

# THE NEW DEPUTY ASSISTANT FOR CHEMICAL AND BIOLOGICAL DEFENSE

John V. Wade, D.V.M., Ph.D.

# O n the 1st of September, 1999, I stepped down as the Acting Deputy Assistant to the Secretary of Defense, Chemical and Biological Defense, (DATSD(CBD)), retiring from

the Army Veterinary Corps on October 31st after twenty-two and a half years of active duty service. This past year was certainly the culmination of my military career, and I will be ever grateful to Dr. John Hamre, Deputy Secretary of Defense (DEPSECDEF); Dr. Jacques Gansler, Under Secretary of Defense, Acquisition, Technology and Logistics (USD(AT&L)); Mr. Dave Oliver, Principal Deputy, Under Secretary of Defense, Acquisition, Technology and Logistics (PDUSD(AT&L)); and Dr. Hans Mark, Director of Defense Research and Engineering (DDR&E) for affording me that 'once-in a lifetime' opportunity. I would also like to take time to thank all of the people who have provided aupport to my office during this critical transition year. The CBD program experienced a great deal of change over the last 12 months due to two watershed events: the establishment of the new Defense Threat Reduction Agency (DTRA) and the almost overwhelming "renewed" interest in CB as it might pertain to terrorism and domestic preparedness. I did my best to provide some degree of programmatic stability during this phase of the program's evolution. There is no such thing as a "good time" to leave, but for several personal and professional reasons, this felt like the "right time." The decision was made much easier, however, upon selection of Dr. Anna Johnson-Winegar as my successor. I have known Dr. Johnson-Winegar for over a decade, but many of you have not been as fortunate, so I was delighted when the CBIAC suggested that I "introduce" her to you.

Dr. Johnson-Winegar holds a Bachelor of Arts degree in Biology from Hood College, as well as Master of Science and Ph.D. degrees in Microbiology from Catholic University of America. She has published numerous technical manuscripts, and authored/co-authored several book chapters. She is a long-standing member of numerous professional societies, including the American Society for Microbiology, American Academy of Microbiology (Fellow), American Association for the Advancement of Science, International Society of Toxicology, Society for Industrial Microbiology, Association for Women in Science, and Sigma Xi. She is an alumna of the Federal Executive Institute, and a graduate of various short courses in the general fields of science and technology, policy development, and management. In 1998, she received the lifetime achievement



Dr. Anna Johnson-Winegar Deputy Assistant to the Secretary of Defense, Chemical and Biological Defense Office of the Director, Defense Research and Engineering 3050 Defense Pentagon Washington, D.C. 20301

award from Women in Science and Engineering. Most importantly, she brings over 20 years of Biological Defense experience to her current position.

Dr. Johnson-Winegar returns to the Office of the Secretary of Defense (OSD) staff after a year directing the Office of Naval Research (ONR) Human Systems science and technology programs which included biomedical programs, cognitive and neural sciences, human factors, and training technologies. Before joining the ONR, Dr. Johnson-Winegar served as Director of Environmental and Life Sciences in the Office of the DDR&E. Her primary responsibilities included monitoring and coordinating all Department of Defense (DoD) research and development

> See "DATSD(CBD)" Continued on page 3

Winter 2000



The Chemical Warfare/Chemical and Biological Defense Information Analysis Center (CBIAC) is a Department of Defense (DoD) Information Analysis Center (IAC) administratively managed by the Defense Information Systems Agency (DISA), Defense Technical Information Center (DTIC) under the DoD IAC Program Office (Contract No. SPO700-00-D-3180). The CBIAC Contracting Officer's Technical Representative (COTR), Mr. Joseph D. Williams, may be contacted by email at Joseph.Williams@sbccom.apgea.army.mil or at the following address:

CDR USA SBCCOM Edgewood Chemical Biological Center ATTN: AMSSB-RRT-OM (Joe Williams E3330) 5183 Blackhawk Road Aberdeen Proving Ground, MD 21010-5424

U.S Government agencies and private industry under contract to the U.S. Government can contact the CBIAC for information products and services. CBIAC services also extend to all state and local governments and the first responder community such as local emergency planners, firefighters, medics and law enforcement personnel.

The CBIAC is located in Building E3330, Aberdeen Proving Ground - Edgewood Area, Maryland 21010. For further information or assistance, visit or contact the CBIAC.

#### CBIAC

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#### **"DATSD(CBD)"** *Continued from page 1*

(R&D) in the areas of medical and life sciences, training and personnel technologies, environmental sciences, environmental quality and civil engineering, chemical and biological warfare defense, and human systems interface.

Before joining DDR&E, Dr. Johnson-Winegar served as the Director of Medical Chemical and Biological Defense Research Programs at the United States Army Medical Research and Materiel Command at Fort Detrick, Maryland. In that capacity, her duties included planning, programming, and managing the entire scope of research programs in medical chemical and biological defense. She also served as Chair of the Joint Technology Coordinating Groups for medical chemical and biological defense. Her previous positions included product manager at the U. S. Army Medical Materiel Development Activity and research investigator at the U. S. Army Medical Research Institute of Infectious Diseases (USAMRIID).

In a rare quiet moment at OSD, I recently caught up with Dr. Johnson-Winegar and had the chance to ask her a few questions that I felt might interest the CBD community at large.

#### Dr. Wade:

We have each had three months to settle into our new positions. Have there been any major surprises so far, or is your new position what you expected it to be?

#### Dr. Johnson-Winegar:

While not exactly a surprise, I guess I am somewhat amazed at the significantly increased interest in chemical and biological defense, not only within the Pentagon, but in other govern-

ment agencies, and the public and private sector as well. I am heartened by this level of energy. I am seeing and welcoming new ideas and new participants in a comprehensive effort to provide the highest quality CB defense.

