Patriot Watch

Vigilance

Safeguarding America

DHS Position, Navigation & Timing (PNT)
Program Management Office
John Merrill – Program Manager

National Space-based PNT Advisory Board
November 2011
Patriot Watch

• Protect the Nation’s 18 Critical Infrastructure & Key Resource Sectors

• System-of-Systems, open architecture, multi-phased/multi-layered approach

• Near real-time situational awareness of PNT Interference
  – Leverage existing mature capabilities & focus on the data, less on system/device
  – Common Data Structure for Information Sharing
  – Persistent monitoring for situational awareness
Patriot Watch

Monitoring & Data Collection

- Crowd Sourcing Applications
- Fleet Management
- FCC/FAA Receiver/Sensors

Processing

- UNITRAC
- PNTIP
- DHS GII OneView

Analysis & Evaluation

- FAA NOCC
- GPSOC
- NAVCEN
- NCCIC
- FCC
- USER

Federal law prohibits the operation, marketing, or sale of any type of jamming equipment, including devices that interfere with cellular and Personal Communication Services (PCS), police radar, Global Positioning Systems (GPS), and wireless networking services (Wi-Fi).

"Jamming devices create serious safety risks. In the coming weeks and months, we'll be intensifying our efforts through partnerships with law enforcement agencies to crack down on those who continue to violate the law. Through education, outreach, and aggressive enforcement, we're tackling this problem head on."

-- P. Michele Ellison, Chief, Enforcement Bureau
Mitigation -- Resiliency

- Master Clock Distribution via Optical Networks
  - Utilize existing fiber infrastructure
  - Successful prototype
  - Long-haul test between pre-determined sites to evaluate physical capabilities, baseline
  - Distribution of Master Clock to specific demarcation
Department of Homeland Security
PNT Program Management Office

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