Host with the most: CCAD makes joint depot maintenance meeting successful

EYES FRONT. Participants listen attentively during the opening session of the Joint Service Depot Maintenance meeting in Corpus Christi, Texas. (Photo by Cynthia Cox Underwood)

Approximately 100 Defense workers gathered recently in Corpus Christi, Texas, for the Joint Service Depot Maintenance meeting. Hosted by Headquarters Army Materiel Command, the meeting included local dignitaries Ms. Norma San Miguel, civilian executive assistant to the commander of Corpus Christi Army Depot, and the Honorable Lloyd Neal, mayor of Corpus Christi. Keynote speaker was Ms. Vickie Plunkett, deputy chief of staff for National Security and Intelligence, office of Congressman Solomon Ortiz, D-Texas.

After familiarizing the audience with Congressman Ortiz's background, Ms. Plunkett discussed her background with Congressman Browder at Anniston Army Depot and his position as co-chair of the House depot caucus.

Capitol Hill Perspective

Ms. Plunkett touched on issues such as prime vendor support and Apache Longbow, QDR and personnel ceilings, and repercussions of BRAC 95. She voiced Congressman Otiz's concerns about the Army's Workload Performance System and concluded by stating that, although the support structure is about to break

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Cynthia Cox Underwood, editor

down, the congressman sees front-line forces in a high state of readiness.

Briefings

Objectives of the meeting were to give members of the joint depot maintenance community a forum to discuss topics of interest, to voice their concerns on issues, and to provide information on future programs. The following briefings were presented.

Subgroups

Mr. James O. Woodard, the Army's maintenance interservice support management officer at the time, told the audience how the Defense Depot Maintenance Council

- advises the deputy undersecretary of defense for logistics (DUSD(L)) on initiatives for reducing costs and improving the efficiency and effectiveness of depot maintenance operations in the Department of Defense (DOD),
- provides a mechanism for coordinated review of DOD depot maintenance policies, systems, programs, and activities, and
- serves as a forum in which the DUSD(L) and Service officials responsible for conducting DOD depot maintenance operations can exchange information.

Mr. Woodard briefed the organization and functions of

- *the Breakfast Club*, which is transitioning to the newly created Logistics Reform Senior Steering Group. (Formed by DUSD(L) in February 1996, the Breakfast Club keeps logisticians informed on major logistics issues.)
- *the Joint Policy Coordinating Group on Depot Maintenance (JPCG-DM)*, and
- *the Joint Logistics Commanders (JLC)*, whose purpose is to identify and exploit opportunities for joint Service and agency cooperation in logistics, to prevent duplication, and to promote uniformity, commonality, standardization, and interoperability.

Office of the Secretary of Defense

REGISTRATION. Approximately 100 DOD employees attended the Joint Service Depot Maintenance meeting in Corpus Christi, Texas. (Photo by Cynthia Cox Underwood)

Army Colonel Edward Hamilton, office of the assistant DUSD(L), followed with "OSD Perspective Depot Maintenance Policy and Legislation." He detailed the 50 percent contract limitation on performing depot level maintenance, core logistics capabilities, the alternative core report to Congress, centers of industrial and technical excellence, and public-private partnerships.

Integrated Sustainment Maintenance

Following Col. Hamilton, Mr. Russell Garrett of Headquarters Army Materiel Command led a lively brief-

Lynn Normand, office of the Chief of Naval Operations, jots down an important point while Anita Lopez, Joint Advisory Board member from the Navy, listens intently to a briefer. (Photos by Cynthia Cox Underwood)

ing and discussion on ISM. ISM focuses on centralized management and decentralized execution of sustainment maintenance workload through consolidation of all sustainment maintenance activities under an integrated management structure.

Mr. Garrett illustrated the maintenance structure, the drivers for change, the payoff, locations, implementation, and program status.