#### Dr. Wade:

What do you see as the major strengths you bring to this position?

#### Dr. Johnson-Winegar:

I feel that my technical expertise provides a very strong foundation for me to carry out my responsibilities. Having first-hand experience in the laboratory working with BW [biological warfare] agents such as anthrax, SEB [Staphylococcal Enterotoxin B], and botulinum toxins gives me a realistic understanding of the technical challenges facing our researchers. I also value many other experiences in my career, such as my participation on the UNSCOM [U.N. Special Commission] inspection teams in Iraq where I gained a better appreciation for third-world capabilities to develop biological weapons. Finally, I think I have a good appreciation of program management, the PPBS [Planning, Programming, and Budgeting System] process, and, most importantly, the need to emphasize good communication

The CB threat has been facing us for a long time, and I do not think it will diminish any time soon. Quite the contrary -- in my opinion, we have to face an increasing possibility of seeing the use of chemical or biological agents - either in a military scenario or in a terrorist attack.<sup>39</sup>

among all components of the chem-bio defense program. One of my highest priorities is to have a fully integrated CB defense program across all aspects of the work.

#### Dr. Wade:

What are the greatest challenges facing the Chemical and Biological Defense Program over the next several years?

#### Dr. Johnson-Winegar:

Finding the right balance between the short-term needs to procure items for equipping our military forces today and investing in our science and technology programs for tomorrow provides a real challenge. We are evaluating our current investments across board and will make any necessary adjustments. In addition, as the threat changes, our programs must be ready to respond. We are hearing a lot about genetically engineered organisms, and new generation chemical agents, not to mention the problem of toxic industrial compounds (which are not classical CW [chemical warfare] agents). Developing a better understanding of the significance of chronic exposures to low level agents is another area requiring our attention. Fully integrating chemical and biological defense into our operational procedures and doctrine still requires some attention.

#### Dr. Wade:

Over the past year we have seen an enormous increase in attention given to the threat of potential terrorist' use of chemical or biological agents, include here in the United States. Could you comment on the impact these various domestic preparedness initiatives have had or might have on the 'warfighter' program for which you are now responsible?

#### Dr. Johnson-Winegar:

As I mentioned before, this new attention to the threat of chemical and biological weapons has brought a lot of new people and organizations to the table, each with somewhat different needs and capabilities. I feel, however, that the Department of Defense remains the primary source of information and technology, based upon our years of investment in these CB programs. I feel that we can leverage the interest from the domestic terrorist perspective and find ways to develop complementary programs that will satisfy the needs of the warfighter and address issues specific to the civilian sector as well. In addition, there should be an increased market for the products that are developed in our CB defense R&D efforts.

#### Dr. Wade:

Are there any additional thoughts you would like to share with our CBIAC Newsletter readers?

See "DATSD(CBD)" Continued on page 8

# CBD CONTRACT AWARDS

By Mary Frances Tracy

 Development of Delivery Vehicle Targeting Cholinergic Neurons Metabiologics Inc.
 505 South Sousa Road Madison, Wisconsin 53719
 \$99,570. September 2, 1999 By U.S. Army Medical Research Acquisition Activity

 Multipurpose Overboots (MULO) Tingley Rubber Corporation South Plainfield, NJ \$7,283,010. September 10, 1999 By Marine Corps Systems Command-Quantico

- Self-Contained Breathing Apparatus Fire Brand Inc.
  3025 South Military Highway Chesapeake, VA 23323
  \$71,329. September 13, 1999 By NSWC-Dahlgren
- Environmental, Safety, Health, & Research Support for the Operations at the U.S. Army Soldier Biological Chemical Command SciTech Services Inc. Abingdon, MD 21009 \$8,000,000. September 13, 1999 By U.S. Army Test & Evaluation Command-APG

## 5. Oxygen Breathing Apparatus

Ocenco Inc. 10225 82nd Avenue Pleasant Prairie, WI 53158 \$35,242. September 15, 1999 By FISC-Puget Sound

- 6. Training Kit for Oxygen Breathing Apparatus Canister Mine Safety Appliance Company PO Box 428 Pittsburgh, PA 15230 \$98,700. September 17, 1999
- **5.** Small Facepiece for OBA-4 Mine Safety Appliance Company PO Box 428 Pittsburgh, PA 15230 \$99,466. September 17, 1999 By DPSC-Pittsburgh

By DPSC-Pittsburgh

#### 8. Topical Skin Protectant (TSP) Manufacturing Development McKesson BioServices 14665 Rothgeb Drive Rockville, MD 20850 \$41,041. September 17, 1999 By U.S. Army Medical Research Acquisition Activity

9. Large Size Respirator Facepiece Airgas Safety Inc.
Doing Business As (DBA) Ipco Safety Products of Pennsylvania 128 Wharton Road Bristol, Pennsylvania 19007 \$87,202. September 17, 1999 By DPSC-Philadelphia

#### 10. Biological Warfare Defense Research

Maxygen Inc. 515 Galveston Drive Redwood City, CA 94063 \$6,753,064. September 22, 1999 By SPAWARSYSCEN-Charleston

# 11. Outserts and Eyelenses for M40/M42 CB Masks

Mine Safety Appliance Company PO Box 428 Pittsburgh, PA 15230 September 27, 1999 By U.S. Army Tank-Automotive and Armaments Command-Rock Island

#### 12. XM93 for NBC Tactical Vehicle

General Dynamics Land Systems Inc. Sterling Heights, MI 48310-3268 \$3,698,686. September 27, 1999 By U.S. Army Tank-Automotive and Armaments Command-Rock Island

#### 13. Characterize RNA Editase Response to Bacterial & Viral Agents Yale University 47 College Street Suite 203 PO Box 208047

