Recommended Security Guidelines for Airport Planning, Design & Construction

Mike Duffy, TSA TSNM

AECOM

Christer Wilkinson

Revised May 2011

2011 Public Safety & Security Fall Conference
August 29, 2011 - September 1, 2011 / Arlington, VA
<table>
<thead>
<tr>
<th>Section</th>
<th>Contributors</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<tr>
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<td>Scot Thaxton, TSA</td>
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<tr>
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</tr>
<tr>
<td>Part IV, APP D, General Aviation</td>
<td>Craig Spence, AOPA; Brittney Miculka, AOPA</td>
</tr>
<tr>
<td>Part IV, APP E, Planning &amp; Design, Command &amp; Control...</td>
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</tr>
<tr>
<td>Part IV, APP F, International AVSEC</td>
<td>Kristina Dores, International Civil Aviation Organization (ICAO); Solomon Wong, InterVistas</td>
</tr>
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</table>
MAJOR DRIVERS OF CHANGE
BUT ALL CONTENT WAS REVISED/UPDATED

Part III, Section E, Baggage Screening  TSA
Part III, Section F, Passenger Screening  TSA
Part III, Section G, Access Control  AECOM
Part III, Section H, Video / CCTV  TranSecure
Part III, Section I, IT / Communications  TranSecure
Part IV, Apdx E, Command and Control  SDI
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Guide to Emergency Response Planning at State Agencies


Dept of Homeland Security's Approach to Risk Analysis

October 1, 2010 - The National Research Council has released a report that explores how the U.S. Department of Homeland Security (DHS) is building its capabilities in risk analysis to inform decision making.

Transmission of Disease in Airports

August 6, 2010 - Research on the Transmission of Disease in Airports and on Aircraft is the summary of a September 2009 symposium. The symposium examined the status of research on or related to transmission of disease on aircraft and in airports, and the application of research results to develop protocols and standards.

Hyper-Links throughout the entire Guidelines take the reader to related materials both inside and outside the document – government, industry & academic resources.

2. Electronic Baggage Screening Program (EBSP). Guidance and sample documentation will continue to be reviewed, updated and posted to: http://www.tsa.gov/research/checked_baggageMaterial.shtml under In-Line Support Application Documents.


5. Chemical & Biological Agent Resources and guidance may be obtained from TSA, Federal Emergency Management Agency (FEMA), Federal Bureau of Investigation (FBI), Department of Energy (DOE), Center for Disease Control (CDC)

Section C - Airport Planning, Security, and Transportation and Facility Security Reports
(Where publication dates are not shown, the publication or document is typically updated regularly, or annually, and should be reviewed in its most recent edition. Some publications are free and others available for purchase.)


Guidelines to Improve Airport Preparedness Against Chemical and Biological Terrorism, Edwards, Dr. Donna M., et al, Sandia Berkley National Laboratory, Albuquerque, New Mexico 87185 and Livermore, California

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"Guidelines" is about...
• Planning
• Design
• Construction
  • Good ideas
  • Options
  • Alternatives
  • Best practices
  • Choices

Is *not* about
  – Policy
  – Procedures
  – Operations
  – Regulations
  – Mandates
  – Requirements

However.....
Part I - Overview:

- A- Introduction
- B- Applicability
- C- Purpose
- D- Background
- E- Coordination
- F- Changing Security

Concerns and
Contingency Measures

- A&E firms, Non-AvSec. Subs
- Legislative / regulatory
- **Checklists**
- Hyperlinks – chapters, outside

- ConOps to coordinate the needs of:
  - ASP
  - FSD / 1542
  - LEO
  - FAA / 139
  - CBP
  - First responder
  - Carriers / tenants
PART II – PLANNING AND DESIGN CONSIDERATIONS

A- General
B- Facility Protection
C- Planning for…
• Secure Areas & Boundaries
• Vulnerability Assessments
• Protection Criteria
• Physical Protection
• Crime Prevention
• Record-keeping
• Delegation of Responsibility
• Design Factors

