

Innovation Key to Force Protection Battlelab

by Lt Col Charles Whitzel and MSgt Robert Mills USAF Force Protection BattleLab, Lackland AFB, Texas

"Force protection enables force projection." That's the rally cry of the US Air Force Force Protection Battlelab. From cutting edge chemical and biological detection devices to futuristic modeling and simulation tools, the Force Protection Battlelab is blazing new trails in the fight against those who would do us harm.

The Battlelab, located at Lackland AFB, was established less than a year after terrorists ignited a truck bomb at Khobar Towers in Saudi Arabia in June of 1996, killing 19 airmen. The effects of that tragedy combined with

more recent events such as the USS Cole incident, show the threat to US interests, at home and abroad, is real and continues to change in ways that makes it more dangerous and difficult to counter. The Battlelab's mission is to stay ahead of these threats by identifying and fielding innovative concepts to enhance force protection capabilities.

"Our job is to rapidly prove the military worth of innovative force protection ideas and get them to the warfighter," according to the commander of the Battlelab, Colonel Regan Springs. "We have a small cadre of

THOLUS DEFENSOR FO highly motivated military experts from a variety of specialties supplemented by the Air National Guard, Reservists, and civilian contractors. All of our people bring an important piece of the puzzle to the fight."

The Force Protection Battlelab promotes the total force concept by leveraging the unique experience and expertise of military personnel from 13 different specialties to include Security Forces, Intelligence, Office of Special Investigations, Civil Engineering, Communications, Engineering, Medical, and Acquisition. The Battlelab examines every conceivable issue relating to force protection; from blast mitigation, detection of biological agents, communications, training, and more.

Over the past four years, the Force Protection Battlelab has worked closely with each of the other military services, the major commands, battlelabs, industry, and academia on hundreds of force protection initiatives. Many

of these concepts have been fielded and are now in the hands of warfighters. PROTECTION BA

Several examples of chemical and biological defense initiatives the Force Protection Battlelab has evaluated include the Ruggedized Advanced Pathogen Identification Device (RAPID), which has proved the worth of employing a two-person biological augmentation team to accurately and efficiently identify biological agents at forward-operating locations.

Another is the Chemical, Biological Aerosol Warnings System (CBAWS), which will provide the first-in deployed forces with the first true "Alert-to-Warn" capability, versus current methods that only provide "Alert-to-Treat" notifications. Finally, there is

the Military Working Dog Biological Organism Search Study (K-9 BOSS), the objective of which is to detect specific biological materials in the same way current K-9s are used for explosive and drug detection.

Other examples of all encompassing force protection initiatives include using tactical and subtactical Unmanned Aerial Vehicles (UAVs) in a force protection



The Chemical Warfare/Chemical and Biological Defense Information Analysis Center (CBIAC) is a Department of Defense (DoD)-sponsored Information Analysis Center (IAC) operated by Battelle Memorial Institute and administered 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 is supported by Horne Engineering Services, Inc., Innovative Emergency Management, Inc., MTS Technologies, Inc., QuickSilver Analytics, Inc., and SciTech, Inc. The CBIAC Contracting Officer's Technical Representative (COTR) is Mr. Joseph D. Williams.

CDR USA SBCCOM

Edgewood Chemical Biological Center ATTN: AMSSB-RRT-OM (Joe Williams E3330) 5183 Blackhawk Road Aberdeen Proving Ground, MD 21010-5424 Joseph.Williams@sbccom.apgea.army.mil

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, to include local emergency planners, firefighters, medics and law enforcement personnel.

The CBIAC is located in Building E3330, Room 150 Aberdeen Proving Ground - Edgewood Area, Maryland 21010. For further information or assistance, visit or contact the CBIAC.

CBIAC

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The *CBIAC Newsletter*, a quarterly publication of the CBIAC, is a public release, unlimited distribution forum for chemical and biological defense information. It is distributed in hardcopy format and posted in Portable Document Format (PDF) on the CBIAC Homepage.

The CBIAC welcomes unsolicited articles on topics that fall within its mission scope. All articles submitted for publication consideration must be cleared for public release prior to submission. The CBIAC reserves the right to reject or edit submissions. For each issue, articles must be received by the following dates: Winter (First Quarter) - November 1st; Spring (Second Quarter) -February 1st; Summer (Third Quarter) - May 1st; Fall (Fourth Quarter) - August 1st.

