Safeguarding Peace
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JNLWP

Joint Non-Lethal Weapons Program

Second Quarter, Fiscal Year 2004

Lt Gen Jan Huly New Integrated Product Team (IPT) Chairman

The Joint Non-Lethal Weapons Program (JNLWP) welcomes Lt Gen Jan Huly as the new Integrated Product Team (IPT) Chairman. On 30 September 2003, Lt Gen Huly assumed the duties of the Deputy Chief of Staff for Plans, Policies, and Operations, Headquarters, U.S Marine Corps, Washington, D.C.

As the JNLWP IPT Chairman, Lt Gen Huly's role is to champion NLW efforts with Senior Flag Officers, to provide guidance and direction to the JNLWP, and to advocate the JNLWP with peers and fellow Senior Leaders and foster active IPT participation. Additionally, he will provide recommended approvals for the JNLWP POM submissions.

Lt Gen Huly will chair the next JNLWP IPT Meeting scheduled to occur at the Pentagon on 17 March 2004.

JNLWP Industry Day

The JNLWP Industry Day was held on 4 November 2003 to engage the support of industry in advancing non-lethal weapons development. A major goal was to encourage submission of new and innovative white papers as proposals for the FY04 Technology Investment Program (TIP) Broad Agency Announcement (BAA) that support gaps identified relative to non-lethals. In attendance were 267 individuals, including 61 companies. As a result of Industry Day, 45 proposals were

INDUSTRY cont'd p.2...

FAREWELL LtGen Emil "Buck" Bedard

The JNLWP bids both farewell and thank you to LtGen Emil "Buck" Bedard for his service as the JNLWP IPT Chairman from 25 July 2000 to 22 September 2003.

LtGen Bedard successfully advocated for the advancement and development of non-lethals. He increased education efforts for Senior Leadership in the applications of non-lethals, and played a key role in increasing Joint Service Flag Level participation in the JNLWP. Also due to his efforts, the JNLWP budget was increased from $25M to $45M across the FYDP in support of the JNLWP's mission.

An avid supporter of Industry Day and the advancement of NLW development in partnership with industry, LtGen Bedard is a strong proponent of the value of NLW to the warfighter. His efforts have directly resulted in increases in NATO's general awareness of non-lethals, a critical element in the progress of NLW development in the international realm.

Farewell, LtGen Bedard!

New JCIG Voting Principal

The JNLWD welcomes the new USN Joint Coordination and Integration Group Voting Principal, CAPT (S) Jerry O'Regan. He is a career Explosive Ordnance Disposal Officer since 1983. His previous commands include: Officer in Charge, EOD Group TWO Detachment Panama City, Florida, Executive Officer of EOD Mobile Unit EIGHT located at Naval Air Station Sigonella, Sicily, and Commanding Officer, Explosive Ordnance Disposal Mobile Unit TWO, Norfolk, Virginia. CAPT (S) O'Regan is currently assigned to the Expeditionary Warfare Division of the Navy Staff as the EOD & Naval Coastal Warfare Resource Sponsor.

Within...

Vehicle Lightweight Arresting Device (VLAD)

In light of current terrorist activity around the world, stopping vehicles is a top mission priority. This mission grows more urgent day by day. The VLAD (formerly known as X-net) is a man portable device, developed and manufactured by QinetiQ, United Kingdom. VLAD can be rapidly deployed to arrest a range of vehicles up to 5 tons gross vehicle weight (GVW). Two rows of unique barbed spikes on the leading edge of the net pierce the front tires of the target vehicle; the net then envelopes the front tires and is pulled tight under the vehicle. This stops the wheels from rotating, bringing the vehicle to a standstill in a similar distance to that of an emergency traffic stop. The Photos show both its packaged and deployed configurations of VLAD.

The VLAD was originally discovered at a US/UK meeting in January 2003 and was introduced to the JNLWP as a viable concept for evaluation. A demonstration for a Joint Service audience was conducted prior to the Director's Reviews at Quantico, VA on 3 December 2003. The objective of this demonstration was to prove the overall design and effectiveness of the system for use by the Joint Services. Previous trials were conducted on 23-24 September 2003 and 28 Oct 2003.