New Haven, CT 06520-8047 \$152,418. September 29, 1999 By SPAWARSYSCEN-San Diego

#### 14. Proposal for Developing a Multi-Agent Chemical Sensor Suitable for Field Use Either as a Detector or Exposure Monitor Photonic Sensor 573B Courtland Street, NE

Atlanta, GA 30308 \$224,006. September 30, 1999 By Office of Naval Research-Arlington

#### 15. Tissue Based Biosensors

Stanford University 857 Serra Street Room 260 Stanford, CA 94305-5410 \$4,539,266. September 30, 1999 By SPAWARSYSCEN-San Diego

## 16. Underwater Breathing Apparatus

Draeger Safety Inc. 101 Technology Drive Pittsburgh, PA 15275 \$568,524. September 30, 1999 By Coastal Systems, Dahlgren Div-Panama City

- 17. Woodland Camouflage Temperate Coats & Woodland Camouflage Enhanced Hot Weather Coats American Apparel Inc. Selma, AL \$22,981,850. September 30, 1999 By Defense Supply Center-Philadelphia
- 18. Woodland Camouflage Temperate Coats & Woodland Camouflage Enhanced Hot Weather Coats Golden Manufacturing Co., Inc. Golden, MS \$19,638,900. September 30, 1999 By Defense Supply Center-Philadelphia

# 19. Woodland Camouflage Temperate Coats & Woodland Camouflage Enhanced Hot Weather Coats D.J. Manufacturing Corp-Caguas, Puerto Rico \$14,503,200. September 30, 1999 By Defense Supply Center-Philadelphia

20. Establishment and Operation of the Department of Defense Weapon Systems Technology Information Analysis Center IIT Research Institute Chicago, IL \$156,501,809. September 30, 1999 By Defense Supply Center-Columbus

> See "CBD Contract Awards" Continued on page 10

## TAT PROFILE

# Simulated Terrorist Attack Improves U.S. Bio-Response Capability

*By Timothy A. Dixon, Public Relations Specialist Battelle Edgewood Operations, Bel Air, MD* 

#### "Hundreds Dead; Thousands Ill. Terrorists Contaminate Food Supplies in Three States with Deadly Bacteria."

These are the headlines U.S. officials hope they never see. Fortunately, it comes from a scenario used during an August tabletop exercise designed to improve the U.S. response to biological weapons incidents.

The U.S. Department of Agriculture (USDA) and the Department of Defense (DoD) co-sponsored a tabletop exercise and workshop to focus attention on the protection of the U.S. food supply from

"agri-terrorism." In the past, U.S. anti-terrorist activities have focused on preparing for attacks on the American populous through the inhalation of biological agents. Both the USDA and DoD recognized that ingestion of biological agents via food supplies poses an equally significant threat with its own unique characteristics and response needs.

The USDA underscored the significance of this effort through the participation of Undersecretary for Food Safety, Catherine Woteki,

and Deputy Inspector General, Joyce Fleischman. "Agricultural exports represent one of the few areas where the United States maintains a positive balance of trade," stated Woteki. "This exercise helps enhance an existing and effective surveillance and response system that can minimize terrorist impacts on the U.S. agriculture economy and on public health."

The USDA and DoD structured the exercise and workshop to meet three primary objectives:

1. Review existing response procedures and examine their capacity to contend with an "agri-terrorist" incident;

- 2. Identify enhancements to current response procedures;
- 3. Assure the development of an integrated response.

To ensure these objectives were met, the USDA and DoD invited a diverse group of individuals and organizations to include state and local medical, public health, veterinary, agriculture and emergency response personnel. Additionally, representatives from the Department of Health and Human Services and the Department of Justice participated in the event.

Ensuring an integrated response is critical to successfully countering a terrorist attack. "Getting representation from each of these groups and agencies helps to ensure we understand existing roles and responsibilities, while establishing new relationships to strengthen our overall response," stated Mike DeZearn, DoD representative for the Biological Warfare Improved Response Program (BW IRP). "Additionally, gaps in the U.S. response capability are often perceived as deficiencies because an agency may not be aware that other organizations fulfill that function," added DeZearn. A report of the exercise findings and discussions will be available in early 2000.

The exercise and workshop represent a continuing effort by the U.S. Army Soldier and Biological Chemical Command's BW IRP to identify, develop, evaluate and demonstrate the best response procedures for local, state and federal responders to contend with biological terrorist incidents. The BW IRP was formed as a result of the Nunn-Lugar-Domenici funding, Public Law 104-201. The USDA exercise represents one of three major activities in this series. The BW IRP plans to conduct a joint workshop with the

Department of Justice, focusing on the integration of the criminal and epidemiological investigations associated with biological incidents. Additionally, the BW IRP will conduct a workshop with the Centers for Disease Control and Prevention to address issues involving contagious diseases. Both workshops are scheduled for early 2000.

For further information, you may contact:

Mike DeZearn Chemical Engineer SBCCOM Domestic Preparedness Program 5183 Blackhawk Road Aberdeen Proving Ground, MD 21010 Tel: (410) 436-3658 Email: michael.dezearn@sbccom.apgea.army.mil URL: http://dp.sbccom.army.mil

George E. Bickerton USDA Emergency Coordinator Emergency Preparedness Staff U.S. Department of Agriculture 1400 Independence Avenue, S.W. Room S-302, South Building Washington, D.C. 20250-9305 Tel: (202) 720-5711 Fax: (202) 720-7708 Email: george.bickerton@usda.gov

## CB IN THE NEWS

By Mary Frances Tracy

Chemical, Biological Defense Program Runs 'Hot & Cold' Erwin, Sandra

#### National DEFENSE

#### September 1999

The Department of Defense's budget for fiscal years 2001 through 2005 includes \$4.2 billion for the nuclear, chemical and biological (NBC) defense program. Half of the funds are designated for research and development and the other half are for procurement of new equipment. This article describes some of the NBC defense programs and the difficulties involved in aligning the services and the needs within each service. However, this funding will target many joint service efforts. For instance, a new platform for detection called CBRIDS (Chemical, Biological, Radiological Integrated Detection System) is planned for the 2002-2007 timeframe.

