

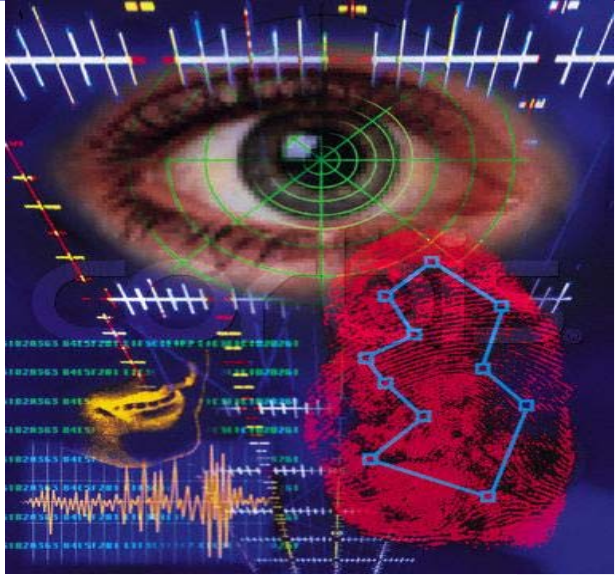
# *National Biometric Security Project*

Activity Update: 2003-2005

**Biometric Consortium Conference 2005**



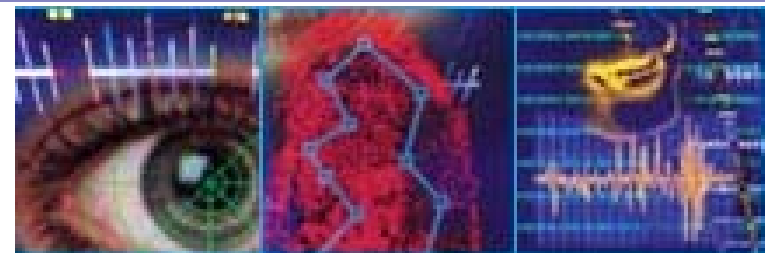
# *National Biometric Security Project Mission*



*Assist government and private sector organizations deter terrorist attacks on the civil infrastructure by enhancing effective, automated human identification through the application of proven biometric technologies.*

**"The Mission of the NBSP is vital to homeland security."**

**Porter Goss, Former Chairman, U.S. House of Representatives Permanent Select Committee on Intelligence 23 July, 2002**



# *National Biometric Security Project Profile*

- Established in 2001 in Washington DC and WV
- Non-Profit, *vendor independent*, and *technology neutral*
- Funded since 2003 as prime contractor for Biometrics in National Security (BiNS) Program under NSA
- Initial focus on defining biometric community potential and establishing core capabilities:
  - Developing an independent and certified **test** facility
  - Accelerating and expanding basic **standards**
  - Defining a comprehensive **training** program in biometrics
  - Conducting applications **research**
  - Improving biometric **data services** resources



# *NBSP Test, Research & Data Center*



“...we must also prepare to deal with the technological capabilities that other countries will acquire.... this underscores how important it is for America to not only become a leader in the development of biometric technologies, but to always remain a leader.”

**Senator Jay Rockefeller at the Dedication of NBSP's TRDC –Dec. 2004**



# ***NBSP Test, Research & Data Center***

- TRDC established in Morgantown, WV as the only independent testing, training, and data facility focused exclusively on biometrics
- 2,000 ft<sup>2</sup> biometric testing & training center
  - QPL Human Factors Testing Area
  - Tester Enrollment and Training Area
  - Training Rooms
- 8,000 ft<sup>2</sup> office and laboratory spaces
  - Fully-equipped laboratory
  - Professional work-spaces for long-term projects



# *Test and Evaluation*



“If we’re going to be serious about security at our airports, we need to employ biometric technology.”