The demonstrations were conducted on a straightaway (paved) course and utilized 3 different vehicles of varying weights (sedan, CUCV, HMMWV) and speeds (30-45 mph). Each time the VLAD engaged the vehicle and the brought the vehicle to a controlled stop.

The successful demonstration resulted in the subsequent approval of this Vehicle Lightweight Arresting Device (VLAD) capability by the JNLWD as an Army led, JNLWP funded program scheduled to achieve a Milestone C Decision by the end of 4QFY04.

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generated for the TIP BAA. The JNLWD and each Service manned booths that provided displays of various non-lethal weapons used by their respective Services.

The five companies selected for tabletop displays were: Boeing, Raytheon, Taser International, General Dynamics, and Pearson Enterprises.

General Anthony Zinni (USMC, Ret) was the keynote speaker. Gen Zinni addressed the role and importance of non-lethal weapons to the warfighter, sharing his personal experience in Somalia and his operational and command background. Mr. Peter Verga, Principal Deputy Assistant Secretary of Defense Homeland Defense, and Mr. Alan Shaffer, Director for Plans and Programs, DDR&E, USD AT&L, provided industry with Homeland Security and OSD perspectives on the application, role, and importance of non-lethal weapons.

There were two discussion panels. The Needs and Requirements Panel consisted of Flag level representatives from each Service, who provided their Service's operational perspective regarding the importance of non-lethals to the warfighter. The Technology Panel consisted of Service and OSD experts discussing current and future technologies under consideration by the JNLWP.

Feedback from the Services on Industry Day was unanimously positive, stating that the event invigorated industry interest in non-lethal technologies. The Services concurred that a key component of this success was in their opportunity to express to industry innovators the Services' current non-lethal capabilities and critical operational NLW needs.

DARPA Engagement: Proposed Science & Technology (S&T) Investments for the Development of Next-Generation NLWs

Over the past few months, the JNLWD met with several Defense Advanced Research Projects Agency (DARPA) program managers to explore new DARPA S&T initiatives related to the development of next-generation non-lethal weapons (NLW). The JNLWD assisted DARPA in identifying several "DARPA-Hard" technologies related to the development and fielding of new non-lethal weapons.

DARPA manages and directs selected basic and applied research and development (R&D) projects for the DoD in pursuit of research and technology with high payoff, and where success may provide dramatic advances for traditional military roles and missions.

The JNLWD presented briefings on current NLW technologies that the JNLWD and Services are pursuing. DARPA was also presented with a prioritized list of the critical NLW mission requirements such as stopping of vehicles, separation of combatants from non-combatants, and clearing a facility without entry.

DARPA has expressed interest in exploring several "DARPA-Hard" S&T initiatives including the development of:

(1) More accurate 40mm munitions suitable for an existing NLW payload such as a Flash-Bang;
(2) Wireless, high-accuracy 40mm (and smaller) "Taser Darts" to provide area "tasing" within small rooms and high aim-point accuracy and delivery to threat individuals operating within a crowd or human shields;
(3) Very compact and easily 'weaponizable' ultra-short pulse laser systems with counter-personnel applications (laser-induced plasma) and counter-material applications (laser-induced ablation plasmas);
(4) Lower volume, longer lasting, quickly reversible anti-traction material(s);
(5) More compact and improved millimeter wave sources for Active Denial Systems;
(6) Small off-board mobile and organically-deployed sensors for improved situational awareness and the ability to identify and prosecute combatants in close proximity of non-combatants with next-generation NLWs;
(7) Sensors for the detection, localization, tracking, and non-lethal prosecution of threat swimmers; and
(8) Human susceptibility models based on the many states of human incapacitation and the application of or exposure to all current stimuli associated with the JNLWD's NLW Technology Taxonomy list. (This modeling effort also includes dynamic and "rheostatic" modeling of the full range of human condition.)

HECOE TASER

The Human Effects Center of Excellence (HECOE) held the final of three workshops to develop a Human-Effects Effectiveness and Risk Characterization (HERC) for TASER-type Electro-Muscular Devices (EMDs) on 4-5 December 2003 in Baltimore, MD.