All paid advertisements and articles are subject to the review and approval of the CBIAC COTR prior to publication. The appearance of an advertisement or article in the *CBIAC Newsletter* does not constitute endorsement by the DoD or the CBIAC.

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SAVING TIME, SAVING MONEY: Department of Defense IACs Offer Centralized Scientific and Technical Information Resources to the DOD Community

Getting pertinent scientific and technical data in a timely and cost effective manner is no longer wishful thinking. Thanks to the DoD Information Analysis Centers, scientists, engineers and information specialists with expertise in specific technologies are available to provide a wide range of data collection and analysis techniques to the DoD scientific and technical research community.

Information Analysis Centers (IACs) are formal organizations chartered by the DoD to help locate, create, analyze, and use scientific and technical information. The IACs establish and maintain comprehensive knowledge bases that include historical, technical, scientific, and other data and information collected on a worldwide basis. The Defense Technical Information Center (DTIC) an element of the Defense Information Systems Agency (DISA), administratively manages and funds thirteen contractor-operated joint service-oriented IACs. Nine other IACs are sponsored by military services.

Each IAC provides in-depth analysis services and information products and resources. IACs respond to technical inquiries, prepare state-of-the-art reports, handbooks, and databooks, perform technology assessments and support exchanges of information among scientists, engineers, and practitioners of various disciplines within their scope.

Visit the IAC Homepage at http://iac.dtic.mil/ for an introduction to the DOD IACs and links to each IAC homepage or brochure.

Defense Information Systems Agency (DISA), Defense Technical Information Center (DTIC) IACs:

AMPTIAC – Advanced Materials & Processes Technology IAC http://amptiac.iitri.org

CBIAC – Chemical Warfare/Chemical & **B**iological Defense **IAC** http://www.cbiac.apgea.army.mil/

CPIA – Chemical Propulsion Information Agency http://www.cpia.jhu.edu/

DACS – Data & Analysis Center for Software http://www.dacs.dtic.mil

HSIAC – Human Systems IAC http://iac.dtic.mil/hsiac/HSI.htm

IATAC – Information Assurance Technology Analysis Center http://iac.dtic.mil/iatac/

IRIA – Infrared IAC http://csdnta.erim-int.com/iria/iriaweb.nsf/

MSIAC – Modeling and Simulation IAC http://www.msiac.dmso.mil/

MTIAC – Manufacturing Technology IAC http://www.mtiac.iitri.org

NTIAC – Nondestructive Testing IAC http://www.ntiac.com/

RAC – **R**eliability **A**nalysis **C**enter http://rac.iitri.org

SURVIAC – **Sur**vivability/**V**ulnerability **IAC** http://iac.dtic.mil/surviac/

WSTIAC - Weapons Systems Technology IAC http://wstiac.iitri.org

Military Service-Sponsored IACs:

APMIAC – Airfields, Pavements, & Mobility IAC http://pavement.wes.army.mil

CEIAC – **C**oastal Engineering **IAC** http://iac.dtic.mil/3_resources/pdf/ceiac.pdf

CRSTIAC – **C**old **R**egions **S**cience & **T**echnology **IAC** http://www.crrel.usace.army.mil/crstiac/crstiac.html

CTIAC – Concrete Technology IAC http://iac.dtic.mil/3_resources/pdf/ctiac.pdf

DTRIAC – **D**efense Threat Reduction IAC http://iac.dtic.mil/3_resources/pdf/dtriac.pdf

EIAC – Environmental **IAC** http://www.wes.army.mil/el/

HEIAC - Hydraulic Engineering IAC http://hlnet.wes.army.mil/

SAVIAC – **S**hock **A**nd **V**ibration **IAC** http://saviac.xservices.com

SMIAC – **S**oil Mechanics **IAC** http://www.wes.army.mil/GL/SMIAC/smiac.html





CONTRACT AWARDS • By Mary Frances Tracy

CBD Contracts:

Canadian Reactive Skin Decontamination Kit (RSDL)

Battelle Memorial Laboratory 505 King Avenue Columbus, OH 43201-2693 \$48,299. February 6, 2001 By U.S. Army Medical Research and Material Command, Fort Detrick, MD

Sensor Integration and Modeling for Biological Detection (SIMBAD)

Arat Associates PO Box 6024 Sherman Oaks, CA 91413 \$354,934 (plus Option 1 for \$178,891). March 21, 2001 By Defense Advanced Research Projects Agency, Arlington, VA