• Understand policies, procedures, operations & regulations to plan for them
• Generic: large/small airports can be very different
• Still provide guidance to the full spectrum of airports
• Common crimes
• ConOps / vulnerability assess.
• Responsibility: TSP, EAA, MOU
• Architectural conflicts
  • Pax flow, LOS, aesthetics
  • Legacy systems
Part III- Recommended Guidelines

- Section A-
  - Layout & boundaries
- Section B-
  - Airside
- Section C-
  - Landside
- Section D-
  - Terminal

- Section E & F (TSA)
  - Passenger Screening
  - Baggage Screening
  - Cargo Screening
- Section G-
  - Access /Alarms/Bio
- Section H-
  - Video Surveillance, Detection & Distribution
Part III—continued

- Section I-
  - Power
  - Communications
  - Cabling Infrastructure
- Section *- (became an appendix)
  - International Aviation & Implications for U.S. Airports
  - CBP Guidance,

APPENDICES

Appendix A  Airport Vulnerability Assessment Process
Appendix B  Chem/Bio Protection and Response
Appendix C  Airport Blast Protection/ Mitigation
Appendix D  General Aviation
Appendix E  Planning & Design Support of Command and Control
Appendix F  Int’l Aviation Security and Implications for U.S. Airports
Appendix G  Glossary of Civil Aviation Security- Related Terms
Appendix H  Bibliography
Section A – Layout & Boundaries

Many A&E’s, subs, don’t fully understand the relationship among the various security-related areas, and thus, how to design for the differences.

<table>
<thead>
<tr>
<th>Regulatory Requirements</th>
<th>Secured Area</th>
<th>SIDA</th>
<th>AOA</th>
<th>Sterile Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Access controls meeting 49 CFR 1542.207.</td>
<td>1. No access controls required by regs.</td>
<td>1. Basic access controls meeting 49 CFR 1542.</td>
<td>1. Access controls meeting §1542 or screening per §1544.</td>
<td></td>
</tr>
<tr>
<td>3. Full CHRC and TSA Security Threat Assessment (STA)</td>
<td>3. Full CHRC and TSA Security Threat Assessment (STA)</td>
<td>3. STA required</td>
<td>3. CHRC and STA required</td>
<td></td>
</tr>
<tr>
<td>4. ID display/challenge</td>
<td>4. ID display/challenge</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security Level</th>
<th>Secured Area</th>
<th>SIDA</th>
<th>AOA</th>
<th>Sterile Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest level of security including access controls, training, CHRC, STA, and ID display/challenge procedures.</td>
<td>SIDA relates to ID display and CHRC/STA only. Access controls are determined by requirements of AOA, Sterile, or Secured Area location.</td>
<td>Broader application of security requirements are not specifically set forth in §1542. STA required</td>
<td>Sterile area(s) may be SIDA depending upon the Airport Security Program. CHRC and STA required</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relational Description</th>
<th>Secured Area</th>
<th>SIDA</th>
<th>AOA</th>
<th>Sterile Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Secured Area is always a SIDA, because all three SIDA elements are present: Training, CHRC/STA, and ID display/challenge procedures. However, the Secured Area goes beyond SIDA by requiring access controls.</td>
<td>SIDA lacks access controls, so a SIDA cannot be a Secured Area.</td>
<td>The AOA requires only basic access controls, but sets no specific standards beyond those adopted locally in the airport security program.</td>
<td>The Sterile Area begins immediately after the screening checkpoint(s) and extends to the boundaries of the Secured Area and/or SIDA, where access controls are required to enter the more secure areas.</td>
<td></td>
</tr>
</tbody>
</table>

Table II-C-1—Security Areas—Basic Requirements and Descriptions
Section A - Boundary/Perimeter

- Fence requirements (A/C’s)
- Signage – 150/5360-12C
- Roadways / vehicle gates
- Guard stations – IT/power
- Fuel farm
- Utility service entry points
- UPS / Emergency generator
- Lighting
- Natural barriers
- Seismic / flood
- HVAC / Chem-Bio

Road barriers
ASTM F2656 - 07 Standard Test Method for Vehicle Crash Testing of Perimeter Barriers,
http://www.astm.org/Standards/F2656.htm
### Section B: Airside
- Movement Area
  - A/C 150/5300-13
  - Part 77
- Cargo facility
- GA
- “Hot spot”
- Roadways - gates