HERC methodology evolved over two years into a standardized process, which began with a data collection meeting held 9-10 July 2003 at Brooks City-Base in San Antonio, Texas. The data collection meeting brought together users, manufacturers, acquisition developers, planners, and research scientists as Subject Matter Experts (SMEs) to assemble available data and identify data gaps. A large volume of anecdotal data obtained from law enforcement's use of TASERs and available laboratory research data were assembled. Toxicology Excellence for Risk Assessment (TERA) reviewed the data using established tools of risk assessment and a probabilistic, Monte-Carlo scenario-based, predictive exposure assessment tool a tool developed by LINEA under the direction of the HECOE.

The TERA team presented initial dose and exposure assessments at the second workshop, held on 27-28 August 2003 in Scottsdale, AZ. This second meeting gave the user community an opportunity to provide a "reality check" on how requirements and scenarios are incorporated into the HERC. Topics reviewed included assessment of risks to potentially sensitive populations for effects on pregnancy, cardiovascular including pacemakers, respiratory, and seizures. A draft report was circulated to participants and to an Independent External Review Panel (IERP). The IERP is a critical component used for establishing and evaluating the credibility of findings, and is necessary for public and warfighter acceptability of the HERC. The TERA, LINEA, and HECOE SME team responded to probing questions from the IERP at this final workshop. Modifications to the report are being incorporated into the final report due to the JNLWD by 15 March 2004.

The EMD HERC is intended to support such activities as urgent fielding requests from the Army and Marine Corps for TASERs, and JNLWP-sponsored acquisition efforts, including the HENLM and Tactical Unmanned Ground Vehicle Non-Lethal MPM programs. Previous HERC endeavors by the HECOE involved the Advanced Tactical Laser, the MK-19 payload, and the 66mm LVOSS Vehicle Launched Non-Lethal Grenade.

Boat Trap Entanglement System Passes Another Phase of Testing

In support of the Coast Guard's mission requirement to stop non-compliant vessels, the aerial deployed net entanglement system called Boat Trap underwent initial full-scale testing at the Coast Guard's Special Mission Training Center (SMTC) at Camp Lejeune, NC in late December 2003. The Boat Trap is a 22-inch long by 13-inch diameter cylindrical device that is dropped by an aircrew member from a helicopter. The dropped package contains a X-shaped net that is propelled into the path of the evading vessel by a small pyrotechnic charge on a delay fuse activated by the air crewman, and entangles the propeller of a boat. .

Over the past few years, the Coast Guard has been challenged by the increasing use of go-fast type vessels to smuggle drugs and migrants into the U.S. Go-fast vessels also pose a homeland security threat in that they could potentially be used in a Cole-style attack upon high value targets, both within a port and open water. Presently, the USCG lacks effective methods to interdict and stop these vessels without resorting to aggressive tactics or deadly force.

Testing involved several drops from an Air Station Atlantic City HH65 Helicopter. A 22-foot Boston Whaler from SMTC with its coxswain protected by a chain-link cage was used as the target vessel. Initial CONOPS for the aircraft's approach and release were developed. Crews from SMTC worked with personnel from the Coast Guard's R&D Center in Groton, CT, the USCG HQ Office of Cutter Forces (G-OCU), and the R&D Center's contractor, Anteon and Foster-Miller, to conduct the series of tests.

Test results show that the Boat Trap concept is sound. Aircrews were able to safely deploy the Boat Trap and establish initial operational parameters such as air speed relative to target, aircraft height above ground, and timing of drop. However, due to inclement weather and insufficient Boat Traps for testing, full system performance, i.e. entanglement of evading target vessels, was unable to be demonstrated.

Plans are in place for another round of testing to fully demonstrate the prototype system capability, expected in summer 2004.

NTAR V & NTIC

The JNLWD sponsored the fifth annual Non-Lethal Technology and Academic Research Symposium (NTAR V) on 5-6 November 2003 at the Crystal City Hyatt Regency. The University of New Hampshire's Non-Lethal Technology Innovation Center (NTIC) hosted the symposium.

