation 3.

meteorological support for Air Force aviation at the Naval European Meteorology and Oceanography Center, Rota, Spain, could be enhanced by Air Force-unique meteorological support.

AF Position: Non-concur.

Rationale: The audit team lacks understanding of reengineered Air Force Weather support. Air Force crews reach-back to the single Air Force forecasting unit in theater, Sembach OWS, for operational weather support.

4. We recommend that the Commander in Chief, U.S. European Command establish a formal joint meteorological and oceanographic advisory group with defined roles and responsibilities to coordinate and integrate meteorological and oceanographic support within the European theater.

AF Position: Concur with comment.

Comment: AF has suggested this change to JP 3-59 and CJCSI 3810.01A for theater assigned units. The roles of Navy METOC units should be codified in MOAs or MOUs between NEMOC, the theater naval component - NAVEUR and USEUCOM.

Atch 1  
Page 2

## Meteorological and Oceanographic Support in the European Theater AF Specific Comments

This analysis addresses each section of the draft report in order.

### **Executive Summary (Page i)**

#### **Introduction (Page i)**

Page i, First Paragraph. Comment: This report provided only a cursory evaluation of “the effectiveness and efficiency” of European METOC support.

#### **Background (Page i)**

Page i, Second Paragraph, First sentence. Clarifying comment: While the Navy and Air Force have similar three-tier structures, there are differences in their organizational structure, command and control, and concept of operations. Air Force METOC personnel are organic, in-house personnel permanently stationed in the European Theater and are assigned to USAFE. Air Force combat weather teams tailor weather support to the local customers and reach back to a theater center for support. The Air Force was able to reduce manpower requirements at CWTs and overall in each theater by employing this concept of operations. Most Navy METOC personnel permanently assigned in the U. S. European Command geographical area of responsibility are not in-house personnel but are in tenant units assigned under the command of the Commander, Navy Meteorology and Oceanography Command, Stennis Space Center, MS.

Revised

#### **Objective (Page i)**

Page i, Third paragraph, Second sentence. Delete sentence.

Rationale: Accuracy. This report did not focus on evaluating the Military Departments’ use of DoD resources to determine whether meteorological and oceanographic services were provided in the most effective and efficient manner in the European Theater. The audit report focused on several operations and then recommended mostly administrative changes to USEUCOM guidance. This report did not achieve the overall DoD IG audit objectives to determine whether the Military Departments were providing the most cost-effective and nonduplicative services and support to DoD and other governmental agencies.

#### **Results (Page i)**

Page i, Fourth paragraph, Third sentence. Delete the sentence “As a result of not having a dedicated functional manager, joint meteorological and oceanographic support in the European Theater was not fully coordinated and integrated.”

Rationale: Accuracy. This is a post hoc and non sequitur fallacy. EUCOM has a designated SMO. The asserted conclusion does not follow from the observations, and this statement is inconsistent with the DoD IG Draft Report, Meteorological and Oceanographic Support in the Pacific Theater (Project Code D200LG-0102.04). In the Pacific theater, there is a dedicated senior METOC officer “responsible for coordinating all METOC operations within the commander in chief’s area of responsibility” (page 1 of the draft PACOM report). There is also a METOC Group, USPACOM “established to coordinate METOC issues for the area of

Atch 2  
Page 1

responsibility” (page 1 of the draft PACOM report). Then the draft PACOM audit report says the METOC Group “did not coordinate” (page 4 of the draft PACOM report), it says “that the AF/XOW and CNO(NO96) “did not fully consider”, and it also makes several references to NAVAF shortfalls. Although PACOM has a dedicated SMO and JMAG, the IG reports deficiencies and then holds others accountable. If the same coordination and integration problems exist in both theaters -- we would expect a similar approach to resolution.

**Background (Page 1)**

**Unified Commands (Page 1)**

Page 1, Second paragraph, Last sentence. Comment: While the Navy and Air Force have similar three-tier structures, there are differences in their organizational structure, command and control, and concept of operations. Air Force METOC personnel are organic, in-house personnel permanently stationed in the European Theater and are assigned to USAFE. Air Force combat weather teams tailor weather support to the local customers and reach back to theater and strategic centers for support. The Air Force was able to reduce manpower requirements at CWTs and overall in each theater by employing this concept of operations. Most Navy METOC personnel permanently assigned in the U. S. European Command geographical area of responsibility are in tenant units assigned under the command of the Commander, Navy Meteorology and Oceanography Command, Stennis Space Center, MS.