Proposed Bio-Defense Lab Raises Concerns, Public Meetings Promised for Long Island Communities Ruppe, David

#### http://www.abcnews.com/sections/us/DailyNews/ bioterror\_plumisland\_990929.html

September 29, 1999

The Clinton Administration has proposed to build a civilian research facility just off the northern coast of Long Island for countering biological terrorism. The proposal incorporates upgrading the Department of Agriculture's Plum Island research laboratory so that the scientists can study diseases affecting humans and animals, such as anthrax and "mad cow disease." Currently, the lab specializes in diseases that can harm livestock but not humans. The proposed expansion would upgrade the lab from the current Biosafety Level 3 facility to a Biosafety Level 4 facility. The other Biosafety Level 4 facilities in the U.S. include the National Institutes of Health in Bethesda, MD; the Centers for Disease Control in Atlanta, GA; the U.S. Army Medical Research Institute of Infectious Diseases in Frederick, MD; and a small facility at Georgia State University in Atlanta, GA. Other labs around the country that may also be upgraded from Biosafety Level 3 facilities are located in Athens, GA, and Ames, IA.

*Defense Against Biological Terrorism* Sohns, Torsten

#### The ASA NEWSLETTER

October 29, 1999

This edited paper (full copy provided by ASA upon request) examines the possible dangers to civilians posed by biological warfare (BW) agents in the hands of terrorists and provides suggestions for appropriate defensive measures. Countermeasures for bioterrorism and proposals for an anti-bioterrorism program are described in length. Domestic Terrorism With Chemical or Biological Agents: Psychiatric Aspects DiGiovanni, Cleto Jr., M.D. American Journal of Psychiatry

October 1999

This article highlights the mental health consequences of a domestic terrorist incident involving chemical and/or biological (CB) weapons. The article delineates the need for psychiatrists in the event of a CB terrorist incident due to the disturbances of behavior and cognition which can result directly from the pharmacological actions of some CB agents.

#### Prescription For Survival Roos, John

#### Armed Forces Journal INTERNATIONAL October 1999

The U.S. will invest millions of dollars in the fiscal year in developing specialized detection and protective gear for use in the event of a CB incident, resulting in materiel suited for use both in U.S. cities and on distant battlefields. This article describes several CB defense programs that have recently been developed. Some of the programs developed as Joint-Service Contamination Programs are the Automatic Chemical Agent Detection Alarm (ACADA); Joint Warning and Reporting Network (JWARN); and the Joint Chemical Biological Agent Water Monitor (JCBAWM). Some of the Joint-Service Biological Detection Programs mentioned are the Interim Biological Agent Detector (IBAD); Air Base/Port Biological Detection (Portal Shield); Advanced Concept Technology Demonstration (ACTD); and Joint Biological Remote Early Warning System (JBREWS) ACTD. These and other programs are described in this article.

# *Grants aid bioterrorism preparations* Atwood, Dwayne

# http://www.adn.com:80/stories/T99110426.html

November 4, 1999

In September the CDC began doling out some \$40 million for 127 projects around the U. S. to upgrade detection of and response to CB weapons. Alaska has been the recipient of three of these grants. The grants will aid Alaska in improving communications and disease detection, and to improve the Anchorage lab that could be responsible for testing for 5 lethal bacteria that would likely be tools of bioterrorism.

#### Detector in Your Pocket Brown, Barry http://abcnews.go.com:80/sections/world/DailyNews/ biotech991109.html

#### November 11, 1999

A Canadian company has developed a biotechnology that could lead to the first pocket-sized CB warfare detector. The device is designed to alert the user to the presence of agents and the direction from which they came. In the device, a smart antibody chemically reacts to agents by generating a light. A spectral analysis of the light reveals what agent is present. This information can be flashed on a screen along with instructions to follow once the agent has been identified.

> See "CB in the News" Continued on page 8

# CALENDAR OF EVENTS

The CBIAC maintains a Calendar of Events highlighting conferences, symposia, meetings, exhibitions and workshops of interest to the CB community in every issue of our newsletter and on the CBIAC homepage at http://www.cbiac.apgea.army.mil. We invite CBIAC users to submit information on various events to Mary Jo Waters (watersm@battelle.org) at 410-612-6418.

#### **2000 MEETINGS**

February 22-23, 2000 Jane's Chem-Bio 2000: Across the Response Continuum Hyatt Newporter Newport Beach, California POC: Marian Sullivan Tel: (703) 683-3700 ext.204 (800) 824-0768 ext.204 Fax: (703) 836-0118 Email: conference@janes.com URL: http://conference@janes.com

#### February 23, 2000 Technical Support Working Group Conference (TSWG) Advanced Program Briefing for Industry (APBI): TSWG Requirements for FY2001

(Event #009) Sheraton Crystal City Arlington, Virginia POC: Kanzada Douglass Tel: (703) 522-1820 Fax: (703) 522-1885 Email: kdouglass@ndia.org URL: http://www.ndia.org/

#### March 1-4, 2000

#### *South Carolina Emergency Care Symposium* Kingston Plantation/Embassy Suites North Myrtle Beach, South Carolina POC: Low Country Regional EMS Council Tel: (843) 569-2220 Fax: (843) 569-2226