### Section C: Landside
- Clear zone
  - Line of sight
- Curb / Parking
- Taxi staging
- Intermodal - transition
- EMT/TCU access
- Roadways - screening
Section D - Terminal

- ConOps
- V/A, blast analysis overview
- Limited concealment (refuge)
- Operational pathways
- Minimize operational access
- Admin. & vertical circulation
- Cargo
- Secure vs. sterile vs. fire
- Emergency evacuation
- Concessions – service corridors
- LEO facilities;
- SOC, ACAMS, EOC
- K-9
- FIS

Check-In Levels of Service

<table>
<thead>
<tr>
<th>Square Feet Per Passenger</th>
<th>A (excellent)</th>
<th>B</th>
<th>C (good)</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few carts and few passengers with checked bags</td>
<td>18</td>
<td>15</td>
<td>13</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Many passengers with checked bags (e.g. international), carts and well wishers</td>
<td>28</td>
<td>25</td>
<td>22</td>
<td>20</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ATF</th>
<th>VEHICLE DESCRIPTION</th>
<th>MAXIMUM EXPLOSIVES CAPACITY</th>
<th>LETHAL AIR BLAST RANGE</th>
<th>MINIMUM EVACUATION DISTANCE</th>
<th>FALLING GLASS HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMPACT SEDAN</td>
<td>500 Pounds; 227 Kilos (In Tray)</td>
<td>100 Feet; 30 Meters</td>
<td>1,500 Feet; 457 Meters</td>
<td>1,250 Feet; 381 Meters</td>
</tr>
<tr>
<td></td>
<td>FULL SIZE SEDAN</td>
<td>1,000 Pounds; 455 Kilos (In Tray)</td>
<td>125 Feet; 38 Meters</td>
<td>1,750 Feet; 534 Meters</td>
<td>1,750 Feet; 534 Meters</td>
</tr>
<tr>
<td></td>
<td>PASSENGER VAN OR CARGO VAN</td>
<td>4,000 Pounds; 1,818 Kilos</td>
<td>200 Feet; 61 Meters</td>
<td>2,750 Feet; 838 Meters</td>
<td>2,750 Feet; 838 Meters</td>
</tr>
<tr>
<td></td>
<td>SMALL BOX VAN (14 FT BOX)</td>
<td>10,000 Pounds; 4,515 Kilos</td>
<td>300 Feet; 91 Meters</td>
<td>3,750 Feet; 1,143 Meters</td>
<td>3,750 Feet; 1,143 Meters</td>
</tr>
<tr>
<td></td>
<td>BOX VAN OR WATER/FUEL TRUCK</td>
<td>30,000 Pounds; 13,636 Kilos</td>
<td>450 Feet; 137 Meters</td>
<td>6,500 Feet; 1,982 Meters</td>
<td>6,500 Feet; 1,982 Meters</td>
</tr>
<tr>
<td></td>
<td>SEMI-TRAILER</td>
<td>60,000 Pounds; 27,273 Kilos</td>
<td>600 Feet; 183 Meters</td>
<td>7,000 Feet; 2,134 Meters</td>
<td>7,000 Feet; 2,134 Meters</td>
</tr>
</tbody>
</table>

ATF Blast distances

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Passenger Screening

CHECKPOINT DESIGN GUIDE (CDG)
Revision 1
February 11, 2009

Prepared for the
Transportation Security Administration
Office of Security Technology
Contract Number: HSTD04-06-D-DEF003
Office of Security Operations
Operational Improvement Branch

Planning Guidelines and Design Standards for
Checked Baggage Inspection Systems

Section E

Section F

Baggage Screening
Standard SSCP Layout

Power & Data Under-Floor Distribution
Unscreened checked baggage travels on conveyor belts leading from the point of induction (e.g., check-in counter) to take-away belts into Level 1 screening.

Checked baggage automatically screened by EDS machine for explosives.

Transportation Security Officers (TSOs) viewing EDS generated images for alarm baggage, try to clear such alarm bags using OSR tools.

Alarm bags not cleared by TSOs during the OSR process and error bags travel to CBRA for manual inspection using ETD.