Anthrax Research

Advanced Biosystems, Inc., Subsidiary of Hadron, Inc. Alexandria, VA \$2,600,000. March 22, 2001 By U.S. Army Medical Research and Material Command, Fort Detrick, MD

Portable, Reliable and Inexpensive Sensor System for the Detection of Chemical Warfare Agents

Sensor Research and Development Corp. \$8,500,000. April 2001 By U.S. Office of Naval Research, Arlington, VA

Other Contracts of Interest:

Predictive Toxicology Research and Technical Research in Support of the Tri-Service Toxicology Research Program

Mantech Geo-Centers Joint Venture Fairfax, VA \$826,848. February 28, 2001 By Air Force Research Laboratory, Wright-Patterson AFB, OH

Develop and Deliver Taqman PCR Probes for Rapid Detection of the Viral Pathogens VEE, EEE, WNV, and SLE

The Regents of the University of California 160 Administration Drive Irvine, CA 92697-1875 By Brooks Air Force Base, TX

Improved Toxicological Agent Protective (ITAP)

ChemFab Corporation 701 Daniel Webster Highway Merrimack, NH 03045 Sole Source (\$ not provided). March 23, 2001 By U.S. Army Tank-Automotive & Armaments Command, Rock Island, IL

Ambersorb 348F Resin in support of the M291 Skin Decontamination Kit

Rohm and Haas Co. Philadelphia, PA \$13,500,000. March 29, 2001 By U.S. Army Tank-Automotive & Armaments Command, Rock Island, IL

M-17 Lightweight Decontamination System

Engineered Support Systems, Inc. St. Louis, MO \$4,400,000. April 12, 2001 By Defense Supply Center Philadelphia, Philadelphia, PA

Remediation of Various Hazardous Waste Sites

Conti Environmental Inc. South Plainfield, NJ \$250,000 (Part of a \$25,000,000 firm-fixed-price, cost reimbursement task order contract). April 24, 2001 By U.S. Army Corps of Engineers, Concord, MA

Final Closure Procedures at the Johnston Atoll Chemical Agent Disposal System Facility

Washington Demilitarization Co. Boise, ID \$19,745,703. April 26, 2001 By U.S. Army Operations Support Command, Rock Island, IL

310 One-Watt Linear (OWL) Cooler Assemblies in Support of Full-rate Production of the Horizontal Technology Integration (HTI) Second Generation Forward Looking Infrared (2nd Gen FLIR)

DRS Infrared Technology Dallas, TX \$2,042,900 (Base year total with an estimated cumulative total of \$7,913,066). April 27, 2001 By U.S. Army Communications-Electronics Command, Fort Monmouth, NJ

Program Management and Technical Support on Destruction of Chemical Weapons

Arthur D. Little Cambridge, MA \$40,000,000 – 60,000,000 (Five year contract). May 14, 2001 By U. S. Army, Washington, DC

Advanced Research, Development and Engineering Support for the Department of Defense

Johns Hopkins University Applied Physics Laboratory Laurel, MD \$100,000,000 (Estimated cumulative total on an indefinitedelivery/indefinite-quantity task order contract). May 24, 2001 By Defense Advanced Research Projects Agency, Arlington, VA

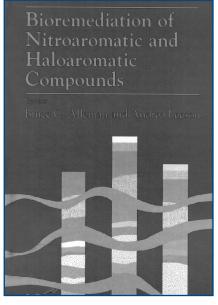
Support State and Local Officials in Exercises in Preparation for Possible CB Terrorist Attacks

Research Planning, Inc. Fairfax, VA \$11,200,000. June 6, 2001 By Department of Justice, Washington, DC

NEW CBIAC INFORMATION RESOURCES • By Richard M. Gilman Books It includes numerous

Alleman, Bruce C. and Andrea Leeson, eds. Bioremediation of Nitroaromatic and Haloaromatic Compounds. Columbus, OH: Battelle Press, 1998, pp. 302.

