

**Closed Sessions**

**U.S. DEPARTMENT OF HOMELAND SECURITY**

**Homeland Security Science and Technology**

**Advisory Committee (HSSTAC)**

**May 18-19, 2005**

**San Diego, CA**

The HSSTAC convened its sixth meeting on Wednesday, May 18, 2005, in San Diego, CA. The Committee met in closed session pursuant to the provisions of 5 U.S.C. 552b(c)(1), (c)(2), (c)(7), and (c)(9)(B).

The Designated Federal Official, Dr. Ronald D. Taylor, called the meeting to order and, per the Committee's charter, turned the conduct of the meeting to the Chairman, General Larry D. Welch, USAF (Ret.). General Welch reviewed the objectives of this quarterly meeting as announced in the *Federal Register* (Vol. 70, No. 83, May 2, 2005). The objectives of this quarterly meeting were to: (1) observe, review, and evaluate operational sites where science and technology products are apparent and where the systems engineering challenges are visible; (2) receive a report from the Under Secretary for Science and Technology on how the prior year HSSTAC recommendations are being/will be implemented; (3) receive a briefing on the Maritime Domain Awareness (MDA) Architecture; (4) tour, observe and evaluate Department of Homeland Security (DHS) operational sites and facilities; and (5) receive subcommittee reports.

During the opening remarks, General Welch reminded the Committee that its focus was to advise the Under Secretary on the Department's efforts to reduce the nation's vulnerabilities to attack with respect to chemical, biological, and high explosive threats. The Committee also would need to consider its role on advising the Department with respect to radiological and nuclear threats now that a separate Domestic Nuclear Detection Office (DNDO) has been established outside the direct auspices of the Under Secretary. Under Secretary McQueary informed the Committee that Assistant Secretary Parney Albright had announced his resignation and would be leaving within a month or two and noted that any restructuring of the Science and Technology (S&T) Directorate would only occur after the Secretary's department-wide review currently underway. Under Secretary McQueary then updated the Committee on the Domestic Nuclear Detection Office which was created as an entity separate from S&T on April 16 by an order signed by Secretary Chertoff.

Mr. Rod Smith, Executive Director of Space and Naval Warfare System Center San Diego (SSC San Diego), then welcomed the Committee to the SSC facility. Afterwards, Ms. Jeanne Lin, Border and Transportation Security (BTS) Portfolio Manager, DHS S&T, described the planned site visits and briefed the Committee on both the operations that they would observe and the technologies currently being employed to support those operations. BTS, the largest of DHS' Directorates, has the operational mission of securing the nation's air, land, and sea borders. Key stops would include the San Ysidro Port of Entry, the Imperial Beach Border Patrol Station, and San Diego Airport.

### **San Ysidro Port of Entry**

The Committee visited San Ysidro Port of Entry where: (1) they discussed operational objectives, operational and technical challenges, and issues with Ms. Adele Fasano, Customs and Border Patrol (CBP) Director of Field Operations, and Mr. Joseph Misenhelter, CBP San Ysidro Director of Tactical Operations; (2) were briefed on the U.S. Arrival program by Ms. Kim Nivera, and (3) observed operations.

### **Imperial Beach Border Patrol Station**

At the Imperial Beach Border Patrol Station, Assistant Chief Patrol Agent David Hoffman briefed the Committee on the history and progress of the San Diego Sector operating area's border patrol efforts. The San Diego Sector of the U.S. Border Patrol is responsible for 66 linear miles of the U.S.-Mexican border, 91 coastal miles and nearly 7,000 square miles, roughly corresponding to the boundaries of the county of San Diego. Approximately 1,600 agents are permanently assigned to the seven stations within the Sector. Five stations are adjacent to the border, while two are permanent checkpoints located on the major highways leading away from San Diego. Agents patrol the border in four-wheel drive vehicles, on all-terrain vehicles, on horseback, in shallow water boats, on bicycles, and in helicopters. Recent infrastructure improvements, such as fences and all-weather roads, have resulted in a border that is easier and safer to patrol.