Clear bags travel to baggage makeup and are then loaded onto airplanes.

**LEGEND**
- Unscreend Bags
- EDS
- EDS Alarmed / Undergoing OSR Bags
- Suspected Bags
- Cleared Bags

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Section G – INTEGRATED Access Control

New RTCA Guidance,

Extensive new guidance on
- Access control
- Biometrics
- ID Management
- System integration

- Tied to TSA Guidelines
document for coordination of all pieces of the puzzle via the ConOps, C2, IT, CCTV, Communications and Perimeter systems
Section H – Video Surveillance, Detection & Distribution

<table>
<thead>
<tr>
<th>Standard</th>
<th>Resolution</th>
<th>CCD/CMOS Array</th>
<th>Depth 256 colors</th>
<th>Video Rate</th>
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</thead>
<tbody>
<tr>
<td>USA</td>
<td>VGA</td>
<td>H Pixel: 640</td>
<td>V Pixel: 480</td>
<td>Bits: 8</td>
</tr>
<tr>
<td>NTSC/</td>
<td>QCIF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS 170</td>
<td>CIF</td>
<td>H Pixel: 352</td>
<td>V Pixel: 240</td>
<td>Bits: 8</td>
</tr>
<tr>
<td></td>
<td>4CIF</td>
<td>H Pixel: 704</td>
<td>V Pixel: 480</td>
<td>Bits: 8</td>
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<tr>
<td></td>
<td>RGB</td>
<td>H Pixel: 768</td>
<td>V Pixel: 480</td>
<td>Bits: 8</td>
</tr>
<tr>
<td>Europe</td>
<td>VGA</td>
<td>H Pixel: 720</td>
<td>V Pixel: 576</td>
<td>Bits: 8</td>
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<tr>
<td>PAL</td>
<td>QCIF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIF</td>
<td>H Pixel: 352</td>
<td>V Pixel: 288</td>
<td>Bits: 8</td>
</tr>
<tr>
<td></td>
<td>4CIF</td>
<td>H Pixel: 704</td>
<td>V Pixel: 576</td>
<td>Bits: 8</td>
</tr>
<tr>
<td></td>
<td>RGB</td>
<td>H Pixel: 768</td>
<td>V Pixel: 580</td>
<td>Bits: 8</td>
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Horizontal/Vertical Resolution of U.S./European Video Standards

<table>
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<tr>
<th>Observer's Requirements</th>
<th>Observer's Confidence Level</th>
<th>Truck or SUV Target</th>
<th>Person – Standing Target</th>
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<tbody>
<tr>
<td>Detection</td>
<td>0.50</td>
<td>0.90</td>
<td>1.50</td>
</tr>
<tr>
<td></td>
<td>0.95</td>
<td>2.00</td>
<td>3.20</td>
</tr>
<tr>
<td>Orientation</td>
<td>0.50</td>
<td>1.25</td>
<td>1.80</td>
</tr>
<tr>
<td></td>
<td>0.95</td>
<td>3.00</td>
<td>3.80</td>
</tr>
<tr>
<td>Recognition</td>
<td>0.50</td>
<td>4.50</td>
<td>3.80</td>
</tr>
<tr>
<td></td>
<td>0.95</td>
<td>8.00</td>
<td>7.60</td>
</tr>
<tr>
<td>Identification</td>
<td>0.50</td>
<td>8.00</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>0.95</td>
<td>13.00</td>
<td>26 for surveillance, up to 40 for legal evidence</td>
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Resolution per Minimum Target Dimension in Line-Pairs
### Horizontal Angular & Linear Field Coverage of Surveillance Cameras