" This volume deals with the application of bioremediation technologies at sites contaminated with explosives, pesticides, herbicides, PCBs, and other aromatic compounds. Such sites present formidable technical, regulatory, and financial challenges. Bioremediation offers the promise of cost-effective site remediation that can serve as a key component of a well-formulated strategy for



achieving site closure. This volume presents the results of bench-, pilot-, and field-scale projects focused on the use of biological approaches to remediate many problem compounds such as RDX, HMX, TNT, DDT, 2,4-D, nitro- and chlorobenzenes, nitroaniline, hexachlorobenzene, PCPs, PCBs, and dichlorophenol in soils and groundwater." (*Forward*)

CB-175489 D756868 ISBN 1-57477-080-2 Battelle Press 505 King Avenue Columbus, OH 43201 Phone: 1-800-451-3543 Fax: (614) 424-3819 URL: http://www.battelle.org/bookstore

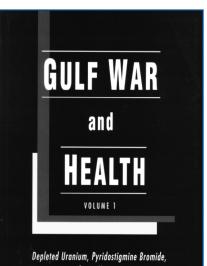
Fulco, Carolyn E., Catharyn T. Liverman and Harold C. Sax, eds. Gulf War and Health. Vol. 1 Depleted Uranium,
Pyridostigmine Bromide, Sarin and Vaccines. Washington,
D.C.: National Academy Press, 1999.

The study reported in this volume was carried out by the Institute of Medicine (IOM) of the National Academy of Sciences, "...to evaluate the published scientific literature concerning the association between the agents to which the Gulf War veterans may have been exposed and adverse health effects." (*Preface*)

It includes numerous tables, figures, six appendices and an index.

Full text can be reviewed online at the website of the National Academy Press reading room located at http://www.nap.edu.

CB-169696 ISBN 0-309-06793-6 National Academy Press Box 285 2101 Constitution Ave., N.W. Washington, D.C. 20055 Phone: 1-800-624-6242 or 202-334-3313 http://www.nap.edu



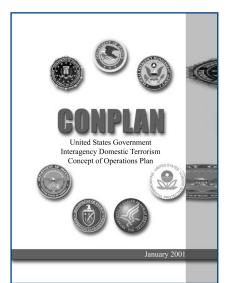
Documents from the Web

Federal Emergency Management Agency. **CONPLAN: United States Government Interagency Domestic Terrorism Concept of Operations Plan.** Washington, D.C.: FEMA, 2001. http://www.fema.gov/r-n-r/Conplan

"The CONPLAN was developed through the efforts of six primary departments and agencies with responsibilities as identified in Presidential Decision Directive/NSC-39 (PDD-39). This plan has been developed consistent with relevant PDDs', Federal law, the Attorney General's Critical Incident Response Plan, the PDD-39

Domestic Guidelines, and the Federal Response Plan and its Terrorist Incident Annex. The FBI has worked with these departments and agencies to provide, maintain, and enhance the Federal Response capability." (Forward)

CB-178659 Federal Emergency Management Agency Washington, D.C.



CALENDAR OF EVENTS

The CBIAC highlights conferences, symposia, meetings, exhibitions and workshops of interest to the CBD community both on our website and in every issue of our newsletter. If you would like to have a CBD-related event posted on the CBIAC Calendar of Events, submit the pertinent information via email to **cbiac@battelle.org**. Due to space limitations, the CBIAC will accept submissions on a first-come, first-served basis and reserves the right to reject submissions. For a more extensive list of events, <u>visit our website at http://www.cbiac.apgea.army.mil/</u>.

September 4-7, 2001 **DTRA's First Biennial Threat Reduction Conference** Norfolk, Virginia POC: DTRA Conference Coordinator Phone: 703.767.5719 Fax: 703.767.0145 DTRAConferenceCoordinator@dtra.mil http://www.ThreatReductionConference.org

September 5-6, 2001 Wetlands & Remediation: The Second International Conference

Sheraton Burlington Burlington, Vermont POC: Karl Nehring Phone: 614.424.7604. wetlandsconf@battelle.org http://www.battelle.org/wetlandscon/default.htm

September 11-12, 2001 Jane's Facility Security: Protecting Infrastructure and Special Events

WestCoast Salt Lake Hotel POC: Katrina Thompson or Erika Davies Phone: 703.683.3700 Fax: 703.836.0118 customer.service@janes.com http://www.janes.com

September 15-21, 2001 COURSE: In-House Medical Management of Chemical and Biological Casualties (MCBC) #6H-F26

USAMRICD, Aberdeen Proving Ground, Maryland and USAMRIID, Fort Detrick, Maryland (Advance registration required) POC: Chemical Casualty Care Division, USAMRICD Phone: 410.436.2230 DSN: 584.2230 Fax: 410.436.3086 Fax DSN: 584 .3086 roger.baxter@amedd.army.mil http://ccc.apgea.army.mil

September 17-19, 2001 The 4th Annual Technologies For Public Safety In Critical Incident Response Conference 2001