March 11-17, 2000 *In-House Medical Management of Chemical and Biological Casualties Course (MCBC)* USAMRICD-Aberdeen Proving Ground, MD and USAMRIID-Fort Detrick, MD (Advance registration required) POC: USAMRICD Chemical Casualty Care Division Tel: (410) 436-2230 Fax: (410) 436-3086 Email: ccc@apg.amedd.army.mil URL: http://ccc.apgea.army.mil

March 26-31, 2000 **2000 Spring Simulation Interoperability Workshop** Holiday Inn International Drive Resort Orlando, Florida POC: Pat Burgess Tel: (407) 658-5031 Fax: (407) 658-5059 Email: pburgess@ist.ucf.edu URL: http://siso.sc.ist.ucf.edu/siw/00spring/index.htm http://www.sissostds.org.siw March 27-30, 2000

26th Environmental Symposium and Exhibition: Sustaining DoD Readiness: "Changes and Challenges in DoD Environmental Priorities" (Event #044) Long Beach Convention Center Long Beach, California POC: Erin Curry Tel: (703) 247-2578 Fax: (703) 522-1885 Email: ecurry@ndia.org URL: http://www.ndia.org/

March 27-30, 2000 *11th Annual U.S. Army Ground Vehicle Survivability Symposium* (Event #054) DoubleTree Hotel & Naval Post Graduate School Monterey, California POC: Ira Click Tel: (703) 247-2573 Fax: (703) 522-1885 Email: iclick@ndia.org URL: http://www.ndia.org

#### April 2-6, 2000 **DOD Medical Initiatives Conference & Exhibition Weapons Mass Destruction (WMD 2000) "MEDIC-WMD 2000"** (Event #017) The Hyatt Regency Hotel Arlington, Virginia POC: Kanzada Douglass Tel: (703) 522-1820

Fax: (703) 522-1885 Email: kdouglass@ndia.org URL: http://www.ndia.org/

#### April 11-13, 2000

#### SLAAD Annual Symposium/Quarterly Meeting (Event # 010) JHU/APL Laurel, Maryland POC: Erin Curry Tel: (703) 522-1820 Fax: (703) 522-1885 Email: ecurry@ndia.org URL: http://www.ndia.org/

April 30-May 2, 2000 *National Disaster Medical System Conference 2000* Alexis Park Hotel Las Vegas, Nevada POC: Beth Marshall, CHEP Program Office Tel: (410) 642-1857 Fax: (410) 642-1090 Email: marshallbeth@hotmail.com URL: http://www.oep.dhhs.gov/NDMS Conference/ndms conference.html

#### May 6-12, 2000 In-House Medical Management of Chemical and Biological Casualties Course (MCBC) USAMRICD-Aberdeen Proving Ground, MD and USAMRIID-Fort Dotriels MD

Detrick, MD (Advance registration required) POC: USAMRICD Chemical Casualty Care Division Tel: (410) 436-2230 Fax: (410) 436-3086 Email: ccc@apg.amedd.army.mil URL: http://ccc.apgea.army.mil

#### May 7-12, 2000

# Chemical and Biological Medical Treatment Symposia Series CBMTS

AC Laboratorium Spiez (ACLS) Spiez, Switzerland POC (U.S.): Richard Price Tel: 207- 829-6376 Fax: 207-829-3040 Email: asa@ime.net POC (ACLS): Dr. Rudolf Portmann Email: CBMTS@gr.admin.ch Fax: 41-33-22-8-1402 URL: http://www.asanltr.com/

#### May 15-18, 2000

#### Global Demilitarization Symposium & Exhibition (Event #058) Coeur d'Alene, Idaho POC: Megan McCrory Tel: (703) 522-1820 Fax: (703) 522-1885 Email: mmccrory@ndia.org URL: http://www.ndia.org

#### May 22-24, 2000

# The International CW Demil Conference (CWD2000)

OPCW (May 22) Dutch Ministry of Foreign Affairs (May 23-24) The Hague, Netherlands POC (DERA): Ian Chilcott Tel: +44 (0) 1980 613129 Fax: +44 (0) 1980 613139 Email: dmil@dera.gov.uk or eichilcott@aol.com URL: http://www.dera.gov.uk

#### May 22-25, 2000 Remediation of Chlorinated and Recalcitrant Compounds: The Second International Conference

Monterey Conference Center Monterey, California Tel: (800) 783-6338 (USA and Canada), (614) 424-5461 Fax: (614) 488-5747 Email: conferencegroup@compuserve.com URL: http://www.battelle.org/environment/er/chloconf.html

#### June 4-9, 2000

U.S. Army Medical Defense Bioscience Review 2000 Marriott's Hunt Valley Inn Hunt Valley, Maryland POC: Katie Deel Tel: (410) 679-3290 Fax: (410) 679-7104 Email: Kathy.M.Deel@SAIC.com URL: http://chemdef.apgea.army.mil/Bios...%202000/ bioscience review 2000.htm

#### June 12-15, 2000 FEMA 2000 Technology Partnerships for Emergency Management Workshop: "Moving Preparedness, Mitigation, and Response into the Next Millennium" Sheraton Hotel

Colorado Springs, Colorado POC: Kimberly Taylor Tel: (303) 275-4358 Fax:: (303) 275-4320 Email: kimberly\_taylor@nrel.gov/surviving\_disaster

#### June 13-15, 2000 *NBC 2000: Symposium on Nuclear, Biological and Chemical Threats in the 21st Century* Helsinki University of Technology

Espoo, Finland POC: Dr Katri Laihia Tel: +358-14-602 655 Fax: +358-14-602 501 Email: laihia@cc.jyu.fi URL: http://www.vtt.fi/aut/rm/spt/index1.htm

#### June 19-23, 2000 *Worldwide Chemical Conference* (Event #030) Fort Leonard Wood, Missouri POC: Dick Riegel Tel: (703) 247-2593 Fax: (703) 522-1885 Email: driegel@ndia.org URL: http://www.ndia.org