<table>
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<tr>
<th>Lens Focal Length (mm)</th>
<th>Horizontal Angular Field of View (degrees)</th>
<th>Linear Field average at 1000 feet</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>35.5</td>
<td>640.0</td>
</tr>
<tr>
<td>10</td>
<td>51.3</td>
<td>960.0</td>
</tr>
<tr>
<td>25</td>
<td>65.2</td>
<td>1280.0</td>
</tr>
<tr>
<td>50</td>
<td>82.7</td>
<td>1760.0</td>
</tr>
<tr>
<td>75</td>
<td>104.0</td>
<td>2560.0</td>
</tr>
<tr>
<td>100</td>
<td>5.0</td>
<td>64.0</td>
</tr>
<tr>
<td>200</td>
<td>2.5</td>
<td>48.0</td>
</tr>
<tr>
<td>300</td>
<td>2.4</td>
<td>32.0</td>
</tr>
<tr>
<td>500</td>
<td>1.0</td>
<td>16.0</td>
</tr>
<tr>
<td>1000</td>
<td>0.7</td>
<td>8.0</td>
</tr>
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</table>
### IEEE Ethernet Standards and Cable Distances for Gigabit Service

#### Section I – Power, Communications, Cable Infrastructure

<table>
<thead>
<tr>
<th>Network Technology</th>
<th>IEEE Standard</th>
<th>Cable Type and Bandwidth</th>
<th>Total Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000base-sx (850 nm short wavelength)</td>
<td>802.3z</td>
<td>62.5-micron multimode fiber</td>
<td>2 - 220m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>160 modal-bandwidth (MHz*km)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 modal-bandwidth (MHz*km)</td>
<td>2 - 275m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50-micron multimode fiber</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>400 modal-bandwidth (MHz*km)</td>
<td>2 - 500m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 modal-bandwidth (MHz*km)</td>
<td>2 - 550m</td>
</tr>
<tr>
<td>1000base-lx (1300 nm long wavelength)</td>
<td>802.3z</td>
<td>10-micron single-mode fiber (plus same as 1000Base-SX above)</td>
<td>2 - 5km</td>
</tr>
<tr>
<td>1000base-cx</td>
<td>802.3z</td>
<td>Twinax copper</td>
<td>25m</td>
</tr>
<tr>
<td>1000base-t</td>
<td>802.3ab</td>
<td>Cat5, Cat5E, Cat6 UTP copper</td>
<td>100m</td>
</tr>
</tbody>
</table>
APPENDICES

Appendix A  Airport Vulnerability Assessment Process
Appendix B  Chem/Bio Protection and Response
Appendix C  Airport Blast Protection/ Mitigation
Appendix D  General Aviation
Appendix E  Planning & Design Support of Command and Control
Appendix F  Int’l Aviation Security and Implications for U.S. Airports
Appendix G  Glossary of Civil Aviation Security- Related Terms
Appendix H  Bibliography
Appendix A – vulnerability assessment

• 5 Elements of Effective Assessments
  • Asset analysis
  • Target / threat identification
  • Vulnerability assessment
  • Consequence analysis (scenarios)
  • Counter measure recommendations

• CARAT – Commercial Airport Resource Allocation Tool
  (on secure web board)

• ASSET – Airport Security Self Evaluation Tool

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## Appendix A Figure B-1—Scenario Evaluation Criteria

<table>
<thead>
<tr>
<th>Vulnerability of Target</th>
<th>Impact</th>
<th>Criticality Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>Loss of Life</td>
<td>H</td>
</tr>
<tr>
<td>B</td>
<td>II</td>
<td>Serious injury, major service impact</td>
</tr>
<tr>
<td>Somewhat Easy</td>
<td></td>
<td>H</td>
</tr>
<tr>
<td>C</td>
<td>III</td>
<td>Minor injury, minor service impact</td>
</tr>
<tr>
<td>Difficult</td>
<td></td>
<td>H</td>
</tr>
<tr>
<td>D</td>
<td>IV</td>
<td>No injury, no service impact</td>
</tr>
<tr>
<td>Very Difficult</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>E</td>
<td>--</td>
<td>---</td>
</tr>
<tr>
<td>Too Difficult</td>
<td></td>
<td>---</td>
</tr>
</tbody>
</table>

H=High  S=Serious  L-Low
Appendix B – Chem Bio

This appendix is in part from “Guidelines to Improve Airport Preparedness Against Chemical and Biological Terrorism,” by Sandia-Berkley National Laboratory.