**Air Force (Pages 1 and 2)**

Page 2, First paragraph, Last sentence. Comment: This sentence needs to be rewritten to reflect the true nature and scope of the support provided by the Sembach OWS. The Sembach OWS does much more than just resource protection functions. A reengineered OWS provides the full range of weather products for the flying operations, products for staff uses, resource protection, etc. The audit team lacks understanding of reengineered mission.

**Guidance (Page 2)**

Page 2, Third paragraph plus all bullets. Delete the following:  
“In addition, U.S. Joint Forces Command, “Joint Meteorological and Oceanographic Handbook,” May 1, 2000, states that the SMO will:...”

Rationale: This is a primacy of print fallacy--an example of accepting or believing everything in print. The U.S. Joint Forces Command Joint Meteorological and Oceanographic Handbook is discretionary guidance for the Joint Forces Command.

**Objectives (Page 3)**

Page 3, First paragraph, Second and third sentences. Comment. This draft audit report has not achieved the overall objective or the specific objective of this audit. The audit report provided no evidence to support the report’s recommendations.

**DoD Meteorological and Oceanographic Support in Europe (Page 4)**

Page 4, First paragraph, Second sentence. Comment concerning the statement “USEUCOM eliminated its METOC joint billets and did not issue adequate guidance to provide a joint concept of operations for METOC support in the theater.” Most Navy METOC personnel permanently assigned in the European Theater are not assigned to the Combatant Command,

Atch 2  
Page 2

Revised

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USEUCOM. While USAFE already has a MOA that specifies the relationship with EUCOM, there is a balance concern--the draft IG report failed to comment on the existence of a MOA between U.S. Naval Forces Europe and EUCOM. The DoD IG also failed to acknowledge Host-Tenant Support Agreements, MOAs, or MOUs between tenant Navy METOC units and U.S. Naval Forces Europe. Additionally, NEMOC Rota and the Sembach OWS should consider creating MOAs or MOUs to codify relationships and responsibilities.

Page 4, First paragraph, Third sentence. Comment concerning the sentence "As a result, joint METOC support in the European Theater was not fully coordinated and integrated." See previous statements made on page (i) -- we would anticipate a balanced approach.

**Dedicated Functional Manager (Page 4)**

Page 4, Second paragraph, Second sentence. Comment concerning the statement "USEUCOM eliminated its METOC joint billets and did not issue adequate guidance to provide a joint concept of operations for METOC support in the theater." While USAFE has a MOA with EUCOM, the draft IG report failed to comment on the existence of a MOA between U.S. Naval Forces Europe and EUCOM.

**METOC Interoperability Study (Page 4 and 5)**

Page 4, Fourth paragraph (continues on next page). Delete this paragraph.

Rationale: The stated purpose of the cited study was to baseline METOC information flow in support to joint operations to aid in the development of an interoperable communications/information systems architecture--not to change billet structure. This is a Theater Commander decision.

**USEUCOM METOC Joint Billets (Page 5)**

Page 5, Third paragraph, Last sentence. Delete the statement "The Commanding Officer, NEMOC, provided USEUCOM a Service staff METOC officer; however, the USAFE and NEMOC Service staff officers are not integrated into USEUCOM operations and cannot effectively carry out the responsibilities of the SMO."

Rationale: This statement is a hasty generalization and an asserted conclusion. If a requirement of being a dedicated member of the Combatant Command is absolutely necessary for integration into operations, then the DoD IG should have recommended all METOC forces in the geographical area of U.S. European Command's area of responsibility become members of the Combatant Command or Service Components.

**Memorandum of Agreement (Page 5 and 6)**

Page 5, Fourth paragraph, Third sentence. Delete the sentence "The memorandum does not address the roles and responsibilities of the SMO and does not adequately address how the Director of Weather, USAFE would fulfill the duties of the SMO while performing duties related to Service and joint responsibilities."