Agent Hoffman explained that the success of Operation Gatekeeper has enabled the San Diego Sector to appropriate more resources to the development of search and rescue teams, anti-smuggling investigative units, public outreach programs, and border safety initiatives. The availability of personnel and resources has enabled the sector to become more proactive and the leader in innovative uses of new technology.

The Committee then drove along the U.S.-Mexican border fence line, observing operations and activity on both sides of the border, and discussing the effectiveness of various operational and technical approaches with border patrol agents.

### **San Diego Airport**

At the San Diego Airport, Mr. Michael Aguilar, Transportation Security Administration, Federal Security Director of the San Diego Airport, briefed the Committee on the history and vision of the Transportation Security Administration and the Federal Security Director's (FSD) responsibilities with respect to regulatory compliance, law enforcement, and passenger, baggage and cargo screening. Mr Aguilar noted that TSA's philosophy is to provide world class security and customer service, work collaboratively with industry (airports and air carriers), and partner with local, state and Federal law enforcement and U.S. Coast Guard.

Mr. Aguilar explained that his duties regarding regulatory compliance were to oversee regulatory compliance with the Code of Federal Regulations relating to airport authorities, aircraft operators, indirect air carriers as well as general aviation and flight schools.

Furthermore, he ensures that Regulatory Staff Inspections are conducted regularly to identify potential vulnerabilities or deviations from prescribed standards ensuring overall adequacy, effectiveness and efficiency of the security posture at the airport. The San Diego Airport partners with Harbor Police to perform law enforcement operations checkpoint coverage and first response, and is an active participant with Joint Terrorism Task Force which combines Federal, state, and local law enforcement relating to airport operations. Also, the FSD initiates and pursues regulatory violations when criminal statutes are violated. Mr. Aguilar then explained the airport's "layered approach" which includes checkpoints, explosive detection technology, reinforced cockpit doors, and other methods to prevent attacks on the Nation's air travel system.

The Committee then toured the airport and observed security-related operations and inspections using TSA equipment; the tour was led by Mr. William Snyder, CBP Port Director. Ms. Kim Nivera subsequently provided a discussion and demonstration of the US-VISIT program. The day's session concluded following the demonstration.

### **Under Secretary for Science and Technology**

General Welch began the morning session on May 19 at SSC San Diego with a summary discussion and reaction to the previous day's site visits and demonstrations. The Committee discussed the operational challenges associated with securing the borders and transportation system and the utility and effectiveness of technology solutions. Topics discussed included the need for a 5 - 10 year plan for border control and transportation security, the US-VISIT Program procedures and effectiveness (and alternative technical approaches); prioritization of funding efforts for transportation security, biometric technologies and implementation efforts; baggage screening methods; the use of a systems-level approach to scanning both passengers and their baggage; the history behind the current state of transportation security; the impact of the San Ysidro area's border patrol efforts on the rest of the U.S.-Mexican border; and the need to consider software life-cycle when implementing new technology and procedures. The discussion involved both sensitive and classified information.

To begin his formal presentation, Under Secretary McQueary thanked the members of the Committee for their efforts in assisting the Directorate to improve its operations and acknowledged their input is greatly appreciated. Under Secretary McQueary then explained he would address some of the recommendations from the Committee's 2004 Annual Report to Congress. The Directorate has had many of its subject matter experts weigh in on many of the recommendations and a complete report addressing the recommendations will be prepared in the near future. To assist further in this effort, a mechanism has been implemented in the Directorate to track the activities with respect to the Committee's recommendations and updates will be provided at future quarterly meetings.

Under Secretary McQueary explained that his initial focus would be on the Committee's recommendations that apply directly to S&T, where he has the most influence; and that in subsequent meetings, he will focus on how to influence a positive change in some of the Department's areas identified by the Committee. Under Secretary McQueary mentioned the S&T Directorate's participation in the DHS Second Stage Review process, as part of Secretary Chertoff's comprehensive review of Department operations. He explained that S&T staff is

working on various Second Stage Review Committee teams to ensure a smooth review process and that those Committees will complete their work by May 20. Following the Second Stage Review, Under Secretary McQueary plans to hold a senior management meeting to address the strategic direction S&T will take based in part on the direction the Secretary provides in his review.