• Prevent
  • Air intakes, HVAC mechanical rooms, plans

• Detect
  • No effective sensors
  • Training, drills

• Mitigate
  • ASHRE - MERV-12 filters
    • [Link to Amer. Soc. Heating, Refrigeration & A/C Engineers]
  • Airflow control, isolation / shelter in place areas
  • Quarantine
Appendix C – Airport Blast Protection


• An Exercise in Risk Management:
  
  a. Security design: using cameras, sensors, alarms, K-9, and patrols, etc.
  
  b. Standoff: separation between a potential bomb source and certain targets;
  
  c. Physical protection: using gates, barriers, blast-hardened columns, blast debris screens, and blast-resistant windows, etc.;
  
  d. Risk acceptance: through prioritization of protective measures based upon a vulnerability assessment, implementation cost, and airport security plan; and
  
  e. Blend of all of the above: in an integrated security plan that combines mobile security, standoff, physical protection, and risk acceptance.
<table>
<thead>
<tr>
<th>ATF</th>
<th>VEHICLE DESCRIPTION</th>
<th>MAXIMUM EXPLOSIVES CAPACITY</th>
<th>LETHAL AIR BLAST RANGE</th>
<th>MINIMUM EVACUATION DISTANCE</th>
<th>FALLING GLASS HAZARD</th>
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<tbody>
<tr>
<td></td>
<td>COMPACT SEDAN</td>
<td>500 Pounds 227 Kilos (In Trunk)</td>
<td>100 Feet 30 Meters</td>
<td>1,500 Feet 457 Meters</td>
<td>1,250 Feet 381 Meters</td>
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<tr>
<td></td>
<td>FULL SIZE SEDAN</td>
<td>1,000 Pounds 455 Kilos (In Trunk)</td>
<td>125 Feet 38 Meters</td>
<td>1,750 Feet 534 Meters</td>
<td>1,750 Feet 534 Meters</td>
</tr>
<tr>
<td></td>
<td>PASSENGER VAN OR CARGO VAN</td>
<td>4,000 Pounds 1,818 Kilos</td>
<td>200 Feet 61 Meters</td>
<td>2,750 Feet 838 Meters</td>
<td>2,750 Feet 838 Meters</td>
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<td></td>
<td>SMALL BOX VAN (14 FT BOX)</td>
<td>10,000 Pounds 4,545 Kilos</td>
<td>300 Feet 91 Meters</td>
<td>3,750 Feet 1,143 Meters</td>
<td>3,750 Feet 1,143 Meters</td>
</tr>
<tr>
<td></td>
<td>BOX VAN OR WATER/FUEL TRUCK</td>
<td>30,000 Pounds 13,636 Kilos</td>
<td>450 Feet 137 Meters</td>
<td>6,500 Feet 1,982 Meters</td>
<td>6,500 Feet 1,982 Meters</td>
</tr>
<tr>
<td></td>
<td>SEMI-TRAILER</td>
<td>60,000 Pounds 27,273 Kilos</td>
<td>600 Feet 183 Meters</td>
<td>7,000 Feet 2,134 Meters</td>
<td>7,000 Feet 2,134 Meters</td>
</tr>
</tbody>
</table>
Appendix D – General Aviation

- General aviation airports
- GA operating at Commercial Airports
- Update planning Just getting underway
Appendix E - Command and Control – Putting it all together

• DHS Definition:

The concept of operations describes specific organizational approaches, processes, coordinating structures and incident-related actions required for the protection and restoration of CIKR assets, systems, networks, or functions within the impacted area and outside the impacted area at the local, regional, and national levels.

• Which systems needed
• How are they used
• For what benefits
• No shelf-ware

• ConOps

• Operational req’mts
  • Reliable
  • Flexible
  • Scalable

• SOC/AOC/EOC/CP

• Backup/Redundancy
  • Especially IT
  • Cyber-security
Appendix F – International - FIS

Typical Flow Process For Arriving International Pax
APPENDICES

Appendix A  Airport Vulnerability Assessment Process
Appendix B  Chem/Bio Protection and Response
Appendix C  Airport Blast Protection/ Mitigation
Appendix D  General Aviation
Appendix E  Planning & Design Support of Command and Control
Appendix F  Int’l Aviation Security and Implications for U.S. Airports
Appendix G  Glossary of Civil Aviation Security- Related Terms
Appendix H  Bibliography