The NTAR symposium provided a forum for the exchange of information regarding current and emerging technologies that may have potential applications for non-lethal capability development. Additionally, the Symposium fostered collaboration between government, industry, and academia to facilitate development of cutting edge technologies. The symposium exposed researchers to opportunities for further research in non-lethal technologies, provided a platform for presenting research, and inform researchers of the current non-lethal needs. There were 132 individuals representing 13 universities, 20 government organizations, and 30 industry organizations in attendance. Twenty-seven presentations were given on a wide range of non-lethal technology topics.

NTIC also administers a grant program for innovative research with non-lethal applications. This successful program continues to attract high-level proposals. NTIC received 60 submissions in response to their FY03 Request for Proposals effort, up from 49 last year and 13 the previous year. The proposals were evenly split between six-month studies and two-year research projects. NTIC is in the proposal review stage and expects to grant up to four awards in each of the 2 categories. The research topics range from laser-induced plasma effects to aversive behavioral protocols.

Further information on NTIC and NTAR may be found at: http://www.unh.edu/ntic/.

USAF and USA Non-Lethal Capability Set (NLCS) Update

Beginning in FY04 and continuing through FY09, the USAF will procure 65 13-man Capability Sets consisting of approximately 20 items pre-packaged in Pelican Cases. While the NL munitions have been approved for Air Force use, the M26 Taser is still being evaluated throughout the USAF Non-Nuclear Munitions Board and has been submitted for approval.

The Army Non-Lethal Center of Excellence is pursuing plans to down-size their NLCS from company-size to platoon-size. The Army will be adding two new items to their future Capability Sets: the X26 Taser, and the Vehicle Lightweight Arresting Device VLAD.

Non-Lethal Education Program

The two driving forces of the Program's Education initiative are Joint Professional Military Education (JPME) Program and the Online Non-Lethal Weapons Course. In partnership with the Marine Corps Research University at Penn State, JNLWD staff and education professionals are formulating quality graduate and undergraduate course material that supports the goals of COCOM interaction and requirements stimulation.

The JPME program began its third year of operation in the fall of 2003 at Marine Corps Command and Staff College, and in January 2004, began a new graduate-level elective class at the Industrial College of the Armed Forces (ICAF) campus at the National Defense University (NDU.) A similar course is set to begin this winter at the Army War College Command and Staff school in Carlisle, PA and the Joint Forces Command and Staff College in Norfolk, VA has expressed interest in Non-lethal weapons elective. The other service War Colleges will be approached in FY 05.

New this year is the Program's plan to develop a web-based Non-lethal weapons course. The goal is to develop a class that provides college credit, advancement points upon completion for enlisted personnel, and an interest in non-lethal weapons technology, policy, and human effects, especially among junior personnel. The web course is scheduled to begin operational by Oct. 04.

These two programs work together to stimulate COCOM interest in non-lethal weapons. The graduates of JPME programs go on to important mid and senior-level positions on COCOM staffs. The junior officers and enlisted personnel who complete the web-based course will be more familiar with non-lethals and have a better understanding of when/how to employ them in

AD-V Joint S&T Consortium

The Area Denial to Vehicles (AD-V) Joint Science and Technology (S&T) Consortium was held on 26-28 August 2003 at the Naval Surface Warfare Center in Dam Neck, Virginia. In attendance were Peer Panelists, Presentation Panelists, Service Combat Developers, and representatives from the Joint Non-Lethal Weapons Directorate (JNLWD) and the Human Effects Center of Excellence (HECOE).

The Peer Panel was comprised of a diverse group of professional technologists, engineers, and scientists tasked with critically assessing the concepts briefed by the Presentation Panel. These accredited and published subject matter experts were asked to submit their professional assessments of the technologies within 30 days after the conclusion of the Consortium. Their conclusions revealed that there is no one solution to the vehicle stopping needs of the Services. There is no cure-all technology concept that: stops a vehicle at range, minimizes collateral damage and human effects, allows for reversibility, is man-portable, has a small logistical footprint, is not affected by weather or terrain, is technically ready, and is cost-effective. The fact is that there are benefits and drawbacks to each technology suite. The "best" concept will depend on the application for which it is to be used.

