Department of Homeland Security

GPS Interference Detection and Mitigation

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Topics of Discussion

• DHS IDM Governance
• Patriot Watch Concept
• Timing Backup
• Summary
DHS IDM Governance

- Coordinate domestic capabilities to identify, analyze, locate, attribute, & mitigate sources of interference to the GPS & its augmentations.
- Develop & maintain capabilities, procedures & techniques, & routinely exercise civil contingency responses to ensure continuity of operations in the event that access to GPS signal is disrupted or denied.
- Collect, analyze, store, & disseminate interference reports from all sources to enable appropriate notification, investigation, & enforcement action.
Patriot Watch System

- System-of-Systems, open architecture, multi-phased approach for situational awareness
  - Designed with government & commercial HW/SW
  - Persistent monitoring for situational awareness
  - Timely response to anomalies
Domestic Timing Backup

- Distributing the Master Clock on Fiber
  - Independent of GPS
  - Utilize existing fiber infrastructure
  - Long-haul test under development
- Investigating over the air transmission alternatives.
Summary

- **Patriot Watch Concept**
  - Systematic layered approach with Open architecture
  - Standardized data protocol for seamless integration of sensors

- **PNT Incident Portal** – Central data repository complete

- **Conduct long-haul fiber test**

- **Investigating over the air transmission of time**
Questions?

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