Under Secretary McQueary then began to address recommendations based upon their focus. The first pertained to the need to preserve resources for the S&T Directorate's research and development function and to implement strategies to transfer operational and fiscal responsibilities for field systems to other entities, and to define S&T's transitional responsibility for a product or capability, using BioWatch as the initial example. Under Secretary McQueary explained that over the last six months, the S&T Directorate established a process for Research, Development, Testing and Evaluation (RDT&E) that defines how to accomplish the core mission of getting cutting edge technologies into the hands of emergency responders, Border Patrol agents, Secret Service personnel and others on the front lines of homeland security. The RDT&E process defines how S&T develops and transfers technology. The process requires that each development effort be mapped to a prioritized risk or user need. In most cases, technology development programs are required to have a sponsor outside the S&T Directorate. Under Secretary McQueary went on to explain that the sponsor is most often the organization that represents the end user, and is also the organization that will fund the purchase, deployment, operations and support after the product or system is developed and tested by S&T. General Welch suggested there ought to be an operational entity in DHS for infrastructure protection, to which Under Secretary McQueary responded that the Second Stage Review may very well consider such an option.

Under Secretary McQueary continued by stating that the sponsor and end user are identified at the beginning of the process and become members of an integrated product team, and are the source of requirements for the product. The process for achieving successful technology transition is in place and in the early stages of being implemented across the organization. Under Secretary McQueary recognized that much remains to be done in this area. A team of S&T senior managers has provided initial recommendations for improving the technology transfer process and is proceeding with implementation.

Regarding transferring the BioWatch program, Under Secretary McQueary briefly reviewed some history of the program. BioWatch was quickly developed and deployed to respond to the immediate fears of a biological attack following 9/11. A sponsor for the program was never identified, and S&T became the sponsor by default. No DHS directorate has embraced the mission of operational urban monitoring. The first generation BioWatch has been successfully deployed, but a sponsor organization must be identified for its continued operation. Currently a draft transition plan and strategy for BioWatch is under review. The plan supports transitioning BioWatch as soon as the following two key criteria are met: (1) The technology is relatively stabilized and does not require detailed scientific hands-on involvement, which will occur when the fully autonomous Generation 3 system is deployed; and (2) When a sponsor organization, with a security-minded culture that has biomonitoring as a key part of its mission, is identified. Under Secretary McQueary then stated that no organization currently fulfills the second criterion, so S&T or DHS will have to cultivate such a "home" in an appropriate DHS

operational directorate. Dr. Atlas advocated the Center for Disease Control as a logical home and further suggested the need for an automated detection system to continue to speed warning times following agent release. Under Secretary McQueary replied that S&T will deploy an Automatic Pathogen Detection System which will decrease the amount of time needed to detect an attack. Dr. Atlas emphasized that the new system should be dual-use and built into the public health system so it is relevant to national conditions that extend beyond just detecting an attack. General Welch then stated that because of current organizational and technical constraints, S&T appears to be stuck with BioWatch. However, the broader issue is that the Department needs an RDT&E process that is not only informed by the operational community, but does so in a manner that creates an appetite in the operational community so that it participates in the spiral development process and takes ownership for the deployed systems.

Under Secretary McQueary then addressed a recommendation that suggested that the S&T Directorate should engage with the relevant work in other Federal agencies to leverage expertise and influence its investment. Under Secretary McQueary explained that integrating with other agencies in research and development (R&D) is integral to how S&T operates. S&T has taken steps, both inside and outside the Department, to develop mechanisms to coordinate and cooperate among other Federal R&D activities related to homeland security. Examples of interagency cooperation include:

- Coordinating with the Environmental Protection Agency (EPA) on decontamination and water security efforts.
- Developing a mobile high-throughput chemical laboratory and a Memorandum of Agreement with EPA to transition the capability to that agency. The EPA views it as a dual-use asset that will help with its "conventional" environmental chemical analysis burden.
- Discussing cooperative chemical threat characterization efforts, particularly in the area of non-traditional agents, with the Department of Defense and the Intelligence Community.
- Engaging in cooperative efforts with the Federal Bureau of Investigation (FBI) to address gaps in forensics and attribution.
- Chairing an interagency consortium to develop an integrated robust Chemical/Biological/Radiological/ Nuclear laboratory response system to address vulnerabilities across the full target space (humans, animals, plants).
- Establishing an Interagency Center for Applied Homeland Security Technology to enable collaboration with other intelligence, law enforcement, and homeland security agencies (23-member organizations now) on technology development, testing, and evaluation.
- Developing an annual update of the National Infrastructure Protection Plan and the National Critical Infrastructure Protection Research and Development Plan through interagency processes. Both of these plans were developed in 2004 and engaged many Federal agencies, including all of the Sector Specific Agencies who are responsible for a number of the sectors and key resources.

Another recommendation that Under Secretary McQueary addressed was that the S&T Directorate should engage other government agencies at Federal and state levels and the private sector to leverage S&T work for dual-use purposes such as public health, first-responders, natural disasters and law enforcement. Under Secretary McQueary explained that S&T is

addressing this point through a number of avenues. The avenues include working with the Government Coordinating Councils and Sector Coordinating Councils — organized by the Infrastructure Coordination Division in Information Assurance and Infrastructure Protection (IAIP) — to engage state, local and private industry and leverage our activities. These Councils are being set up for each of the 17 critical infrastructure sectors. Some are well established and others are still in the planning stages. The Councils will be the mechanism for integrating products, methods and plans across all key agencies.

Next, Under Secretary McQueary informed the Committee that S&T coordinates with IAIP in the development of the National Infrastructure Protection Plan (NIPP), especially the portion of the base plan and the sector-specific plans on R&D. The goal of the next iteration of the NIPP will be to ensure it is a national plan by including representatives from state, local and tribal governments and private industry for all critical infrastructure sectors. The focus is on infrastructure protection — All Hazards — and the “dual use” which really has to do with business continuity and reliability of the services and products coming from the critical infrastructure sectors. In many cases, the Government Coordinating Councils and Sector Coordinating Councils system will facilitate development of the next NIPP.

Finally, in the development of the annual National Critical Infrastructure Protection R&D Plan, S&T engages with multiple Federal agencies and owners and operators of the critical infrastructures to ensure the requirements are understood and communicated. The Office of Science & Technology Policy’s National Science and Technology Council subcommittees provide a mechanism for communication and coordination across the Federal agencies.

The third recommendation of the Committee in this area that Under Secretary McQueary addressed was that the S&T Directorate should emphasize research which will support the role of DHS in integrating local and national responses to threats. Under Secretary McQueary stated that the Directorate must establish “real” applications programs in homeland security that reflect the Nation’s current challenges and measure performance in real settings. The solutions that S&T’s R&D efforts yield must address both the dire threats and the physical challenges of the real world. Mayors, city council members, city managers and first responders share a common desire to apply new science, technologies and tool in their communities. Their chief concerns in implementing each solution revolve around questions such as: (1) Will this technology improve my current capability? (2) Will it perform efficiently and is it user friendly? (3) Can we afford to purchase, implement and maintain it? and (4) Can it function within the operational parameters of my community?

Under Secretary McQueary discussed the Regional Technology Initiative (RTI) which is evaluating the varying requirements of select urban areas to enhance their preparedness and response posture. Participating cities – Memphis, Anaheim, Cincinnati and Seattle – share characteristics common to many U.S. cities. The goals of the RTI are to: (1) deploy emerging technologies to determine their effectiveness in actual operating environments and to assess how well these technologies will have improved preparedness, (2) develop methods that utilize exercise, modeling and simulation technologies to assess the effectiveness of proposed solutions in terms of technical performance and risk before costly implementation and retrofits take place, and (3) compile best practices and lessons learned to transfer capabilities to sister cities.