Results from the Consortium combined with a Vehicle Susceptibility Analysis will be used in the development of a combined Joint Service / JNLWP S&T Roadmap for non-lethal AD-V capabilities. The S&T Roadmap will be used to guide investment in properly planning and focusing resource allocations. It is scheduled to be completed 2QFY04.

The AD-V S&T Team extends a special thanks to all who participated in the event, especially the following Peer Panel members and subject matter experts: Dr. Stephen J. Allen, Dr. Carl E Baum, Colonel James A. Godsey, Mr. Hugh Huntzinger, Mr. Joseph Wieland, and Mr. Franz Gayl. Their professional technical analyses of the relative merits of the technologies presented aided significantly in the development of the AD-V S&T Roadmap.

Crowd Control Concept Exploration Program (CC CEP)

At the December 2003 JNLWD Director Reviews, Mr. Hugh Huntzinger provided an overview of the closeout of the CC CEP. This effort had been tasked to identify non-lethal concept(s) that would facilitate operational forces in accomplishing one or more of the mission tasks identified in the JNLWP's Joint Mission Area Analysis (JMAA).

The analytical objective of the CC CEP was to identify alternative non-lethal system concepts that alone or in the aggregate satisfy functional area requirements within a military operational context defined by the Users.

Taking into consideration the CC CEP Analysis of Multiple Concepts, and the urgent needs from the Users (Service Reps), the top four candidates were:

MK19 NLSR
MK19 40mm NLLR
12 Gauge Universal Launch Cup (I2NLS), and
Tactical Unmanned Ground Vehicle (TUGV) with Multi-Launched Tube Munitions.

The CC CEP effort validated what is available near-term, identified the Users needs and surfaced potential new technologies for future consideration to meet future operational requirements. The CC CEP Final Report will be distributed during 2QFY04.

Non-Lethals in Operation Iraqi Freedom (OIF)

U.S. Army units employing their Non-Lethal Capability Sets (NLCS) in Operation Iraqi Freedom have validated the Army's NLCS investment in the most demanding test center, the battlefield. Since early April 2003, Military Policemen and Airborne Infantry have used non-lethal weapons to control crowds and manage rioting enemy prisoners of war. Additionally, they have successfully conducted cordon and search missions with the assistance of non-lethal capabilities. This experience has confirmed that the Army's current NL development strategy for small arms and advanced capabilities is sound and should be accelerated, the first priority being approval of the requirements document for the platoon-sized NLCS. Other efforts must focus on separating human shields from gunmen in crowds and on bringing vehicles to a dead stop at access control points. Feedback from Operation Iraqi Freedom missions also identified and validated the need for both short- and long-range MK19 and small caliber NL Munitions.

The Army's NL Team began intensive preparation to provide a Non-Lethal Weapons Mobile Training Team (MTT) in support of Phase IV, Stability and Support Operations (SASO) of the OPLAN for Operation Iraqi Freedom. The mission of this team was two-fold: field the TASER M-26 Electro-Muscular Disruptor Device, and train and assess employment of the NLCS. In the course of the MTT, 110 soldiers were trained on the M-26 TASER, many receiving a refresher module on NL munitions and unarmed self-defense. The soldiers trained ranged in grade from Private to Major, and Lieutenant Colonels often volunteered to be TASED by the team. All were impressed by the capability of the TASER to incapacitate at close range with reversible effects.

The use of non-lethals to date has demonstrated their effectiveness and less-lethal munitions have already had a major operational impact in cordon and search operations. Implications are that NL weapons and techniques for employment will be used for years to come in Iraq and inevitably will be used by the new Iraqi Police Force.

Joint Service Small Arms Program Functional Area Analysis/Functional Needs Analysis

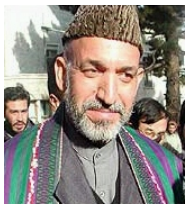
Based on recent real world operations and lessons learned, the Joint Service Small Arms Program (JSSAP) has determined that it must conduct a capabilities-based assessment of Joint and Service small arms to identify improvements in existing capabilities and develop new warfighting capabilities across the range of military operations.