Integrated Maintenance Concept

Mr. Frank Nuhfer of Headquarters Naval Air Systems Command briefed the IMC, which is based on

- reliability centered maintenance analysis,
- innovative support solutions, and
- a process that will lead to reduced O&S costs, better materiel conditions, and greater availability.

IMC affects all maintenance and supply support. It reduces support costs, increases readiness, and it has more frequent depot level maintenance tasks.

Lean Logistics

Mr. Tom H. Caudill, chief of Production Policy at Headquarters Air Force Materiel Command (AFMC), discussed the command's Lean Logistics program. The program works by providing the right parts to the right place when needed using the fewest resources possible by

- meeting customers' mission requirements,
- applying modern business practices, and
- changing processes.

The tenets of Lean Logistics, which focuses on readiness instead of sustainment, are user in control, tightened repair and manufacturing processes, innovations in contracting, inventory consolidation, and fast transportation.

Joint Technology Exchange Group

Mr. Steve Siens, chief of JDMAG's Technology Assessment division, discussed the JTEG and the Joint Depot Environmental Panel (JDEP), which were chartered under the JPCG-DM and chaired by JDMAG's director. The JTEG, which has many active and completed projects,

- makes sure technology projects are reviewed and coordinated to identify potential duplication,

Navy Maintenance Interservice Support Management Officer Lee Lord (R) interacts with meeting participants during a break.

Conference attendees take notes during the Joint Service Depot Maintenance meeting.

- recommends, as appropriate, a lead Service to develop prototypes for individual projects,
- makes sure depot maintenance requirements for new technology, processes, and equipment are disseminated among all appropriate DOD activities (laboratories, centers, depots, headquarters),
- ensures coordination among the Services on, and maintains current status of, the development of new technologies to minimize duplication and associated costs,
- recommends a method for exchanging information on new technology, processes, and equipment that may apply to depot maintenance, and
- initiates or advocates new technology projects or equipment that have interservicing potential to improve depot maintenance capability or efficiency.

Joint Depot Environmental Panel

The JDEP, which is evolving along with the Joint Pollution Prevention Advisory Board into the Joint Acquisition Sustainment Pollution Prevention Activity, was established in 1988 to identify current environmental techniques and processes that have potential application across Service lines. Since its inception the group has facilitated cooperation and coordination in the development and implementation of environmental projects to avoid unnecessary duplication and maintained a proactive liaison with related federal activities such as the office of the Assistant Deputy Secretary of Defense for Environment, the Environmental Protection Agency (EPA), National Aeronautics and Space Administration, General Services Administration, Joint Group on Acquisition Pollution Prevention, DOD labs, private industry, and academia.

Joint Regulation

Mr. Larry Rutledge, chief of JDMAG's Depot Maintenance Analysis division (MAU), covered the depot source of repair (DSOR) deci-

Army employee Joseph Marina (L) shares a humorous moment with Battelle representative Russ Garret, who presented a briefing on integrated sustainment maintenance. (Photos by Cynthia Cox Underwood)

sion process and the revised joint depot maintenance program regulation, which supersedes the joint depot maintenance interservicing (DMI) regulation. Soon to be available on JDMAG's World Wide Web page, the regulation incorporates changes in public law, DOD policy and other guidance, joint depot maintenance organizational changes, and DMI process changes.

Automated DMI Data Submission

Mr. Charles Johnson, JDMAG/MAU, followed with a briefing on ADDS, which standardizes the computer automation of JLC forms. The program runs on an IBM compatible personal computer and includes a user's software manual and an on-screen help feature to automate JLC form information. ADDS eliminates redundant entries of header information by applying the information throughout the scope of the JLC forms and cuts an estimated 66 percent of the work involved in preparing forms for DMI studies.

Training and Other Resources

CHARLIE JOHNSON

Mr. Kenneth Ellis, JDMAG/MAU, covered the Depot Maintenance Interservice Support Agreement and Cost Comparability Handbook courses. He also described the acquisition guide, *Depot Source of Repair Assignment Process for Acquisition Personnel*, which explains the why and how of DMI studies and complements the DMI regulation.

