



**NISSSC**  
NATIONAL INSTITUTE OF  
SCIENCE, SPACE & SECURITY CENTERS

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**U** *nlocking the potential for collaboration  
in science, space and security*

***EVENT: First Annual Emerging Technology Day***

***ORGANIZER: COLORADO HOMELAND DEFENSE ALLIANCE  
AND NATIONAL HOMELAND DEFENSE FOUNDATION***

***DATE: OCTOBER 27, 2008***

***TITLE: NHDF INVITED PAPERS***

***SPEAKER: Michael B Perini, Panel Moderator***

**(AS DELIVERED)**

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THANK YOU DON.

GOOD MORNING EVERYONE!

LET ME ADD MY THANKS TO THE COLORADO HOMELAND  
DEFENSE ALLIANCE AND THE NATIONAL HOMELAND DEFENSE

FOUNDATION FOR PARTNERING ON THIS IMPORTANT CONFERENCE.

AS AN INTITUTE DIRECTOR, AT ONE OF AMERICA'S LEADING REGIONAL RESEARCH UNIVERSITIES, I CAN SPEAK FROM EXPERIENCE: NEW CAPABILITIES ARE NEEDED TO DEFEND OUR NATION AND THEY MUST BE LED BY A NEW GENERATION OF EAGER MEN AND WOMEN EDUCATED IN EMERGING TECHNOLOGIES.

FROM UNDERSTANDING POLICY TO BEING ABLE TO WORK WITH ALL THOSE BYTES AND BITS.

WE MUST GET THIS RIGHT IF WE ARE TO KEEP OUR NATION SAFE AND SECURE. THEREFORE, WE NEED TO UNLOCK THE POTENTIAL FOR COLLABORATION IN SCIENCE, SPACE AND SECURITY IF WE ARE TO PROTECT WHAT WE ALL VALUE MOST: OUR FAMILIES AND OUR WAY OF LIFE.

I KNOW YOU WILL SEE FROM THE CALIBER OF THE FOLKS ON THIS FIRST PANEL, BACKED BY THEIR INCREDIBLE PAPERS THAT IT IS BECOMING EVEN MORE IMPORTANT TO DEVELOP INNOVATIVE WAYS TO COUNTER THREATS AGAINST OUR HOMELAND.

THE PAPERS THAT WILL BE DISCUSSED TODAY ADDRESS THIS KEY ISSUE WITH SOME VERY EXCITING OBSERVATIONS FROM OUR PRESENTERS.

THE FORMAT WILL BE AS FOLLOWS:

I WILL INTRODUCE EACH AUTHOR INDIVIDUALLY. THEY WILL SPEAK TO THEIR PAPER AND WE WILL HAVE AN OPPORTUNITY TO ASK A QUESTION OR TWO AS TIME PERMITS.

IF WE DON'T GET TO YOUR QUESTIONS, I WOULD ENCOURAGE YOU TO SEEK THEM OUT AND TALK WITH THEM DURING THE BREAKS.

NOW, FOR OUR FIRST INVITED AUTHOR

**RICHARD J. HUGHBANK** IS THE FOUNDER AND DIRECTOR OF EXTREME TERRORISM CONSULTING AND A MAJOR IN THE US ARMY WITH 20 YEARS EXPERIENCE IN THE MILITARY POLICE CORPS.

HE IS AN ADJUNCT FOR THE UNIVERSITY OF COLORADO AT COLORADO SPRINGS AS A GRADUATE COURSE INSTRUCTOR IN TERRORISM STUDIES AND HOMELAND SECURITY AND CHAIRS THE TERRORISM STUDIES AND STANDARDS COMMITTEE FOR THE ANTI-TERRORISM ACCREDITATION BOARD.

RICHARD'S GRADUATE STUDIES ARE IN SECURITY MANAGEMENT, COUNSELING AND TERRORISM STUDIES.

HIS PAPER IS TITLED, “THE COST OF DEFENDING A NATION: BALANCING LIBERTY AND SECURITY IN DEFENDING AGAINST TERRORISM”.

HIS WORK IS INSIGHTFUL AND I THINK THAT HIS OBSERVATIONS WILL GENERATE FURTHER DISCUSSIONS AS WE ALL WATCH THE GLOBAL CREDIT CRISIS THAT WE FIND OURSELVES IN.

PLEASE WELCOME MR HUGHBANKS.

QUESTIONS

THANK YOU RICHARD FOR THOSE THOUGHT-PROVOKING WORDS. IT IS AN HONOR TO HAVE YOU SPEAK AND ATTEND OUR EVENTS TODAY.

IT IS A PRIVILEGE TO **INTRODUCE DR. MEIR (MAY EAR) OREN.**

CURRENTLY HE IS THE CEO AND MEDICAL DIRECTOR OF THE HILLEL–YAFFE MEDICAL CENTER. A FORMER DIRECTOR - GENERAL OF THE ISRAELI MINISTRY OF HEALTH AND HE IS BOARD CERTIFIED IN PEDIATRICS AND IN HEALTH ADMINISTRATION.

