

Aviation Security

February 19, 2003 Review

First Year Accomplishments

- ◆ Application of Aviation Security Reporting System for Security Investigated
 - Reports processed with structured call back
- ◆ Developed Aviation security laboratory and processing infrastructure
 - Lab available for NASA/FAA workshop
 - Biometric and ID devices procured and working
 - Focal point for various tours
- ◆ Knowledge acquisition and categorization
 - Voquette-based system provides demos of main aspects of passenger flow where IT could be injected
 - Brought in data from web
 - Under Voquette-developed software acquired Lexis-Nexis data on 12000 pseudo passengers (prior to availability of Northwest Passenger Data)

More First Year

◆ Data mining

- 90 days of Northwest Airlines CD data decoded so that they could be rapidly read
 - ◆ Would have taken a year to read with software supplied with CDs and discussions with software vendor did not promise significant improvements.
 - ◆ Under current approach will take a matter of days
- Preliminary mining on
 - ◆ Pseudo-passengers with Lexis-Nexis data
 - ◆ Preliminary NW Airlines data
- Data mining investigation under external contact to Study of Learning and Expertise (ISLE)
 - ◆ Mining of non-sensitive census data that mirrors passenger data
 - ◆ Algorithms investigated by ISLE
 - ◆ New algorithm created for anomaly detection



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