Under Secretary McQueary stated that in addition to RTI, S&T created the Interagency Modeling and Atmospheric Assessment Center (IMAAC) to provide a central point of collection and analysis of plume modeling so that only one Federal position emerges during an incident. The IMAAC concept was borne out of the confusion that surrounded plot and prediction generation during TOPOFF 2. IMAAC was employed during TOPOFF 3 and showed that DHS had made the proper move in creating this operational function. Furthermore, Under Secretary McQueary stated that the success of the National Incident Management System relies heavily on DHS's ability to provide an integrated response to major incidents, especially those requiring significant Federal support. This year S&T initiated a major effort through the Homeland Security Advanced Research Projects Agency (HSARPA) to develop a conceptual architecture that will enable Unified Incident Command Decision Support at all levels of government. The successful architecture must be scalable, platform independent, open, non-proprietary, and interoperable. S&T has chosen four performers and they are on track to prototype specific architectural concepts in the FY 07-08 timeframe.

In its annual report, the Committee recommended that DHS establish a mechanism for S&T to manage and oversee work for the Department and the National Laboratories. Furthermore, the Committee recommended that S&T should, as a prerequisite for settling on the appropriate organization and mechanisms for Laboratory support, more clearly define the needs to be met by the laboratories. With the needs defined, the approaches can be evaluated against specific needs. It is likely that the variety of needs will call for a variety of approaches across the laboratories. S&T should initiate a two-pronged approach consisting of (1) directing a subset of the laboratories, operating under the existing Memorandum of Agreement with sufficient funding, to develop enduring Centers of Excellence focused on critical relevant technologies; and (2) initiate discussions with the Department of Energy and selected laboratories (or integrated multiple laboratory entities) to create cooperative agreements (contracts or embedded FFRDCs) for up to three laboratories or laboratory combinations to ensure enduring programmatic mission centers addressing broad grand challenges for DHS.

Under Secretary McQueary explained S&T's policy on how the National Laboratories consist of five categories: (1) assist in program development, (2) make strategic investments in laboratories to build an enduring national capability, (3) provide mission-critical RDT&E and operational support based on laboratories' unique technical expertise, (4) accelerate spiral technology development and transitioning capabilities to operational end-users, and (5) respond to competitive solicitations (non-strategic). He went on to describe that in formulating a long-term policy for using the national laboratories, S&T requested input from both the HSSTAC and the Homeland Security Institute (HSI). From the HSSTAC, S&T's Office of Research & Development (ORD) sought advice and a recommendation regarding an investment strategy and business case for using the National Laboratories over the long term and creating an enduring DHS capability at the laboratories. From HSI, ORD requested a study of DHS-related capabilities at each of the National Laboratories.

Under Secretary McQueary continued by explaining that in response to S&T's request, HSSTAC cited many factors that must be considered within the context of their final recommendation. In general, S&T concurs with HSSTAC's recommendation that they make a

significant, long-term investment in two to three laboratories so that those laboratories make resources available to focus on specific DHS challenges. S&T also supports the recommendation that resources should be provided to the other laboratories for regional support and niche capabilities. Furthermore, as a follow-up to the HSI survey and to the general recommendation made in the HSSTAC report, S&T's ORD asked HSI to recommend the criteria or metrics that S&T should use to select specific National Laboratories for long-term investments in the future. HSI has been asked to provide a report by September 30. Under Secretary McQueary finished addressing the recommendation by informing the Committee that S&T intends to formulate a policy for long-term investments in the National Laboratories once the Directorate has the benefit of the HSI study findings.

The final Committee recommendation Under Secretary McQueary addressed was the recommendation stating that S&T should provide broad electronic notification of Broad Agency Announcement and Requests for Proposal opportunities, as described on the DHS S&T Directorate web site, in order to facilitate participation opportunities for not-for-profit associations, small businesses, and universities. Under Secretary McQueary responded with some facts pertaining to the Directorate's outreach efforts to communicate the opportunities available with the S&T Directorate. Under Secretary McQueary stated that from September 2003, when the Directorate's first solicitation was published until now (May 2005), HSARPA has published 14 solicitations plus three specialized Small Business Innovation Research solicitations. All were placed on the official Federal government procurement web site, [www.fedbizopps.gov](http://www.fedbizopps.gov). Each solicitation was also posted on an additional web site, either [www.hsarpabaa.com](http://www.hsarpabaa.com), or [www.hsarpasbir.com](http://www.hsarpasbir.com). Both web sites have a "list serve" (mailing list) function that permits interested private sector organizations to be electronically notified when a new research solicitation is posted on the site. In addition to providing links on both sites to related information, each site directly links to the other. So far, HSARPA has recorded 3,405 registrations for list serve in eight technology areas. This list serve function can also be accessed directly from the HSARPA section of the DHS public web site [Research and Technology].