The JSSAP will use the Joint Capabilities Integration and Development System (JCIDS) analysis process that identifies capability gaps and redundancies, assesses the risk and priority of these gaps, and recommends the best approach or combination of approaches (materiel and/or non-material) to address the gaps.

Accordingly, the JSSAP will sponsor the conduct of a Functional Area Analysis (FAA) and Functional Needs Analysis (FNA) for its program. The FAA will identify the operational tasks, conditions, and standards needed to achieve their military objectives to include a cross-capability and cross-system analysis. The FNA will assess the ability of current and programmed Joint and Service capabilities to accomplish the tasks that the FAA identified, under the full range of operating conditions and to the designated standards. The FNA will then identify the capability gaps or shortcomings that require solutions. The JSSAP FAA/FNA will begin in February 2004.

NATO Multinational Exercise on NLW in Future Peacekeeping Operations

NATO conducted a multinational exercise (MNE) in Bourges, France from 17-26 November 2003 within the SAS-040 "Long Term Scientific Study on Non-Lethal Weapons and Future Peace Enforcement Operations". The session attendees were charged to produce a technical report anticipating scenarios and NLW development and use through the 2020 timeframe. The effort is to provide recommendations for military planners to increase the probability of success in the full spectrum of peace support operations.



The MNE was attended by 41 participants representing eight countries, the International Committee of the Red Cross, and experts from other SAS panels. The exercise was built around three working groups organized by area of expertise.

During the first two days, the Operations group developed six scenarios of varying intensity that represented likely NATO operations within the 2020 timeframe. These scenarios were the basis for matching future requirements with anticipated capabilities.

The Technology group identified a broad spectrum of NL technologies that are likely to be available within this timeframe. High-tech electromagnetic and stun technologies were key, but low tech chemical (anti-traction) and physical (quickly deployed barriers) devices and combinations of technologies were predicted to flourish.

The Political-Legal group reviewed treaties and international law that may be permissive or constrain operations, technology, or use of force. They concluded that development, possession, and use of NLW is subject to the Law of Armed Conflict, and therefore, are subject to its treaty law. For the second half of the week, three new working groups were formed, each composed of a mix of operations, technology, and legal participants. Each group analyzed two scenarios (high and low intensity situations). The technology staff identified future capabilities for NL intervention, and the operations staff prioritized the technologies with regard to target properties and overall mission tasks. The technologies and operational settings were then analyzed by the legal staff for trends that would permit or constrain their use or collateral effects. The political and media arena in which the conflict takes place was also considered. The week concluded with a plenary session discussing findings and recommendations.

An editorial session of working group chairmen produced in the second week a final report that has been sent to Paris, France for publication. The body of the report will be Unclassified/ Unlimited, but the Annexes which include details of range and energies of NL technologies under development will be NATO Classified. The US delegation felt that the MNE was an extremely beneficial experience, and that the final document will be critical to future NATO planning and operations.

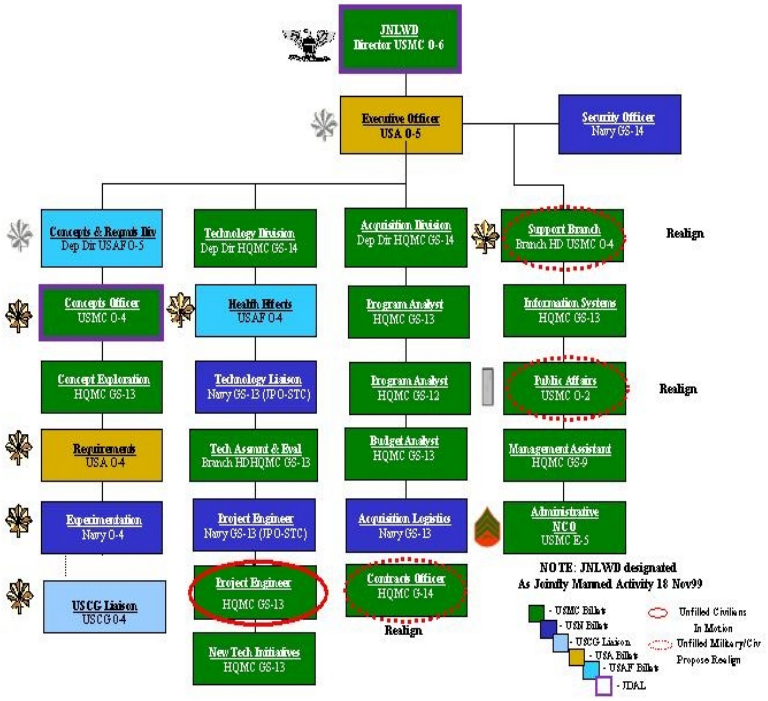
The JNLWD supported the participation of Col Rick Bowman, Policy, Training, and Readiness, SOCOM, Mr. Joe Rutigliano, Judge Advocate Division, HQMC, Mr. Glenn Shwaery, NTIC, and Mr. John Nelson, International Defense Analyst, ASC, who served as the coordinator of the US contingency.