#### June 19-23, 2000 *EUROSATORY 2000: International Land Defence Equipment Exhibition* Paris-Le Bourget, France Tel: 33-1 44 14 58 10 Fax: 33-1 42 30 70 88 Email: Coges.eurosatory@wanadoo.fr URL: http://www.eurosatory.com/anglais/welcome.shtml

#### June 26-29, 2000 *The 6th Annual Joint Aerospace Weapons Systems Support, Sensors and Simulation (JAWS S<sup>3</sup>) Symposium & Exhibition* (Event # 092) Adam's Mark Hotel San Antonio Riverwalk San Antonio, Texas POC: Erin Curry Tel: (703) 247-2578 Fax: (703) 522-1885 Email: ecurry@ndia.org URL: http://www.ndia.org http://www.jawswg.hill.af.mil

June 26-29, 2000 *16th Annual Security Technology Symposium & Exhibition Williamsburg Marriott* Williamsburg, Virginia (Event #049) POC: Angie DeKleine Tel: (703) 247-2599 Fax: (703) 522-1885 Email: adekleine@ndia.org URL: http://www.ndia.org/

# **CBIAC ACTIVITIES**

By CBIAC staff

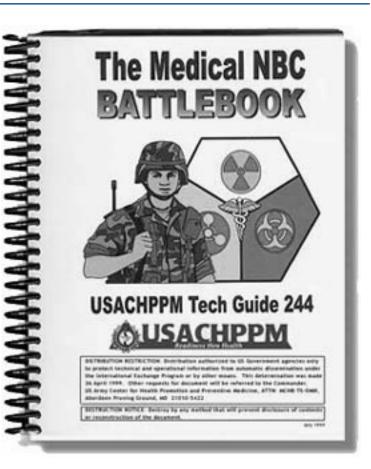
◆ Dr. Jim King, CBIAC Deputy Director, and Mr. Don McGonigle, CBIAC Information Systems Manager, visited Mr. John Hnatio and Dr. Bob Hughes, Industrial College of the Armed Forces (ICAF), National Defense University (NDU), Fort McNair, DC on October 14, 1999. Mr. Hnatio is developing a seminar on strategic decision making and complex national security events involving weapons of mass destruction. Dr. King covered IACs and a CBIAC overview. Mr. McGonigle discussed Biological and Chemical Warfare Online Repository and Technical Holdings (BACWORTH) and Chemical and Biological Archival Information Management System (CBAIMS). Followon meetings are planned.

♦ Mr. Don McGonigle participated in the International Symposium on Occupational Exposure Databases and Their Application for the Next Millennium. The symposium was held in London, UK from November 1 through 3, 1999. The CBIAC display, which featured our database work, was a focus of attention, and gave the CBIAC the opportunity to address exposure database consistency, compatibility, and interchangeability in a major international setting.

◆ On November 30, 1999, CBIAC staff members Mr. Richard Gilman, Ms. Judy Hermann, and Ms. Suman Adler attended a talk by Dr. D.A. Henderson on "The Booming Threat of Terrorism: Rumor or Reality." Dr. Henderson is the Director of the Center for Civilian Biodefense Studies at the Johns Hopkins School of Hygiene and Public Health. The Center fosters development of medical and public health policies and structures to protect civilian populations from bioterrorism. Dr. Henderson examined U.S. and international bioterrorism defense policies, e.g., surveillance, clinical and laboratory diagnosis, epidemiology, quarantine, vaccination and treatment. Participation afforded the CBIAC an outstanding opportunity to interact with CB defense experts from academia.

♦ On December 1, 1999, Mr. Ron Evans, Director, CBIAC met with COL Pat Nilo, the Commandant of the U.S. Army Chemical School, Maneuver Support Center at Fort Leonard Wood, MO. During the meeting, COL Nilo and Mr. Evans explored means through which the CBIAC could support the Chemical School's strategic and business planning processes and outlined approaches to maintain and strengthen the linkage between the Chemical School and the CBIAC.

♦ On December 2, 1999, Mr. Ron Evans, Dr. Jim King, and Ms. Janice Rhodes, CBIAC Technical Area Task Manager, met with LTC Robert Serino, Chief of the Chemical Division, Maneuver Support Center Directorate of Combat Developments, Fort Leonard Wood, MO. Discussions were held to determine the support needs of the Chemical Division and identify means through which the CBIAC could provide support for Chemical Combat Developments and assist in development of the Future NBC Architecture Plan.



# The Medical NBC Battlebook Available from the CBIAC

The Medical NBC Battlebook (U.S. Army Center for Health Promotion and Preventive Medicine [USACHPPM] Tech Guide 244) can now be ordered from the CBIAC. The Battlebook covers nuclear weapons, radiological hazards, biological agents, chemical agents, lasers and radiofrequency hazards, NBC defense equipment, and points of contact. The Battlebook is only available to U.S. Government Agencies.

DoD agencies and units can order free copies by sending an official request to:

Commander

U.S. Army Center for Health Promotion and Preventive Medicine 5158 Blackhawk Road Aberdeen Proving Ground, MD 21010-5422

The request must contain a mailing address and a point of contact. The memorandum must be signed by the commander or other appropriate authority.

CBIAC distributes the Battlebooks to non-DoD agencies at a cost of \$5.00 per copy.