Next, Mr. Ellis discussed Interservice Material Accounting and Control System (IMACS) computer- based training and its availability. Finally, he described the Defense Acquisition Deskbook (DAD), and how it gives DOD acquisition information for all components across all functional disciplines. An easy-to-use program, DAD accesses DOD directives and publications, Service acquisition documents, and acquisition reform information. Sponsored by the office of the undersecretary of defense (A&T)/ acquisition program integration and by the deputy undersecretary of defense for acquisition reform, DAD can be visited on the World Wide Web at http:\\www.deskbook.osd.mil.

KEN ELLIS

Joint Service Business Planning

Mr. Kelly Blakely of JDMAG's Business Planning division (MAW) presented an overview of the joint business planning process, which involves promoting businesslike, cost-effective operations while maintaining the depot infrastructure needed to accomplish the mission. The process focuses on the Services' efforts to comply with legislation and policy. MAW analyzes and integrates these efforts from a joint perspective and publishes the results.

Business planning supports the

- Joint Military Construction Review Panel, which meets semiannually to review proposed depot maintenance military construction projects to preclude the acquisition of unwarranted duplicate depot maintenance capabilities,
- Joint Performance Measurement Group, which was chartered by the JPCG-DM to develop depot performance indicators and report on them periodically, and
- depot maintenance core methodology, which is the means by which the military

Services determine types and amounts of organic capability required to support weapon systems needed in Joint Chiefs of Staff contingency plans.

Army employees Marilyn Ostrand, Judy Wenger, and Sharon McCarty (L to R) discuss depot maintenance issues during a break. (Photos by Cynthia Cox Underwood)

Other briefings

Mr. Johnson discussed the implementation tracking system, which was set up to track DSOR decisions that assign depot maintenance workload to an interservice source.

The next briefing, entitled "America's Logistic Combat Support Agency," focused on the Defense Logistics Agency (DLA), whose mission is to provide acquisition and focused logistics support to America's armed forces in peace and war around the clock and around the world. The agency has three major functions: supply operations, contracting and production, and technical operations. Ms. Renea Burns, Headquarters DLA, presented this topic.

Dennis Mielke discussed the Joint Performance Measurement Group, whose purpose is to provide the Defense Depot Maintenance Council with depot maintenance performance measurement data.

Ms. Barbara Machenheimer of Ogden Air Logistics Center, Hill Air Force Base, Utah, briefed an overview of IMACS. Ms. Machenheimer described IMACS, and discussed vital statistics, customer sites, PMRT status, Air Force management responsibilities, Service responsibilities, funding status, and issues.

For information contact Joseph Cupurdija, AMCLG-MJ, DSN 767-2570, or e-mail: JCUPURDIJA @alexandria-emh1.army.mil.

JDMAG employees Charlie Johnson (L) and Kelly Blakely check out a historic aircraft aboard the U.S.S. Lexington.

Corpus Christi Army Depot

Corpus Christi Army Depot (CCAD) is the Army's only organic facility that repairs and overhauls rotary wing aircraft. Spanning 145 acres on Naval Air Station Corpus Christi, Texas, the depot makes a major contribution to DOD readiness through repairing, overhauling, and maintaining a variety of helicopters and related engines and components.

Corpus Christi Army Depot, Texas, which hosted the Joint Service Depot Maintenance meeting (see p. 2), is the Army's only facility that repairs and overhauls rotary wing aircraft. (Photos by Cynthia Cox Underwood)

Mission

CCAD seeks and meets the challenges of global military demands through several major missions: pre-shop analysis and disassembly; routing of assemblies, subassemblies, and parts; examination and evaluation; cleaning; nondestructive testing; machining; welding; metal spraying; heat treating; painting; subassembly repair and buildup; and final assembly. Engines are then dynamically tested to make sure they meet performance requirements.

