



Homeland
Security

U.S.
Global Positioning System
and the
Homeland Security Mission

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- DHS Core Missions
 - DHS Common Uses of GPS
 - DHS Components Unique Uses of GPS
 - Summary
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Five Core Homeland Security Missions



Homeland
Security

- Prevent Terrorism and Enhancing Security
- Secure and Manage Our Borders
- Enforce and Administer Our Immigration Laws
- Safeguard and Secure Cyberspace
- Ensure Resilience to Disasters



DHS Common Uses of GPS



Homeland Security

- Timing for Computer Networks
 - Network Time Protocol (NTP)
- Communications
 - Cell Phones, Satellite Comms, Mobile Radios
- Blue Force/Asset Tracking
 - USCG, CBP, ICE, FEMA, etc...
- Natural Disaster/Crisis Management
 - Hurricanes (Katrina, Rita, Sandy)
 - Deepwater Horizon



■ Aids to Navigation

- Placement of Nav Aids

■ Fisheries

- Prevent illegal fishing in prohibited areas

■ Search and Rescue

- Global Maritime Distress and Safety System (GMDSS).
- Rescue 21/SARSAT

■ Automatic Identification System (AIS)

- Maritime Domain Awareness

■ Differential GPS



- Air-Marine Safety of Flight & Navigation
 - Enhanced Ground Proximity Warning System
 - Electro-Optical/Infra-Red (EO/IR) Sensor turret
 - Area Navigation Systems
 - electronic Automatic Identification System (eAIS)
- UAV Control
 - Safety of Flight



- Deploy to Disaster Site
 - Hurricane, Tornado, Fire, etc...
- Conduct Damage Assessments
 - GPS with GIS tools provides timely and accurate damage assessments





Summary

- GPS is widely used carry out DHS Missions
 - Most Common applications are
 - Communications
 - Situational Awareness – Blue Force / Asset Tracking
 - Network Timing
 - DHS Components also have unique uses of GPS
 - UAV Safety of Flight - CBP
 - Aids to Navigation – USCG
 - Command, Control, Coordination of Natural Disasters- FEMA
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QUESTIONS?
