

**STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3849 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495**

MEMORANDUM OF UNDERSTANDING

BETWEEN THE

STATE OF HAWAII DEPARTMENT OF DEFENSE,

THE COMMANDER-IN-CHIEF U.S. PACIFIC COMMAND (USCINCPAC),

AND

**OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE FOR
COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE
INTELLIGENCE SYSTEMS SUPPORT OFFICE,**

PURPOSE: To designate the responsibilities and relationships between the State of Hawaii Department of Defense (SOH/DOD), the Commander-in-Chief U.S. Pacific Command (USCINCPAC), and the Office of the Assistant Secretary of Defense (OASD) for Command, Control, Communications, and Intelligence (C3I) Intelligence Systems Support Office (ISSO) in the implementation and continued development of the Pacific Disaster Center (PDC).

BACKGROUND: The 1995 Congressional Budget mandated that federal DoD funds be used for the purpose of evaluating the merits of a PDC. The 1996 Congressional Budget earmarked additional federal DoD funds to "continue efforts to establish a disaster center and associated analysis capability which can be used to mitigate the impact of hurricanes, earthquakes, and other natural disasters." A portion of these 1996 funds were earmarked for OASD (C3I) to "continue the establishment of a Pacific Disaster Center." It is understood that this center will assist in disaster mitigation, preparation, response and recovery efforts, making critical disaster-related information readily available to emergency managers throughout the Pacific Region. ISSO, OASD (C3I) has been designated by DoD to act as the Program Manager and technically accomplish and support the PDC effort as directed by the State of Hawaii. The SOH/DOD has been designated the cognizant state agency to specify requirements and operationally administer the PDC.

Both ISSO, OASD (C3I) and the SOH/DOD have requested analytical support for the PDC from USCINCPAC. This analytical support relationship logically flows from the disaster information analysis work being done by USCINCPAC in support of both its military and humanitarian missions within the Pacific Region.

The recent work being done by the Disaster Relief Anchor Desk (DRAD) research and development project that NR-2 is conducting in support of USCINCPAC is of particular interest to SOH/DOD. The DRAD features predictive models for tropical cyclones and earthquakes, a

geographic information system (GIS), allowing georegistration of data extracted from various databases, and collaborative planning software for use in desktop video teleconferencing, shared map planning, and other forms of collaboration. The present focus is to incorporate technologies that extend the anchor desk's functionality and connectivity to civilian agencies, foreign governments, and non-governmental organizations and allows the application of advanced technologies to remote sensing, high performance computing, and management of disparate databases dealing with natural disasters and other catastrophic events.

DISCUSSION: Emergency managers continually strive to minimize loss of life and damage to property caused by such hazards as: hurricane/typhoon, tsunami, earthquake, volcano/lava flow, flood, drought, erosion, pollution, oil spill, and other natural and manmade occurrences. The PDC initiative will dramatically improve the ability of emergency managers to perform this difficult job. A two-phase approach is underway.

The first phase will culminate in an Initial Operational Capability (IOC) for the PDC, which will enhance production, analysis, and dissemination of currently available information used by civil defense/emergency management officials. The resulting improvements to the existing civil defense infrastructure will provide a functional Pacific Regional Emergency Management Information System (PREMIS), enhancing the utility of existing data resources, markedly improving user terminal access to graphic representations of these resources, and integrating existing data sources, analytical tools, collection means, and dissemination/communication systems into a user friendly environment available to emergency managers in the State Emergency Operations Center (EOC), county EOCs, and Pacific Caucus states. The IOC will include a PDC Applications Center at the Maui Research and Technology Center (MRTC), with an interface to the Maui High Performance Computing Center (MHPCC). The IOC will also include a PDC Command Center located at the State Civil Defense (SCD) EOC to interface with the PREMIS infrastructure.

The second phase will result in a Full Operational Capability (FOC). The FOC will upgrade the PDC capabilities in response to identified and validated needs developed within user groups consisting of responsible federal, state, local, and regional agencies. The FOC PDC will dramatically enhance the capabilities of PREMIS, by linking national agencies, remote sensors, and massively parallel computing resources to regional disaster requirements and making those assets available to disaster managers.

RESPONSIBILITIES:

State of Hawaii, Department of Defense:

1. Specify requirements and operationally administer the PDC.
2. Designate the PDC project coordination officer for development of PDC activities representing State of Hawaii interests.
3. Organize and convene user groups for requirements analysis and definition. These user groups will represent: State and Local agencies; members of the Pacific Caucus; Federal departments, agencies, and commands at the regional level (e.g., USCINCPAC), and Federal agencies (National Level Program Management).

4. Consult with USCINCPAC and approve USCINCPAC identified analytical and technical support tasks to be provided PDC.

5. Provide office space, access to the PDC local area network (LAN), and working areas for USCINCPAC USG and contract support personnel to the extent available.

USCINCPAC:

In coordination with the State of Hawaii Department of Defense and ISSO, OASD(C3I):

1. Provide inputs to the PDC user requirements process.
2. Provide disaster related data to PDC as appropriate and identify methodologies to fulfill support requirements, including accessing sensor data to support disaster relief operations.
3. Identify a suitable operational analyst to perform operational analysis activities at the PDC Applications Center on Maui as technical liaison to USCINCPAC. The on-site operational analyst will be provided by the Naval Command, Control, and Ocean Surveillance Center (NCCOSC) Research, Development, Test, and Evaluation Division (NRaD). NRaD and ISSO will jointly fund the operational analyst position for the remainder of FY 96. (Note: The operational analyst position would require an in-depth knowledge of USCINCPAC's specific sensors, data, and information products that would apply to the PDC mission. The analyst would perform detailed and computer intensive tasks of collection, fusion, analysis, planning, production and discrimination necessary to integrate inputs from USCINCPAC and others into custom tailored PDC information products.)

UNITED STATES DEPARTMENT OF DEFENSE:

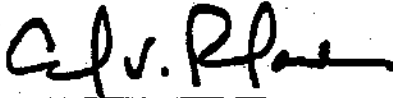
Subject to available funds, ISSO OASD (C3I) will:

1. Establish a technical element in Hawaii to implement development of the PDC.
2. Assist in developing the PDC implementation strategy, concept of operations (CONOPS), and systems requirements, including support to regional- and national-level user groups.
3. Develop the IOC. Establish, staff, equip and maintain the PDC Applications Center at the MRTC, Maui and the PDC Command Center at the State EOC.
4. Develop the FOC, including technical support activities such as implementing needs and developing procedures to access national-level remote sensing assets and massively parallel computing resources.

The parties hereto have caused this instrument to be executed the day and year of approval signatures below. The MOU will remain in effect by mutual concurrence of the parties until such time as NRS&D support is no longer required. This instrument will be reviewed annually to determine the need for update.

State of Hawaii
Department of Defense

Office of the Secretary of Defense
Command, Control, Communications, & Intelligence
Intelligence Systems Support



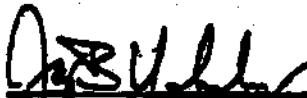
MG EDWARD V. RICHARDSON
Director, Department of Defense

CARL KLELE
Director, ISSO

Date: 1 Feb 1996

Date: 8 Feb 96

Commander-in-Chief
U.S. Pacific Command



JAY B. YAKELEY
RADM USN
Director for Operations

Date: 30 Jan 1996