Under Secretary McQueary went on to explain that to date, HSARPA has received 2,478 white papers responding to their 17 solicitations, followed by 1,380 full proposals. Of that number, 311 have been selected to enter negotiations for contract award and 196 have been awarded contracts and work is underway. In several cases, HSARPA published draft statements of work for public comment prior to publishing the formal solicitation. Under Secretary McQueary emphasized that HSARPA believes that based on these responses and substantial individual efforts by the HSARPA professional staff, the interested technical community is fully aware of its solicitations and will continue its high level of participation. Furthermore, HSARPA holds Bidders Conferences for many of S&T's solicitations to facilitate the participation of potential bidders. For potential bidders who are unable to attend these conferences, HSARPA publishes the conference viewgraphs on its web site. Finally, the HSARPA leadership continually fulfills requests to speak to industry, academic, and professional groups describing the S&T research program and methods for securing research and development funding. As an example, in 2004 the Deputy Director of HSARPA gave one of these presentations every five working days (on average). In addition, S&T holds an annual conference to describe and forecast future R&D needs for the technical community. The proceedings of this conference are available on compact disk. General Welch also noted the importance of DHS being open to



receiving and evaluating unsolicited proposals, citing the example that the Stealth fighter was an unsolicited proposal.

### **Subcommittee Reports**

Dr. Rich Roca, Chair of the Mission & Operations Subcommittee, briefed the Committee on the subcommittee's meetings since the prior plenary session of February 23-24. The Subcommittee met on April 14 to receive briefs on the threat/vulnerability-based approach to S&T programs, HSI's systems approach integrated program planning, and the U.S. Coast Guard's process for formulating a strategic plan utilizing a risk-based approach, and to discuss S&T strategic objectives and priorities. On May 5 the Subcommittee received briefs on the roles, responsibilities, and activities of the Office of Program Assessment & Evaluation, the High Explosives Countermeasures Portfolio, and the Border and Transportation Security Portfolio. Issues discussed with the Committee included: (1) threat and risk characterization influence over the DHS S&T process, (2) the status of independent risk assessments, (3) Countermeasures Portfolio program boundary conditions, (4) the role of the DHS Component Portfolios as a trusted agent for systems engineering and systems integrator, (5) operational program ownership, (6) the need to develop technology with an end-to-end systems plan, and (7) the need for stronger coupling with the Intelligence Community. The Committee discussion focused on the apparent disconnect between the needs and priorities of the operators (represented by the operational directorates) versus the technology solutions to be developed by the S&T Directorate. As Dr. Roca pointed out, the operational entities must provide the long-term plan against which S&T develops solutions. General Welch observed that DHS currently is organized so that the operational entities can circumvent S&T when fielding technical solutions. General Welch stated that the only way S&T's role can work is if differences between S&T and operational entities are decided at the DHS Secretarial level. General Welch explained that you cannot rely upon the operational entities to accept readily new technologies. The operator should be dominant, but the possibilities of new technologies need to be allowed for as well. By example, the Air Force did not initially want submicron chips, but the Director of Defense Research and Engineering worked through the Deputy Secretary of Defense to ensure that the program was established which, in turn, led to the Global Positioning System.