HE IS A GRADUATE OF THE SACKLER SCHOOL OF MEDICINE, TEL AVIV UNIVERSITY.

HE HAS A MASTER OF PUBLIC HEALTH FROM THE JOHNS HOPKINS SCHOOL OF HYGIENE AND PUBLIC HEALTH, AT JOHNS HOPKINS UNIVERSITY.

HE HAS BEEN A MEMBER OF MANY JOINT COMMITTEES DEALING WITH EMERGENCY PREPAREDNESS AT THE NATIONAL LEVEL... THE EPIDEMIC MANAGEMENT TEAM... STEERING COMMITTEE FOR EARLY IDENTIFICATION AND SURVEILLANCE OF CONTAGIOUS DISEASES AND OTHERS.

HE IS MAINLY INTERESTED IN THE BROADER ASPECT OF PREPAREDNESS FOR NON CONVENTIONAL TERRORISM, CBRN, AND WARFARE SCENARIOS, AT THE NATIONAL LEVEL IN GENERAL, AND THAT OF THE HEALTH CARE SYSTEM IN PARTICULAR.

HIS PAPER IS TITLED, "ISRAEL ON CONSTANT ALERT – THE ISRAELI HEALTH CARE SYSTEM AS AN EXAMPLE OF COLLABORATION AND COORDINATION BETWEEN CIVIL – MILITARY – AND INTELLIGENCE AGENCIES."

I MUST TELL YOU THAT HE HAS DESCRIBED IN DETAIL WITH EXCELLENT CLARITY THE CHALLENGES FACED BY HOSPITALS WHO FACE THE THREAT OF A BIOTERRORIST INCIDENT. I KNOW YOU WILL FIND HIS OBSERVATIONS SOBERING AS WE ALL WORK ON EMERGING TECHNOLOGIES TO PROTECT CITIZENS FROM THIS TERRORIST THREAT.

DR. OREN... THE FLOOR IS YOURS. PLEASE, A ROUND OF APPLAUSE.

THANK YOU DR. OREN FOR THAT GREAT PRESENTATION. IT WAS VERY ENLIGHTENING AND I'M SURE THE AUDIENCE APPRECIATED HEARING HOW ISRAEL HANDLES THIS TOUGH ISSUE – AN INTERNATIONAL EXAMPLE FOR OTHERS TO LEARN FROM.

## QUESTIONS

WE ALL KNOW THAT ADVANCING HD/HS COLLABORATION IS CRITICAL. OUR NEXT PRESENTER HAS EXPERIENCE IN THIS REGARD.

**DR DALE JONES** IS ASSOCIATE PROFESSOR OF PUBLIC ADMINISTRATION AND DIRECTOR OF THE NATIONAL HOMELAND SECURITY PROJECT WITH THE L. DOUGLAS WILDER SCHOOL OF GOVERNMENT AND PUBLIC AFFAIRS AT VIRGINIA COMMONWEALTH UNIVERSITY.

HE TEACHES COURSES IN PUBLIC ADMINISTRATION, HOMELAND SECURITY, AND EMERGENCY MANAGEMENT.

PRIOR TO HIS CURRENT POSITION, HE SERVED AS DIRECTOR OF RESEARCH AT NISSSC'S CENTER FOR HOMELAND SECURITY AT UCCS.

HE IS A PRINCIPAL WITH THE COUNCIL FOR EXCELLENCE IN GOVERNMENT.

HIS PUBLICATIONS INCLUDE ARTICLES IN *PUBLIC ADMINISTRATION REVIEW*, *THE AMERICAN REVIEW OF PUBLIC ADMINISTRATION*, *PUBLIC INTEGRITY ANNUAL*, *JOURNAL OF FORECASTING*, AND OTHER JOURNALS. PLUS HE IS A PUBLISHED BOOK AUTHOR.

HE COMPLETED A PH.D. IN PUBLIC ADMINISTRATION FROM SYRACUSE UNIVERSITY'S MAXWELL SCHOOL, AN M.A. IN PUBLIC POLICY FROM GEORGE WASHINGTON UNIVERSITY, AN M.B.A. WITH A CONCENTRATION IN MANAGEMENT FROM WRIGHT STATE UNIVERSITY, AND A B.S. IN AERONAUTICAL ENGINEERING FROM THE AIR FORCE ACADEMY.

HIS REPORT TITLED, "ADVANCING HOMELAND SECURITY, HOMELAND DEFENSE, AND EMERGENCY MANAGEMENT COLLABORATION: LESSONS FROM THE MID-ATLANTIC ALL HAZARDS CONSORTIUM" ADDRESSES COLLABORATIVE PUBLIC MANAGEMENT PROCESSES AND PRACTICES. HE PRESENTS A CONCEPTUAL MODEL WITH SOME EXCELLENT LESSONS LEARNED. I WON'T STEAL HIS THUNDER.

PLEASE WELCOME DR. JONES.