Hyatt Regency and Albuquerque Convention Center Albuquerque, NM POC: Lisa Hecker Phone: 703.216.4336 Fax: 703.920.9300 Ihecker@ctc.org http://www.nlectc.org/conf/nij2001/nij2001.html September 25-27, 2001 National Institute for Urban Search and Rescue (NIUSR) Fall 2001 International Conference and Exhibition

Marriott Conference Center, U.S. Space and Rocket Center Huntsville, Alabama POC: Sherry Adlich Phone: 256.726.2122 conference@niusr.org www.niusr.org

September 26, 2001 2:00 – 3:00 p.m. EST **Satellite Broadcast: Live Response "Incident Recovery"** POC: Charles Hall • National Terrorism Preparedness Training Phone: 727.893.9800 ext. 228 terrorism@spjc.edu http://terrorism.spjc.edu

September 28-30 2001 Control Regimes For Chemical And Biological Materials: Towards A Safer And More Prosperous World Phone: +44.(0).1903.815020 Fax +44.(0).1903.816373 admin@wiltonpark.org.uk http://www.wiltonpark.org.uk/

October 29-November 1, 2001

DTIC 2001 Annual Users Meeting and Training Conference DoubleTree Hotel Rockville, MD POC: Richard Sparks Phone; 703.767.8226 DSN: 427.8226 Fax: 703.767.8228 DSN: 427.8228 rsparks@dtic.mil http://www.dtic.mil/dtic/annualconf/

October 1-2, 2001 Jane's WMD 2001: Protecting the Lifeline Washington Plaza Hotel Washington, DC POCS: Katrina Thompson or Erika Davies Phone: 703.683.3700 Fax: 703.836.0118 katrina.thompson@janes.com or erika.davies@janes.com http://conferences.janes.com

October 15-17, 2001 2001 Association of the United States Army Annual Meeting POC: Ilse Dorman x681 or Carmelita Salmon x674 (Registration) POC: Rand Meade x393 (Exhibits) Phone: 703.841.4300 or 800.336.4570 ausa-info@ausa.org http://www.ausa.org/www/annual.nsf/

October 20-26, 2001 COURSE: In-House Medical Management of Chemical and Biological Casualties (MCBC) #6H-F26

CBIAC Newsletter

Summer 2001

Calendar of Events cont.

USAMRICD, Aberdeen Proving Ground, Maryland and USAMRIID, Fort Detrick, Maryland (Advance registration required) POC: Chemical Casualty Care Division, USAMRICD Phone: 410.436.2230 DSN: 584.2230 Fax: 410.436.3086 Fax DSN: 584 .3086 roger.baxter@amedd.army.mil http://ccc.apgea.army.mil

October 28 - November 3, 2001

Composites-At-Lake-Louise: 2001 - A Composites Odyssey Chateau Lake Louise Alberta, Canada POC: P.S. Nicholson, Chairman FAX: 905.577.9099 nicholsn@mcmaster.ca http://composites-lake-louise.mcmaster.ca/

November 4-9, 2001 Association of Military Surgeons of the United States (AMSUS) 108th Annual Meeting San Antonio, Texas meetings@amsus.otg http://www.amsus.org/meetings/current.html

November 6-8, 2001 2nd Symposium on NBC-Decontamination Munster, Lower Saxony, Germany POC: Dr. Alexander Grabowski Phone: +49 (0) 5192 136 403 Fax: +49 (0) 5192 136 355 Email: ahgrabow@bwb.org

November 26-29, 2001 Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) Orange County Convention Center Orlando, Florida http://www.iitsec.org

November 27-30, 2001 International Soldier Systems Conference and Exhibition Bath, England POC: Tracey Berry Phone: +44 (0) 1428.602614 Fax: +44 (0) 1428.604567 t.berry@the-dma.org.uk

November 28, 2001 2:00 – 3:00 p.m. EST Satellite Broadcast: Live Response "Planning and Executing Exercises"

POC: Charles Hall • National Terrorism Preparedness Training Phone: 727.893.9800 ext. 228 terrorism@spjc.edu http://terrorism.spjc.edu

December 10-12, 2001 France-U.S. Defense Business Forum II (#2990) Renaissance Harborplace Hotel Baltimore, MD (Washington-Baltimore Area) POC: Ben Stone or Col. Peter Herrly (Ret) (Liaison in France) Phone: 703.2247.2561 or 01.41.12.91.56 (France) Fax: 703.243.8439 bstone@ndia.org or Pherrly@compuserve.com http://www.ndia.org/committees/international/dbif.htm