Rationale: This is a false assertion that the MOA must include these items. DOD Instruction 4000.19, Interservice and Intragovernmental Support, August 9, 1995, provides implementation policy and responsibilities and procedures for interservice and intragovernmental support. According to DoDI 4000.19, MOAs are memorandums that define general areas of conditional agreement between two or more parties. The MOA in question says, "HQ USAFE will assume

Atch 2  
Page 3

USEUCOM SMO responsibilities and provide or arrange for support to USCINCEUR and the USEUCOM staff.” The responsibilities of the SMO are found in CJCSI 3810.01A, Meteorological and Oceanographic Operations, 25 February 1998, Enclosure B, Responsibilities for Meteorological and Oceanographic Operations, paragraph 11. DoDI 4000.19 also says, “DoD activities shall provide requested support to other DoD activities when the head of the requesting activity determines it would be in the best interest of the United States Government, and the head of the supplying activity determines capabilities exist to provide the support without jeopardizing assigned missions. These determinations are signified by signing a support agreement...no further written determinations are required for agreements between DoD activities.”

The duties of a SMO are already provided in CJCSI 3810.01A.

**Memorandum of Agreement (Page 6)**

Page 6, First paragraph, Last sentence. Delete the sentence, “In addition, the memorandum does not address NEMOC support.”

Rationale: Per DoDI 4000.19, a MOA is a general agreement between two or more parties. This MOA is between USAFE and USEUCOM.

**Multiple Roles of the USEUCOM SMO (Page 6)**

Page 6, Second paragraph, Last sentence. Delete the sentence, “With all the significant Service, joint, and allied roles and responsibilities the designated SMO has, he *might* (added emphasis) not be able to effectively provide METOC support to all.”

Rationale: This asserted conclusion is false. Many examples of dual and multi-hatted positions exist across the military. One way to ensure tight integration in these situations is to dual-hat an individual. Full-time METOC staff officers are assigned to EUCOM from both the Navy and the Air Force communities to handle the daily tasks, permitting the SMO to manage other tasks as well. This is a Theater Commander decision.

**Navy and NEMOC Support (Page 6)**

Page 6, Third paragraph. Delete the entire paragraph. “The memorandum of agreement does not address significant theater METOC support capabilities. Specifically, the memorandum does not address NEMOC support provided to USEUCOM and joint operations. NEMOC and USAFE are two separate unilateral METOC entities within USEUCOM. Although the memorandum includes USAFE weather support, it does not include NEMOC support. In addition, the memorandum was not approved or signed by a representative from U.S. Naval Forces Europe. U.S. Naval Forces Europe and USAFE are the only two USEUCOM Components responsible for providing METOC products to USEUCOM operations. USAFE, through OWS Sembach, provides meteorological support. NEMOC provides both meteorological and oceanographic support. U.S. Naval Forces Europe should have been a signatory to the memorandum of agreement, and NEMOC support, specifically oceanographic support, should have been addressed in the memorandum.”

Rationale: There are numerous problems with this paragraph.

- DoDI 4000.19 does not require MOAs to address significant theater support capabilities. A MOA defines general areas of conditional agreement between two or more parties.
- The memorandum does not address NEMOC support because it is an agreement between

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Page 4

USAFE (the Air Component Command) and USEUCOM. NEMOC support to operations should be spelled out in a MOA, MOU, or Host-Tenant Support Agreement between NEMOC and the other interested parties--not in someone else's MOA. DoDI 4000.19 says, "Broad areas of recurring interservice and intragovernmental support and cooperation that do not require reimbursement should be documented with a memorandum of agreement (MOA) or memorandum of understanding (MOU).

- NEMOC and USAFE are not two separate unilateral METOC entities within USEUCOM. NEMOC is not in EUCEM although NEMOC forces operate within EUCEM's geographical area of responsibility--they are a tenant unit in the theater and their chain of command runs through the Commander, Naval Meteorology and Oceanography Command, Stennis Space Center, MS. USAFE is not a METOC unit; it is the Air Force Component of USEUCOM.
- The MOA does not include NEMOC support for reasons already stated--it is not a NEMOC MOA.
- The MOA was not approved or signed by a representative from U.S. Naval Forces Europe because it did not pertain to them. U.S. Naval Forces Europe does not have approval authority over a MOA between USAFE and USEUCOM. NEMOC is also not within U.S. Naval Forces Europe.
- DoD IG makes no mention of MOAs, MOUs, and/or Host-Tenant Support Agreements between NEMOC and U. S. Naval Forces Europe, NEMOC and USEUCOM, or NEMOC and Sembach. No mention was made of the existence of these agreements without signatures by USAFE or Sembach OWS. It implies that either these documents were in perfect order or the DoD IG auditors chose to ignore these documents in their report.