Dr. Will Happer, Chair of the Programs Subcommittee, briefed the Committee on the subcommittee's activity since the prior plenary session of February 23-23. The Subcommittee met on April 21 to receive briefings on and discuss the DHS agro-terrorism countermeasures programs, the FBI's role in biological terrorism forensics, and the origins and status of the DNDO. Issues discussed with the Committee included: (1) joint government efforts to combat agro-terrorism, (2) efforts and challenges regarding biological terrorism forensics, and history and organization of the DNDO. Dr. Atlas led a discussion about the future of the Plum Island Animal Disease Center (PIADC), noting statutory requirements to investigate diseases such as foot and mouth disease in off-shore facilities. Under Secretary McQueary described the problems associated with maintaining an aging facility such as PIADC, which was built 50 years ago and for which S&T already has invested \$20 million in upgrades. He also described progress toward a National Biological & Agro-defense Facility (NBAF). Following Dr. Happer's summary of the history and organization of the DNDO and the Secretary's decision to remove it from the S&T Directorate and make it a direct report to the Secretary, members

expressed concern over (1) S&T's ability to carry out its mission with the nuclear threat portfolio removed, (2) the possibility that DHS leadership will see such an organizational partitioning among other counter threat areas (such as biological, chemical, etc.) as an attractive structure, and (3) the lack of any external Federal advisory input into the DNDO at its genesis. Finally, Dr. Atlas described his views on the need for an independent advisory board on bio-safety, security, and ethics.

Dr. Larry Papay, Chair of the Resources & Organization Subcommittee, briefed the Committee on the subcommittee's meetings and activities since the prior plenary session of February 23-24. The Subcommittee met on March 31 to receive briefings on the challenges and successes of the SAFETY ACT implementation and to discuss S&T's technology transfer process with each of its four offices. On May 2 the Subcommittee met to discuss progress on the S&T technology transition process and to learn about the goals and status of the NBAF and the National Biodefense Analysis and Countermeasures Center (NBACC). Issues discussed with the Committee included the formation, organization and membership of the Directorate's Technology Transition Process Team and how it would further benefit from input from industry and universities, and that it should use the BioWatch experience as a useful "lesson learned." Members also saw the need to integrate NBACC with other facilities, the need for other government agencies to be involved with NBAF, the need for the SAFETY ACT to include an operational testing and evaluation phase, and the distinction between SAFETY ACT's certification and designation standards. Some members expressed concern that the SAFETY ACT does not allow for an applicant to test the technology in an operational environment prior to seeking designation.

Dr. Russ Bessette, Chair of the Outreach Subcommittee, briefed the Committee on the subcommittee's activities since the prior plenary session of February 23-24. Dr. Bessette attended TOPOFF 3 as an observer and reported his observations, mostly emphasizing the importance of communication with public officials. Dr. Baruch Fischhoff commented on the need for DHS to study public communication. Chief Ernie Mitchell described interaction he had with firefighters and the need to seek feedback from firefighting organizations.

### **Marine Domain Awareness Architecture**

Ms. Abby Westerman, Deputy for Program Development at the Space and Naval Warfare System Center, provided a sensitive brief to the Committee on the status of MDA Architecture. Ms. Westerman began with the history behind the effort to survey the waterways that impact the United States' interests. Ms. Westerman went on to discuss the challenges and efforts to detect, identify, assess risk, track and intercept ships. After explaining the MDA organization and all technical options, the Committee discussed program budget, mission scope, implementation concept, and the operational end-users.

### **U.S. Coast Guard San Diego Sector**

At the Coast Guard Sector San Diego headquarters, the Committee was welcomed by CAPT John E. Long, USCG, and subsequently received a sensitive briefing on the Command 2010 history and efforts to provide a common operational picture that integrates port and coastal

sensors. The Committee was then briefed on the history and status of the Sector Command Center – Joint (SSC-J) program for the San Diego Harbor. Topics covered were SCC-J stakeholders, existing systems and databases, concepts of operation, SSC-J milestones, SCC-J challenges and desired state. The Committee’s discussion included establishing which government agencies need what information, the implementation plan of the program, and the operational benefits. The Committee then observed the operations center detailing the capabilities and duties of each watch station.

The meeting adjourned at 1500, May 19, 2005.



Larry D. Welch  
General, USAF (Ret.)  
Chairman

Attachments

1. Agenda
2. Attendees
3. Acronyms