Components

CCAD is capable of repairing or overhauling rotary wing aircraft components, such as rotor blades; rotor heads; rotor controls; transmissions; gearboxes; mechanical, electrical, and hydraulic components; instrumentation; avionics; and bearings. The depot processes approximately 30,000 components annually for customers such as the Army, Air Force, Navy, Foreign Military Services, and the State Department.

CH-47 Chinook. *One of the many rotary wing aircraft repaired and overhauled at Corpus Christi Army Depot, Texas.*

Level I and Level II Bearings

Bearing Shop personnel integrate statistical process control and precision equipment to economically inspect, rework, and reclaim a range of bearings.

Hydraulics

Highly trained CCAD mechanics and certified quality control inspectors repair and overhaul a variety of hydraulic components found in rotary wing aircraft. Servo cylinders, pumps, starters, modules, landing gear, struts, valves, reservoirs, and coolers are just a few of the many components they support.

Rotor Blade Autoclave Processing

CCAD's Rotary Wing Repair facility currently repairs the largest variety and number of main and tail rotor blades within the DOD. The Rotor Blade Program consists of the Army's Black Hawk (UH-60), Apache (AH-64), Chinook (CH-47D), Cobra (AH-1S), and Huey (UH-1H) blades. The program, which also supports the Air Force's Pavehawk (MH-

60) and the Navy's Seahawk (SH-60) and Huey (UH-1N) blades, is preparing to induct the Super Cobra (AH-1W). The statically and dynamically (H-60) balanced blades undergo nondestructive inspection, composite repair, replacement of time life items.

Steve Siens, chief of JDMAG's Technology Assessment division, takes time to explore the U.S.S. Lexington, which is permanently docked in Corpus Christi Bay. (Photo by Annette Banks Chase)

The most critical repair the depot currently performs is replacing the deicing mat sheath assembly on all the H-60 main rotor blades. The sheath assembly is a contoured component that extends the entire length of the leading edge of the blade and consists of a nickel abrasion strip, titanium strip, and deicing mats. CCAD installed a 10-foot-diameter by 50-foot-long autoclave to perform the cure process of this composite repair program. The autoclave is capable of temperatures up to 650 degrees Fahrenheit and pressures of 165 pounds per square inch. CCAD is the only DOD installation currently repairing H-60 blades.

Advanced Metal Finishing

Electroplating replaces worn metal, provides corrosion protection, enhances paint adhesion, or changes surface characteristics such as increasing wear resistance or oil retention. The facility, which processes more than 1,000 different aircraft parts, saves thousands of dollars per part by reclaiming and recycling damaged or worn parts.

Cadmium plating and aluminum vacuum coating are used to protect modern steels from corrosion, while alodine and anodize processes are used for paint adhesion and corrosion protection. Black oxide coating is used for oil retention, which changes the surface property of steels.

Manufacturing Processes and Capabilities

CCAD has extensive manufacturing capabilities that utilize both conventional and technologically advanced processes including computer aided design and manufacturing. The depot can rapidly and economically tool up and machine a variety of ferrous and nonferrous materials.

GUIDED TOUR. Participants in the Joint Service Depot Maintenance meeting tour Corpus Christi Army Depot. (Photo by Cynthia Cox Underwood)

The depot uses computer aided manufacturing to create computer numerically controlled programs that are used to fabricate aircraft currently available from standard sources.

Environmental Awareness

CCAD is committed to protecting and enhancing the environment, while updating practices in light of

advances in technology, health, and environmental sciences.

CCAD vigorously pursues opportunities to reduce the volume and toxicity of generated wastes. This pursuit has resulted in the depot's designation as a Center of Technical Excellence (CTX) for eliminating ozone depleting substances and the backup CTX for plating and adhesives. CCAD also has substituted plastic media blasting, lasers, wheat starch blasting, and carbon dioxide pellet blasting for harsh chemical solvents in paint stripping. The CTX received the EPA's International Stratospheric Ozone Protection award.