December 12, 2001 2:00 - 3:00 p.m. EST **Satellite Broadcast: Consequence Management News,** Equipment, and Training (COMNET) POC: Charles Hall • National Terrorism Preparedness Training Phone: 727.893.9800 ext. 228 terrorism@spjc.edu http://terrorism.spjc.edu

2002 MEETINGS

January 11-15, 2002 **PREPAREDNESS through PARTNERSHIP: Integrating Medical Mass Care Management in a WMD Incident** St. Petersburg, Florida http://www.va.gov/wmd/

March 9-15, 2002 COURSE: In-House Medical Management of Chemical and Biological Casualties (MCBC)

#6H-F26 USAMRICD, Aberdeen Proving Ground, Maryland and USAMRID, Fort Detrick, Maryland (Advance registration required) POC: Chemical Casualty Care Division, USAMRICD Phone: 410.436.2230 DSN: 584.2230 Fax: 410.436.3086 Fax DSN: 584 .3086 roger.baxter@amedd.army.mil http://ccc.apgea.army.mil

April 28-May 3, 2002 **CBMTS IV** AC-Laboratory, Spiez Spiez, Switzerland POC: ASA Phone: 207.829.6376 Fax: 207.829.3040 asa@maine.rr.com http://www.asanltr.com

May 4-10, 2002 COURSE: In-House Medical Management of Chemical and Biological Casualties (MCBC)

#6H-F26 USAMRICD, Aberdeen Proving Ground, Maryland and USAMRID, Fort Detrick, Maryland (Advance registration required) POC: Chemical Casualty Care Division, USAMRICD Phone: 410.436.2230 DSN: 584.2230 Fax: 410.436.3086 Fax DSN: 584 .3086 roger.baxter@amedd.army.mil http://ccc.apgea.army.mil

IN THE NEWS • By Mary Frances Tracy

CHEM-BIO DETECTION; RACE AGAINST TIME

Military Medical Technology Volume 5, Issue 2 – 2001

The military is working hard to develop equipment to warn against the presence of chemical and biological agents. This article discusses the focused research of the Army on several items. The items included are: the Biological Integrated Detection System (BIDS); a second generation BIDS; Biological Agent Warning System (BAWS); Portal Shield; the Navy Interim Biological Agent Detection System (IBADS); the Automatic Chemical Agent Detection Alarm (ACADA); and, the Fox, a modified version of the German Fuchs NBC reconnaissance vehicle. Additionally, the Ruggedized Advanced Pathogen Identification Device (RAPID) has undergone two field trials for potential use with the military. RAPID, along with a software program called LEADER (Lightweight Epidemiology Advanced Detection and Emergency Response) which allows for the transmission of results over a secure Internet connection, can identify a pathogen and report on the resistance of the pathogen to drug therapy and thus help guide treatment.

Army Licenses Portable Device to Analyze Hazardous Materials

Emergency Preparedness News

March 13, 2001

The Army's Edgewood Chemical Biological Center (ECBC) has signed a licensing agreement for commercial sale of a transportable glovebox and filtration system. The system is designed to safely analyze and classify unknown materials. The device is comprised of an isolation container with a view plate and glove ports; a double door airlock and a dunk tank to allow objects to be passed in or out of the isolation container. The device will be marketed by Purified Microenvironments (Miami).

Israel, US pioneer treatment for mustard-gas burns Siegel, Judy

http://cgis.jpost.com/

March 30, 2001

Researchers at Ben-Gurion University of the Negev, the Hebrew University of Jerusalem, and the National Institute of Environmental Health Sciences of the US National Institutes of Health have developed the first effective treatment for mustard-gas burns. The Israeli therapy involves administering povidone iodine in a base of glycofurol, a water-soluble polymer already approved for use in chemical and cosmetic preparations. "Biological Double-Sided Tape": Microscopic Inquiry Aims at Thwarting Bio-Agent Attack

Roos, John

Armed Forces Journal International April 2001

Under a collaborative arrangement between EluSys Therapeutics, Inc., of Pine Brook, NJ, and the US Army Medical Research Institute of Infectious Diseases (USAM-RIID) at Ft. Detrick, MD, researchers are attempting to develop treatments for a wide range of bacteria, toxins, and viruses. Under this program, the preventative treatment calls for injecting a monoclonal antibody-based substance into the bloodstream. This substance, known as the heteropolymer (HP), seeks out the invading pathogen and binds an antigen of choice to the invading substance and to a receptor on a red blood cell, where it is taken to the liver and destroyed.