QUESTIONS

THANK YOU, DR. JONES FOR YOUR MOTIVATING COMMENTS. I'M SURE THE AUDIENCE HAS A GREATER APPRECIATION FOR

THE TIME AND EFFORT EXPENDED TO FORGE THE POSITIVE RELATIONSHIPS BETWEEN LOCAL, STATE AND FEDERAL AGENCIES.

OUR NEXT PAPER WAS CO-AUTHORED BY THREE DISTINGUISHED COLLEAGUES. **WALTER SCHEIRER, RICHARD WHITE AND TERRY BOULT** – ALL THREE ARE MOUNTAIN LIONS FROM THE UNIVERSITY OF COLORADO AT COLORADO SPRINGS

**WALTER SCHEIRER** RECEIVED HIS M.S. (COMPUTER SCIENCE) AND B.A. (COMPUTER SCIENCE AND INTERNATIONAL RELATIONS) DEGREES FROM LEHIGH UNIVERSITY, FOCUSED IN SECURITY.

HE IS A 3<sup>RD</sup> YEAR PH.D. CANDIDATE AT UCCS, WORKING IN BIOMETRICS, AND THE LEAD BIOMETRIC ENGINEER AT SECURICS, INC.

HE HAS PUBLISHED AND LECTURED WIDELY ON A VARIETY OF SECURITY RELATED TOPICS, INCLUDING FACE DETECTION FOR SURVEILLANCE, PRIVACY ENHANCING TECHNOLOGIES, SECURE CRYPTOGRAPHIC CHANNELS, NETWORK INTRUSION DETECTION, FORENSICS, AND UNIX SYSTEM SECURITY.

**RICK WHITE** IS ASSISTANT DIRECTOR FOR CURRICULUM DEVELOPMENT AT THE UCCS CENTER FOR HOMELAND SECURITY. RICK TAUGHT MILITARY STRATEGIC STUDIES AT THE AIR FORCE ACADEMY BEFORE RETIRING IN 2004. IN 2006, HE

PRODUCED A TEXTBOOK ON THE DEPARTMENT OF HOMELAND SECURITY, FOLLOWED BY A TEXTBOOK ON HOMELAND DEFENSE. SINCE 2005 HE HAS DEVELOPED AND TAUGHT NATIONAL AND INTERNATIONAL PROGRAMS IN HS, AND IS PRESENTLY WORKING ON A PHD IN SECURITY AT UCCS.

**DR. TERRY BOULT** IS THE EL POMAR ENDOWED CHAIR OF INNOVATION AND SECURITY AND PROFESSOR OF COMPUTER SCIENCE AT UCCS, AS WELL AS THE CO-FOUNDER AND CEO/CTO OF SECURICS, INC.

DR. BOULT HAS PUBLISHED OVER 150 PAPERS AND HOLDS 7 PATENTS, WITH 9 PATENTS PENDING. HIS ONGOING RESEARCH PROJECTS INCLUDE ADVANCED BIOMETRICS, ADVANCED VISUAL SECURITY SYSTEMS, NETWORK SECURITY, AND EMBEDDED VISION/SURVEILLANCE PLATFORMS. PRIOR TO JOINING UCCS, DR. BOULT HELD APPOINTMENTS AT COLUMBIA AND LEHIGH UNIVERSITY.

THEIR PAPER IS TITLED, "PRIVACY ENHANCEMENT VIA ADAPTIVE CRYPTOGRAPHIC EMBEDDING: BALANCING LIBERTY AND SECURITY IN AN INFORMATION SOCIETY."

THERE WORK IS CUTTING EDGE. TODAY'S HIGH TECH, INSTANT COMMUNICATION WORLD OF IPHONES AND BLACKBERRIES AND ENDLESS EMAILS AND TEXTING IS ALMOST OVERWHELMING. YOU ADD TO THIS THE COUNTLESS DATA FROM ELECTRONIC SURVEILLANCE, SIGNALS INTELLIGENCE

AND BIOMETRIC IDENTIFICATION AND ONE HAS TO WONDER JUST HOW SAFE IS ALL OF THIS – AND, WHAT ABOUT PRIVACY AND SECURITY. TO EXPLAIN HOW WE CAN BALANCE ALL OF THESE FACTORS, **WALTER SCHEIRER**, WILL PRESENT ON BEHALF OF THE GROUP. LET’S WELCOME HIM TO THE STAGE.

THANK YOU WALTER AND THANKS TO ALL OF OUR AUTHORS TODAY FOR INCREASING OUR KNOWLEDGE ON THESE ISSUES AS THEY RELATE TO EMERGING TECHNOLOGY.

WE NEED TO KEEP IN MIND THE ISSUES THAT SURFACED DURING THIS FIRST PRESENTATION AS WE MOVE TO OUR NEXT PANEL OF PRESENTORS.

AGAIN, THANKS TO THE CHDA AND NHDF FOR ALLOWING ME TO HOST.

THIS COMPLETES THE NHDF INVITED PAPER SESSION.