CCAD uses the depot maintenance hazardous material management system to control and record resource information and access thousands of process chemicals. This automated information system provides type, quantity, and location of hazardous material. Employees have the added advantage of material safety data sheet information at their fingertips to safely use monitored materials.

Through the use of special environmental appropriations that were available in the past and depot operating funds, CCAD has funded more than $7 million of waste minimizing processes or alternative process equipment. Investments in pollution prevention technologies continue as a high priority for the depot, which received industrial facility pollution prevention awards from the Department of the Army and DOD.

Environmental Compliance

CCAD complies with all applicable federal, state, and local environmental regulations. The depot accomplishes its mission with sustained priority given to tracking all hazardous wastes from point of generation through final disposal. Comprehensive waste management procedures assure waste separation and integrity.

Environmental and safety engineers review new construction projects and facility modifications. This assures safety, occupational health, and environmental considerations are included in design and construction. CCAD's skid-mounted industrial wastewater pretreatment plant is a prime example of its environmental engineering efforts.

For information contact Logistics Support Customer Coordination, Code 0SDA4, (512) 961-2525/4167/DSN 861-2525/4167.

CCAD receives ozone protection award

In a recent ceremony held at the Hilton Hotel, Washington, D.C., the EPA presented Corpus Christi Army Depot (CCAD), Texas, with the International Stratospheric Ozone Protection award. Along with 47 international organizations and individuals, CCAD received the award for efforts to eliminate the use of dangerous chemicals in the workplace and community. CCAD's work in eliminating ozone depleting chemicals and replacing them with aqueous cleaners (soap and water) set the standard for the Department of Army and other Department of Defense (DOD) facilities.

In 1997 CCAD received pollution prevention awards from the Army and from DOD.

For information visit CCAD's World Wide Web page at http://ccad-www.army.mil or contact Ralph Yoder, Public Affairs office, (512) 961-3627/DSN 861-3627/RYODER@ccad.army.mil.

COMING UP . . .

P2 conference focuses on compliance

Headquarters Air Force Center for Environmental Excellence is hosting the Joint Service Pollution Prevention Conference and Exhibition August 25-27 in San Antonio. Supported by the National Defense Industrial Association, the conference will take place in the Henry B. Gonzalez Convention Center.

This technical meeting will provide a national forum for exchanging ideas, success stories, case histories, and technologies related to pollution prevention. The central theme, achieving compliance through pollution prevention, relates to the interaction between the Department of Defense (DOD) and industry to find and implement the most effective and cost efficient means of leveraging limited resources to achieve a mutually effective environmental leadership role in pollution prevention.

The agenda has been structured to facilitate exhibits displaying pollution prevention technologies and services in hazardous materials and waste reduction, composting, recycling, vehicle and painting operations, shipboard operations, and compliance. Throughout this joint conference, participants will have the opportunity to meet with leaders in government, academia, and the private sector who are working on environmentally related pollution prevention technologies.engineering/medical fields with pollution prevention programs and funding,

For information contact Christy Kline or Christin Berry, (703) 247-2572/2590.

DOD MAINTENANCE SYMPOSIUM & EXHIBITION

The National Defense Industrial Association (NDIA) will host the 1998 DOD Maintenance Symposium and Exhibition Oct. 18-21 at the convention center in Fort Worth, Texas. The theme is "Maintenance: Today's Challenges - Tomorrow's Vision."

The symposium is designed to help participants understand the role of maintenance in the overall context of the current logistics transformation. A unique opportunity to interact with key maintenance decision makers from the military Services and other Defense organizations, the symposium will encourage a cross-feed of perspectives among counterparts in industry and related activities.

NDIA invites organizations to display products or services to the unique and qualified audience attending this symposium. Exhibits will be located adjacent to the general session, and the receptions and breaks will be held among the booths to ensure high visibility.

For information contact Christin Berry, (703) 247-2590.