Federation Confirms Serb Forces Use of Chemical Agent BZ Against KLA Kavanaugh, Kevin

http://www.fas.org/faspir/v52n3.htm

April 3, 2001

The first occurrence of the use of chemical agents during the current Kosovo crisis has been reported. The Federation, on April 14, confirmed the use of BZ by the Yugoslav Army (VJ) against the Kosovo Liberation Army (KLA). Current VJ doctrine allows for the use of BZ against personnel to incapacitate them, then to capture or kill those affected. Current estimates of BZ in the inventory of the VJ are in the 300 ton range. The use of BZ is illegal under the CWC; however, Yugoslavia is not a signatory of the CWC.

Bush to Create New Terrorism Office Newton, Christopher http://dailynews.yahoo.com/h/ap/20010504/pl/ bush_terrorism_1.html

May 4, 2001

President Bush has drafted an executive order creating an office on terrorism to coordinate the government's response to any biological, chemical or nuclear (NBC) attack. The office would exist under the Federal Emergency Management Agency (FEMA) and be at the helm of more than 40 federal agencies responsible to provide emergency personnel and services. Vice President Dick Cheney would oversee the creation of a national terrorism response plan.

"Innovation Key..." cont.

role. The idea is to use UAVs to "take the high ground" to detect and defeat threats around a base. Another is the "Blast and Frag" initiative designed to evaluate the damaging effects of blast and fragmentation from a large vehicle bomb on our facilities and shelters. More importantly, the Battlelab identified methods to protect us from incidents like the Khobar Towers bombing. The Force Protection Battlelab also has a robust Modeling and Simulation capability and has conducted multiple performancebased assessments using analytical models, numerous force-on-force efforts using human-in-the-loop simulations, and has recently expanded its visualization capability.



The Battlelab features versatile Force Protection Modeling and Simulation capabilities.

Force Protection Battlelab; however, force protection should be the foremost thought in every airman's mind. Though there is no such thing as a perfect defense against terrorism, the Battlelab, with your help, is tirelessly striving to stay ahead of the threat.



Tier One CBAWS

Initial CBAWS Control Computer



For further information about the US Air Force Battlelab, contact:

Robert L. Mills, MSgt, USAF Chief, Force Protection Readiness Concepts Phone: 210.671.6042 DSN: 473.6042 Fax: 210.671.0649 DSN: 473.0649 Email: Robert.Mills@LACKLAND.AF.MIL

or visit the Lackland Air Force Securities Forces website at http://afsf.lackland.af.mil/ and select "U.S. AF Force Protection Battlelab"

The Battlelab celebrated its fourth anniversary on April 1, 2001. It's efforts have not gone unnoticed. During a recent ceremony at the Pentagon, the unit was awarded the AF Productivity Excellence Award and was selected as the 11th Wing recipient of the Verne Orr Award.

"It's a great honor to be recognized at that level," said CMSgt Earl Jones, Superintendent of the Force Protection Battlelab, "but the struggle to protect our forces continues. Adversaries will continue to adapt in an attempt to find the 'seams' in our defenses. We have to stay one step ahead."

Chief Jones' comments were confirmed by President Bush during a speech on February 13, 2001, when he said, "The grave threat from nuclear, biological, and chemical weapons has not gone away with the cold war... we have no higher priority than the defense of our people against a terrorist attack."

Exploring and fielding innovative ways to protect our people and resources will continue to be the focus of the

INFO. RESOURCES cont.

Koblentz, Gregory D. **Overview of Federal Programs to Enhance State and Local Preparedness for Terrorism with Weapons of Mass Destruction.** Belfer Center for Science and International Affairs Discussion Paper 2001-5, John F. Kennedy School of Government, Harvard University, April 2001. http://ksgnotes1.harvard.edu/BCSIA/Library.nsf/pubs/ 2001ESDP3

"...The purpose of this report is to provide an overview of the current federal programs to enhance state and local preparedness for terrorism with weapons of mass destruction. The report describes the origin, purpose, and current status of the major federal domestic preparedness assistance programs." (*Introduction*)

CB-175627

Belfer Center for Science and International Affairs John F. Kennedy School of Government Harvard University 79 JFK Street Cambridge MA 02138 (617) 495-1410 http://www.ksg.harvard.edu/bcsia

U.S. Army Center for Health Promotion and Preventive Medicine. **Detailed and General Facts About Chemical Agents**—TG218. APG, MD: CHPPM, 1996. http://chppm-www.apgea.army.mil/documents/ TG/TECHGUID/Tg218.pdf

"The fact sheets in this Technical Guide are intended to provide summary information on 24 chemical warfare materials related to Chemical Stockpile and Non-Stockpile activities. In essence, they are a brief abstract of data contained in Material Safety Data Sheets and other technical references relevant to these substances." (*Preface*)

CB-178251

U.S. Army Center for Health Promotion and Preventive Medicine Aberdeen Proving Ground, MD 21010

IN THE NEWS cont.