**Rep. Peter DeFazio (D-OR), member of the House Committee on Transportation and Infrastructure**



# *Testing Achievements*

- NBSP is creating a new level of assurance for government and private sector buyers and users of biometric equipment with development of a three-class testing program:
  - **Class I**  
Tests commercial products against a common performance threshold to establish basic capability to meet security requirements.
  - **Class II**  
Uses developed compliance suites to assess product conformance with standards  
[Products that meet Class 1 and Class 2 requirements are posted on a Qualified Products List (QPL)]
  - **Class III**  
Conducts client specified tests to meet special application requirements or perform comparative evaluations



# *Standards Development*



“The latest science and most advanced technologies must continue to be sought out and utilized. To that end, common international standards of biometrics must be developed... the sooner the better.”

**Tom Ridge, Secretary for Homeland Security, 14 January 2005**



# *Standards Achievements*

- NBSP has invested \$1.5m and 5,000 + hours
  - Number of published standards doubled from 10 to 23
  - Provided two technical contributions/reports to M1.6 Cross Jurisdictional and Societal Issues Task Group:
    - “United States Federal Laws Regarding Privacy and Personal Data and Applications to Biometrics”
    - “International Data Privacy Laws and Application to the Use of Biometrics in the United States”
  - Updated “Biometric Standardization 2005 – Status, Progress and Plans”
  - Continue to support NIST’s development of a BioAPI Conformance Test Suite (CTS)



# *Standards Achievements*

- Expanded available software platforms for standards-based biometric systems
  - **Funded development of Beta version of Windows CE Reference Implementation Software to support the BioAPI Consortium**
- Enabled international use of biometric-based Seafarers ID cards on behalf of the International Labor Organization (ILO)
  - **Developed first draft of required standard for seafarer applications and enabled ILO to expand number of qualified biometric vendors**
- Funded U.S. National Body representatives positions to the ISO/IEC JTC 1, SC37 on biometrics at Seoul and Paris



# *Training and Education*



“The ultimate goal of training is to reduce failure to enroll Rate and increase true Match rates. This keeps Costs down and user Satisfaction high.”

“Identity Assurance in the Information Age” by Woodward, Orleans and Higgins



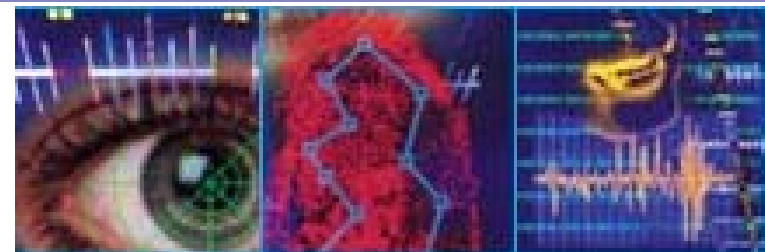
# *Training Achievements*

- NBSP conducted extensive surveys of the biometric community to determine what practitioners in the field thought was most needed in training
- Invested 2,200+ hours in curriculum development to fill identified gaps in available biometric training with three (3) new biometric training courses.
  - **A biometric orientation course for managers**
  - **A technical course for program managers and operational personnel**
  - **A certification course for tech support and maintenance**



# *Education Achievements*

- NBSP helped establish the foundation for Educational Biometric Centers of Excellence
  - Enables universities to design/implement biometric programs consistent with Government/Industry needs
  - NBSP hosted and chaired a Biometric Education Working Group (BEWG) attended by Univ. of Kentucky, James Madison, WVU and Michigan State Univ., the Federal Government (DHS) and industry
  - Primary objective of BEWG is to propose a Biometric Curriculum prototype in preparation to certify schools as Programs of Excellence in Biometrics
  - First BEWG report is due to be published in August 2005



# *Research and Analysis*



“The objective of research is to support improvements in performance, development of effective countermeasures to technology threats; and examination of new technology.”