calendar Onward...

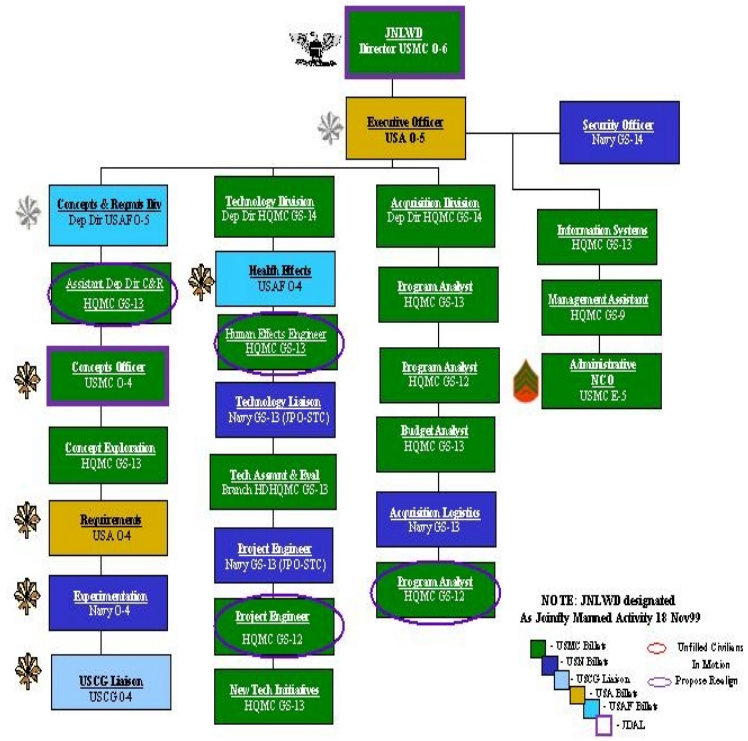
March		
2-5	Cobra Gold Mid Planning Conference	TBD
15-18	Joint Undersea Warfare Conference	Monterey, CA
16	NORTHCOM's Determined Promise Mid Planning Conference	Colorado Springs, CO
17	NLW IPT Meeting	Pentagon
TBD	PACOM NL Symposium (NOLES) Initial Planning Conference	TBD
April		
22	JNLWD Training Day	Quantico, VA

Joint Duty Assignment List (JDAL)

The Joint Non-Lethal Weapons Directorate (JNLWD) was designated a Jointly Manned Activity (JMA) by the Office of the Secretary of Defense on 18 November 1999. Since that time, officers and enlisted personnel from all Services, to include the Coast Guard, have been assigned to organizational billets at the JNLWD as identified in the Department of Defense's Joint Non-Lethal Weapons Program (JNLWP) Memorandum of Agreement (MOA) of 10 May 2002.



On two separate occasions, the JNLWD has requested Joint Duty Assignment (JDA) approval and validation for the military billets assigned to JNLWD. The Chairman of the Joint Staff (CJCS) and the Services recently approved the JDA designation of two more billets that meet the definitions, standards and criteria for assignment to the overall Joint Duty Assignment List (JDAL). The two new billets selected for inclusion in the JDAL are the Executive Director (US Army, Lieutenant Colonel) and the Deputy Director, Concepts and Requirements (US Air Force, Lieutenant Colonel).