For more information contact the CBIAC:

Telephone: 410-676-9030 Facsimile: 410-676-9703

#### "DATSD(CBD)" Continued from page 3

#### Dr. Johnson-Winegar:

I am very pleased to have been selected for this position and look forward to working with all aspects of the CB community. I want to emphasize the joint nature of the DoD program, and to ensure that all the DoD efforts are coordinated with other government agencies, with academia and industry and with our Allies. The CB threat has been facing us for a long time, and I do not think it will diminish any time soon. Quite the contrary -- in my opinion, we have to face an increasing possibility of seeing the use of chemical or biological agents- either in a military scenario or in a terrorist attack. It is incumbent upon all of us to focus our efforts so that we can be better prepared for that eventuality. I admit we have a big challenge ahead, but I am confident that we have the foundation for a strong program that will move us to achieving our objectives. I look forward to the opportunity to visit with the participating organizations, laboratories, and contractors in the CB defense program and to meet the people involved in this high priority work.



# WINTER 2000

#### "CB in the News" Continued from page 6

*Weapons detector - INEEL turns motor home over to Army* Langston, Jennifer

#### http://www.idahonews.com/11101999/the\_west/94611.htm November 17, 1999

The Idaho National Engineering and Environmental Laboratory (INEEL) has developed a "souped-up" Winnebago for the Army that can detect what is inside an unexploded weapon, the presence of deadly gases in the surrounding air, or residue in soils if one of the weapons has leaked. The transportable laboratory can transmit information anywhere in the world by satellite. Additionally, X-ray equipment is on board that uses digital computing instead of film to figure out where the liquid and explosive tubes are located within a container or weapon.

Additional CB articles that may be of interest are listed below:

*The Demon in the Freezer* Preston, Richard http://www.cryptome.org/smallpox-wmd.htm September 29, 1999

*Improved Modular Decontamination Equipment* Bucci, Rinaldo **Army RD&A** September-October 1999

Glimpsing The Future: New Chem/Bio Gear Hints At What's In Store Tomorrow Roos, John Armed Forces Journal INTERNATIONAL October 1999

Seoul claims North Korea chemical weapons up fivefold http://cnn.com/ASIANOW/east/9910/11/arms.korea.north.reut /index.html October 12, 1999

Acoustic trickery can spot dangerous chemicals in sealed drums Sample, Ian http://www.newscientist.com:80/ns/19991030/newstory4.html October 30, 1999

DoD Works to Counter Chemical-Biological Threats Kozaryn, Linda http://www.defenselink.mil/news/Nov1999/ n11031999\_9911034.html November 5, 1999

21st Century Inventions: Warfare Rosner, Hillary http://www.msnbc.com:80/news/334593.asp?cp1=1 November 12,1999

Russia Gives Rare Chemical Arms Facts, Wants Help http://www.russiatoday.com:80/news.php3?id=114229 December 2, 1999

## NEW CB RESOURCES

By Richard M. Gilman

#### Books

Potomac Institute for Policy Studies. **Counter Biological Terrorism Panel. Countering Biological Terrorism in the U.S.: An Understanding of Issues and Status.** Dobbs Ferry, NY: Oceana Publications, 1999, pp. 426.

A group of leading military and civilian experts collaborate in an analysis of the threats posed by biological weapons and the growth of nihilistic terrorist groups bent on inflicting large numbers of casualties. Topics covered include the "The Emerging Threat Environment;" "Defense Against Biological Weapons;" "Countering Terrorist Groups;" "Countering Emerging Infectious Diseases;" "Views on Soviet Biological Weapons Program;" "The Role of Intelligence in Combating Terrorism;" "Bioterrorism Consequence Management;" "Advanced Countermeasures;" "The Case for a Special Operations Response to Biological Terrorism;" "Bio-terrorist Attack Pathways and Social/Civil Infrastructure;" "DOD Assistance to Civil Authorities"; and "New Approaches to Counter Biological Terrorism with Electrotechnologies."

There are two appendices. Appendix A provides short biographical notes about the panel of experts who contributed to the book. Appendix B provides "Background Information on Arms Control and Biological Terrorism."

CB-168283 ISBN 0-379-21395-8 Oceana Publications, Inc. 75 Main Street Dobbs Ferry, NY 10522 (914) 693-8100

#### Documents from the Web

CDC, FDA, PHTN and USAMRIID. Biological Warfare and Terrorism: The Military and Public Health Response. Sept., Oct. 1999.

http://www.biomedtraining.org/handouts.htm

In September and October of this year the CDC, FDA, PHTN (Public Health Training Network) and USAMRIID (U.S. Army Medical Research Institute for Infectious Disease) jointly sponsored two live satellite broadcasts of this program. The target audience includes military and civilian medical providers, public health professionals, clinical laboratory staff, first responders and others who would be called upon to recognize and manage casualties in the event of a bioterrorist attack.

There are approximately 251 pages of course materials. These include a course handbook compiled by USAMRIID, student material, a "Bioterrorism Readiness Plan" for healthcare facilities and a CDC compilation of "Case Definitions for Infectious Disease Conditions."

CB-168506 USAMRIID Ft. Detrick, MD 21702-5011

#### Journals

**Annals of Emergency Medicine.** Vol. 34, No. 2 (August 1999), pp. 177-212, 219-224 and 229-232.

The nine articles in this issue dealing with terrorism utilizing chemical or biological weapons underscore the increasing emphasis practitioners of emergency medicine are placing on meeting this threat. The themes covered include training medical residents how to respond to bioterrorism, responding to the release of chemical warfare agents in the civilian community, an emergency room protocol for handling contaminated patients and interim CDC guidelines for handling the alleged terrorist use of anthrax.