Army holds first International Symposium on Enzyme Technology

DeFrank, Joseph and Kelly Buckingham

APG News

June 21, 2001

The first International Symposium on Application of Enzymes in Chemical and Biological Defense was hosted in Orlando, Florida, by the Edgewood Chemical Biological Center of the U.S. Army Soldier and Biological Chemical Command. Researchers from 11 nations along with several U.S. organizations participated in the symposium. The keynote speakers were Dr. John Deutch and Dr. Alexander Klibanov of the Massachusetts Institute of Technology (MIT). The presentations included the latest research on both medical and non-medical applications of enzymes. Dr. Klibonav discussed his work in determining that enzymes could function in organic solvents and other environments once thought to be incompatible with the existence of enzymes. Additional information about the symposium can be obtained from http://www.sbccom.apgea.army.mil.

Hauschild receives CHPPM's Lovell Award Riley, Evelyn **APG News**

June 21, 2001

Veronique D. Hauschild was named the 22nd recipient of the 2000 Joseph Lovell award. This award is unique to the U.S. Army Center for Health Promotion and Preventive Medicine and was named in honor of the first Army surgeon general. Ms. Hauschild used her experience to successfully complete chemical agent related accomplishments. She served as project officer and manager for numerous projects which included the development of chronic oral toxicity values for military chemical agents with these standards officially published by the Army Medical Department in February 2000. Ms. Hauschild led a team that developed short-term chemical exposure guidelines for use during military deployments which filled an important gap in AMEDD's ability to provide advice to commanders on the risks posed by occupational and environmental hazards during deployments. Additionally, Ms. Hauschild served on a Department of Defense (DoD) working group to develop the DoD strategy to address low-level chemical warfare agent exposure; led an evaluation of the airborne exposure limits for occupations and general population exposures to G agents, VX, and sulfur mustard; and facilitated the development and publication of acute exposure guideline levels for chemical warfare agents.

NEW CBIAC PRODUCTS

Air Purification Technologies

Distribution Limitation: U.S. Federal Government Agencies and their contractors; Unclassified CBIAC Product Number: CR-01-03 Price: \$25.00 Publication Date: February 2001 Availability: CBIAC Product Category: Critical Review

Media: Paperback

Description: A variety of air purification technologies exist and are used for both military and commercial uses. Certain of the technologies are more applicable to collective protection than to individual protection applications, based primarily on power requirements and size and weight. The expected maturity of technologies within the next 5 years is also discussed; technologies currently in the R&D stage may not be available for near term individual and collective protection applications. A full range of current and emerging vapor separation and aerosol separation technologies are considered.

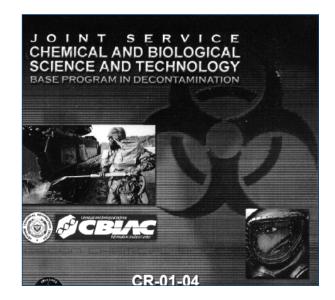


U.S. Air Force photo by Staff Sgt. James R. Hurt, Jr. http://www.af.mil/photos/images/people_0084.jpg

Joint Service Chemical and Biological Science and Technology Base Program in Decontamination

Distribution Limitation: U.S. Federal Government Agencies and their contractors; Unclassified CBIAC Product Number: CR-01-04 Price: \$45.00 Publication Date: April 2001 Availability: CBIAC Product Category: Critical Review Media: CD-ROM Description: This CD-ROM contains the results of

Description: This CD-ROM contains the results of a literature search and market survey addressing wide area CB decontamination technologies equipment and projects, the Joint Science and Technology Chemical and Biological Decontamination Front End Analysis and Master Plan Report, and the Joint Science and Technology Chemical and Biological Decontamination Master Plan Summary. The contents will be of value to those working in the decontamination area. Abode Acrobat Reader with Search® Version 4.05b is needed to view and search these documents; a copy of this version is provided on the CD-ROM.



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