Revised

**Concept of Operations Guidance (Page 6 and 7)**

Page 6, Fourth and fifth (continued on page 7) paragraphs. Delete these paragraphs.

Rationale: Operation NORTHERN WATCH is a Combined (vice Joint) Task Force and according to Joint Pub 3-59, "Commanders of forces operating as part of a multinational (alliance or coalition) military command should follow multinational doctrine and procedures ratified by the United States." Procedures for Operation NORTHERN WATCH are identified in the 39 ABW-ONW Base Support Plan. The United Kingdom (UK) representative from the Mobile Met Unit (METMAN) is the official staff weather officer for Operation NORTHERN WATCH. The 39 OSS/OSW (Weather Flight) works in conjunction with the METMAN to provide meteorological information to operational and staff elements of the Combined Task Force (CTF). Weather support provided to ONW, the CTF, and its units is the result of a coordinated effort between the METMAN, 39 OSS/OSW, and ONW forecaster. In effect, the METMAN is the JMO/CMO and the JMFU is METMAN, 39 OSS/OSW, and the ONW forecaster.

**METOC Support in Theater (Page 7)**

Page 7, Second paragraph, Third Sentence. Delete the sentence "NEMOC and USAFE did not fully coordinate with each other to determine whether a more effective way of providing METOC support to the unified command and each other could be developed."

Rationale: USAFE is the Air Component of USEUCOM. NEMOC's role should have been established through a MOAs, MOUs, and/or Host-Tenant Support Agreements with NAVEUR and USEUCOM.

Deleted

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**METOC Support in Theater (Page 7)**

Page 7, Second paragraph, Fourth and fifth Sentences. Comment: Operation ALLIED FORCE was a NATO CJTF and in accordance with JP 3-59, NATO rules take precedence.

**Service-Unique Support (Page 8)**

Page 8, Third paragraph, First sentence. Delete the sentence “NEMOC and USAFE did not fully coordinate with each other to effectively enhance METOC support to aviation elements within the theater.”

Rationale: USAFE is the Air Component of USEUCOM while NEMOC is a tenant METOC unit operating within the theater. NEMOC’s role should have been established through MOAs, MOUs, and/or a Host-Tenant Support Agreements with U. S. Naval Forces Europe and USEUCOM.

Deleted

**Service-Unique Support (Page 8)**

Page 8, Third paragraph, Second Sentence through the remainder of the paragraph. Delete the rest of the paragraph.

Rationale: Crews reach back to Sembach OWS for aviation assistance. The type of support should be codified in MOUs and MOAs with U.S. Naval Forces Europe, USUECOM, and Sembach OWS.

Deleted

**Integrating Joint METOC Support (Pages 8 and 9)**

Pages 8 and 9. Delete the entire section.

Rationale: DoD and JCS guidance states that it is the JFC who appoints the JMO and JMFU. CJCSI 3810.01A states responsibilities of the Joint Force Commander (JFCs) include:

- Designate a Joint METOC Officer (JMO) for the force.
- Direct and coordinate the activities of all METOC assets under operational control to ensure unity of effort in supporting assigned missions.
- Identify METOC requirements, as well as any known shortfalls in the METOC capabilities.
- Coordinate with the appropriate CINC for centralized METOC support or other additional support required to fulfill operational needs not within the assigned forces’ capabilities.
- Coordinate with the CINC to designate the location and composition of the JMFU and its staff deployed to the AO.
- Ensure ocean, air, and space environments are considered during the planning of all operations and that the JF METOC Officer (JMO) is included at the beginning of the planning process.

JP 3-59 States that the CJCSI3810.01A, “Meteorological and Oceanographic Operations,” specifies that a JFC is ultimately responsible for the direction and coordination of METOC activities under the JFC’s operational control.” JP3-59 also says “the JMFU can be forward deployed” and “As an alternative, the JMO can designate a dedicated support cell or element within an MFC to provide JMFU products. The JMO should consider using existing theater forecast units as the JMFU whenever possible.”

Atch 2  
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