By mandate, there can be no growth in JDA billets within the JDAL; therefore, the JDA approval and validation of these JNLWD billets is significant. This approval required the Joint Staff and the Services to agree to conduct compensatory reductions in other Joint billets at the Joint Staff, a Combatant Commander's Staff, or at a DoD Agency. Personnel assigned to the JDAL, upon completion of their tour of duty at the JNLWD, are authorized to request Joint Specialty Officer (JSO) designation from their respective Service. (Two previously approved billets in the JDAL are the JNLWD Director and the JNLWD Concepts Officer; both are US Marine Corps assigned billets by the MOA.)

JNLWD Open Billets:

The JNLWD is proposing a realignment of the current JNWLD Table of Organization. The proposed restructure will realign military and civilian billets.

Hail and Farewell

The JNLWD would like to say farewell to:

MAJ Reggie Williams

MAJ Reggie Williams who now is a Squadron Commander at Fort Campbell, Kentucky. MAJ Williams was the JNLWD Modeling and Simulation Officer since August 2001. For his efforts in establishing a foundation in the requirements generation and modeling and simulation activities throughout the DoD Non-Lethal Weapons Program, he was awarded the Defense Meritorious Service Medal. The JNLWP wishes MAJ Williams the best in his future endeavors.

MAJ Williams

The JNLWD would like to say farewell and congratulations to:

Lt. Melody Adames

Lt Melody Adames was promoted to her present rank on 23 January 2004 by Col David Karcher. Lt Adames joined the JNLWD as the USCG Liaison Officer in August 2001. In January 2003, she was selected to lead as the Project Officer for the Joint Integration Product (JIP) program. During this time, she organized several JIP meetings at various locations and demonstrations of proposed solutions at vendor's sites. Lt Adames will be going to San Antonio, Texas to continue her graduate studies. Best Wishes to her and her husband!!

Lt. Adames

The JNLWD would like to welcome:

Mr. Peter "Pete" Lilly

The JNLWD welcomes Mr. Peter "Pete" Lilly, who joined us on 8 December 2003 as our new Assistant to the Deputy for Technology. He will supervise and lead the team responsible for evaluating and assessing NLW technologies being conceived, considered and developed for the JNLWP. His expertise will be applied in day-to-day management support, task monitoring, personnel development, project planning, and budgeting efforts.

Mr. Lilly devoted more than 20 years as an Engineer at China Lake and offers a multi-disciplined background in design and systems engineering, testing, project engineering and management covering the full spectrum of RDT&E for tactical weapons, aircraft, and energetics. Among many others, he has worked on the following systems: Sidewinder, Sparrow, Standard Missile, JTIDS, Walleye, Maverick, Skipper, HELRATS, TAMPS, JSOW, RAM, Crusader, AV-8B, and F/A-18. Mr. Lilly holds a BS in Electrical Engineering with emphasis on Field and Wave theory, Control theory, and Radars and Communication from California State University, Fresno. Welcome, Mr. Lilly to the JNLWD!

Mr. Lilly

Ms. Peggy Smith

Ms. Peggy Smith came aboard the JNLWD staff on 4 November 2003 as the JNLWD's new Contracting Officer. Ms. Smith brings a wealth of contracting knowledge and experience, and will be responsible for all in-house contracting efforts of the Directorate.

Previously, Ms. Smith served as the Contracting Officer for Marine Corps Systems Command at Quantico, VA. There, she supported Engineering Systems as a vital member of the Ground Transportation and Engineer Systems Directorate. Welcome, Ms. Smith, to the JNLWD!

Ms. Smith

Mr. Earl Switzer

On 17 November 2003, the JNLWD welcomed aboard Mr. Earl Switzer. Mr. Switzer offers a broad background in research, development, test and evaluation of military and commercial products and systems. A USMC Civil Service employee, he holds a BS in Electronics Engineering with experience in both government and industry. Mr. Switzer most recently worked with the Air Force as an Electronics Engineer and as a Weapons Systems Acquisition Program Manager.

Mr. Switzer will apply his varied expertise and experience in providing support to the JNLWD's Concepts and Requirements Division. Welcome aboard, Mr. Switzer!

Mr. Switzer