From NBSP BiNS SOW



# *Research and Analysis Achievements*

## Impact Studies and Tools

- Developed two comprehensive reports assessing U.S. Federal and international laws on privacy and personal data
  - **Reports demonstrate how, under existing legal systems, biometrics can effectively be used as a system to verify identity in virtually any situation and, under certain circumstances, to positively identify individuals through the use of databases without sacrificing the desire for maintaining and protecting personal privacy.**
- Developed a Protocol for the Collection, Use, Dissemination, and Storage of Biometric Data
  - **Protocol provides guidelines for organizations to meet federal requirements on the handling of information, especially as related to human subjects.**



# Data Services



“An authoritative and regularly updated data base and reference source on biometrics is a pressing requirement to support all the activities described above.”

NBSP



# *Data Services Achievements*

- NBSP is enhancing available, viable biometric information via:
  - a unique reference work titled the BTAM (Biometric Technology Applications Manual)
    - ▶ **Comprehensive reference manual on biometric applications.**
    - ▶ **Real-world user's manual for those who specify, buy, integrate, and manage biometric systems**
      - ▶ **Updated on a regular basis to assure its currency**
  - An extensive biometrics data base linked to related, existing publicly available and sequestered information
  - Supporting the Biometric Consortium
    - ▶ **Migrating LISTSERV to an interactive bulletin board**



# ***NBSP Application Experience***

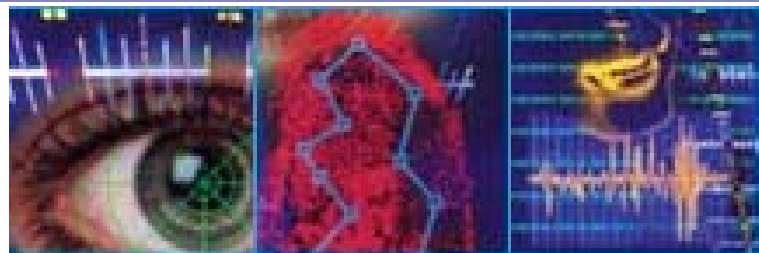
- **US-VISIT Program:** NBSP established a testing regime for passports and readers that utilize integrated circuit chips to retain secure biometric information.
  - **evaluated the interoperability and effectiveness of chips to be inserted into visa-waiver country passports**
  - **successfully conducted at the NBSP TRDC July 27-29, 2004.**
- **Enhanced International Traveler System (EITS):** At the request of the White House Office of Science & Technology Policy NBSP completed initial work on EITS
  - **defined the scope of the EITS effort**
  - **evaluated the options for establishing a multilateral international traveler identification system**
  - **identified issues that would affect implementation**



# ***NBSP Application Experience***

## **Image Collection Project:**

- **NIST-led effort to collect multiple, accurate biometric images that may be used to advance research on biometric applications**
  - **Establishes common database of images to test all competing systems within technology specific databases**
  - **Provides common basis for testing, using data developed from different sources, equipment, and conditions**
  - **NBSP took the lead in defining the scope and organization of this effort by proposing a three-phase project**
  - **End result will be the collection of images from 10,000 subjects**



# ***NBSP Initiatives***

## ➤ Safe Schools

**NBSP is providing support to a Department of Education Safe Schools research project intended to develop a series of prototype safe schools configured with biometrics as part of the overall security plan for primary, middle and secondary schools**

## ➤ Identity Theft

**NBSP is examining alternatives for use of biometrics in identity management and authentication as a key to deterring Identity theft and recovery.**



# Summary

- Start-up period (2003-2005):
  - addressed urgent standards, research & testing needs
  - assessed near-term requirements & completed infrastructure development required to provide focused services to the biometric community
- The implementation period (2006-2007):
  - will execute the developed testing, training, and data services to support users and the industrial base
- The overall mission and objectives remain focused:
  - advance the use of biometrics as a key component in an integrated system for infrastructure protection
  - Improve the performance/effectiveness of biometrics as the primary tool in identity management and security