CB-168284 ISSN 0196-0644 Mosby, Inc. 11830 Westline Industrial Dr. St. Louis, MO 63146-3318 1-888-325-4177

#### Website resources for CB research

Aerobiological Engineering http://www.engr.psu.edu/www/dept/arc/server/wjkaerob.html

Analytical Chemistry (Sci-media encyclopedia of...) http://www.scimedia.com/chem-ed/analytic/ac-media meths.htm

Canadian Centre for Occupational Health and Safety—Internet Directory http://www.ccohs.ca/resources/

Medical Microbiology http://gsbs.utmb.edu/microbook/

Mitretek—Site Map for Chemical, Biological and Nuclear Systems http://www.mitretek.org/mission/envene/site map.html

National Antimicrobial Information Network

http://www.ace.orst.edu/

Pharma Scientific and Regulatory Affairs—Biological and Chemical Weapons

http://www.pharma.org/srpub/weapons.html

SBCCOM—Program Director for Domestic Preparedness http://dp.sbccom.army.mil

U.S. Airforce Counterproliferation Center http://www.au.af.mil/au/awc/awcgate/awc-cps.htm

# **INQUIRIES**

By Judith A. Hermann

Excerpts from Inquiry 1999-0406:

# Q: What progress has been made in the development of decontamination products delivered through fire fighting foams?

A: DS2 and bleach solutions are commonly used for decontamination of nerve agents. Research is underway to investigate the use of biocatalytic decontamination methods.

OPAA-2, the organophosphorus acid anhydrolase produced by Alteromonas JD6.5, has a very high catalytic activity against Soman (GD), Sarin (GB), GF, and the nerve-agent analog diisopropyl fluorophosphate (DFP). The gene encoding OPAA-2 has recently been cloned in Escherichia coli. The resulting recombinant E. coli is capable of producing large quantities of the nerve-agent degrading enzyme.

This has paved the way for studies assessing the potential of enzyme-based decontamination systems, including those incorporated into fire fighting foams, to provide effective, non-toxic, non-corrosive, and environmentally friendly nerve agent decontamination.

Using a different approach, Sandia National Laboratories has recently filed for a patent on a substance tentatively called Decon Foam 100 (1). During preliminary testing it destroyed simulants of VX, mustard and soman and it also destroyed a simulant of anthrax. The expectation is that this single product will quickly and effectively decontaminate all chemical and biological agents including viral particles and bacterial spores. It is said to be a fire retardant as well.

The Decon Foam would be inexpensive to produce, harmless to people and could begin neutralizing chemical, biological, or combinations of agents in minutes. The active ingredients, surfactants and mild oxidizing substances, are delivered through a special nozzle to generate a quantity of foam about 100 times its original liquid volume. Within several hours the product, now returned to its liquid state, should be "benign enough following a chem-bio incident to be washed down the drain like dish soap." (1)

Studies examining the feasibility of enzyme mediated decontamination include:

#### **CB-104464**

Cheng, T-C., Calomiris, J. J. : *A Cloned Bacterial Enzyme for Nerve Agent Decontamination. Enzyme and Microbial Technology* 18:597-601, 1996.

#### CB-107091

LeJeune, K.E., Russell, A. J.: *Biocatalytic Nerve Agent Detoxification in Fire Fighting Foams*. Biotechnology and Bioengineering, 62(6):559-665, September 1998

Reference:

1. http://www.newswise.com/articles/ 1999/3/FOAM.SNL.html

#### "CBD Contract Awards" Continued from page 4

#### 21. Air Filter Assembly

Aerometals Inc. 3920 Sandstone Drive El Dorado, CA 95762 \$59,400. October 6, 1999 By Defense Supply Center-Richmond

#### 22. M45 CB Mask Spare Faceblanks

Campbell Plastics Engineering & MFG., Inc. 130 S. Klug Circle Corona, CA 91720 \$99,717. October 20, 1999 By U.S. Army Tank-Automotive and Armaments Command-Rock Island

#### 23. Establishment and Operation of the Chemical and Biological Defense Information Analysis Center Battelle Memorial Institute Columbus, OH \$174,171,306. October 28, 1999 By Defense Supply Center-Columbus

 24. Woodland Camouflage Enhanced Hot Weather Coats Caribbean Needle Point, Inc. Penuelas, Puerto Rico \$8,008,041. November 9, 1999

By Defense Supply Center-Philadelphia

25. Woodland Camouflage Enhanced Hot Weather Coats EA Industries, Inc. San Lorenzo, Puerto Rico \$15,278,910. November 9, 1999 By Defense Supply Center-Philadelphia

### BATTELLE WINS CBIAC CONTRACT

Battelle's work in the chemical and biological defense arena continues to strengthen with the recent win of a 10-year, \$174 million Chemical and Biological Defense Information Analysis Center (CBIAC) contract with the Department of Defense (DoD).

The contract win continues Battelle's 13 years of operating the CBIAC at Aberdeen Proving Ground Edgewood Area, MD, for the DoD. Battelle serves as prime contractor for CBIAC and has five subcontractors. They are: Horne Engineering Services, Inc.; Quick Silver Analytics, Inc.; Sci Tech Services, Inc.; MTS Technologies, Inc., and Innovative Emergency Management, Inc.

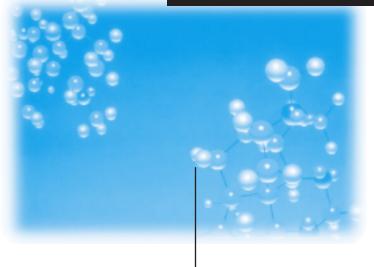
In addition to supporting the DoD, the CBIAC has interagency agreements in place to support other federal agencies such as the Departments of Energy, State, Justice and Transportation. The CBIAC's core program services extend to all state and local governments and the first responder community such as local emergency planners, firefighters, medics and law enforcement personnel.

10

	CBIAC	C User Survey	2000!	
incorporate your s	suggestions and improve of		to provide feedback so that we may emical and biological defense community. ?. Thank you!	
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2. Please rate the CBIAC products and services that you have used, using the following scale: 5=Excellent 4=Very Good 3=Satisfactory 2=Fair 1=Poor				
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