



SPACE-BASED POSITIONING  
NAVIGATION & TIMING  
NATIONAL COORDINATION OFFICE

# **U.S. Space-Based Positioning, Navigation & Timing (PNT) Policy Update**

**52nd Civil GPS Service Interface Committee Meeting  
Nashville, Tennessee**

**Col Harold W. Martin III  
Deputy Director  
National Coordination Office**



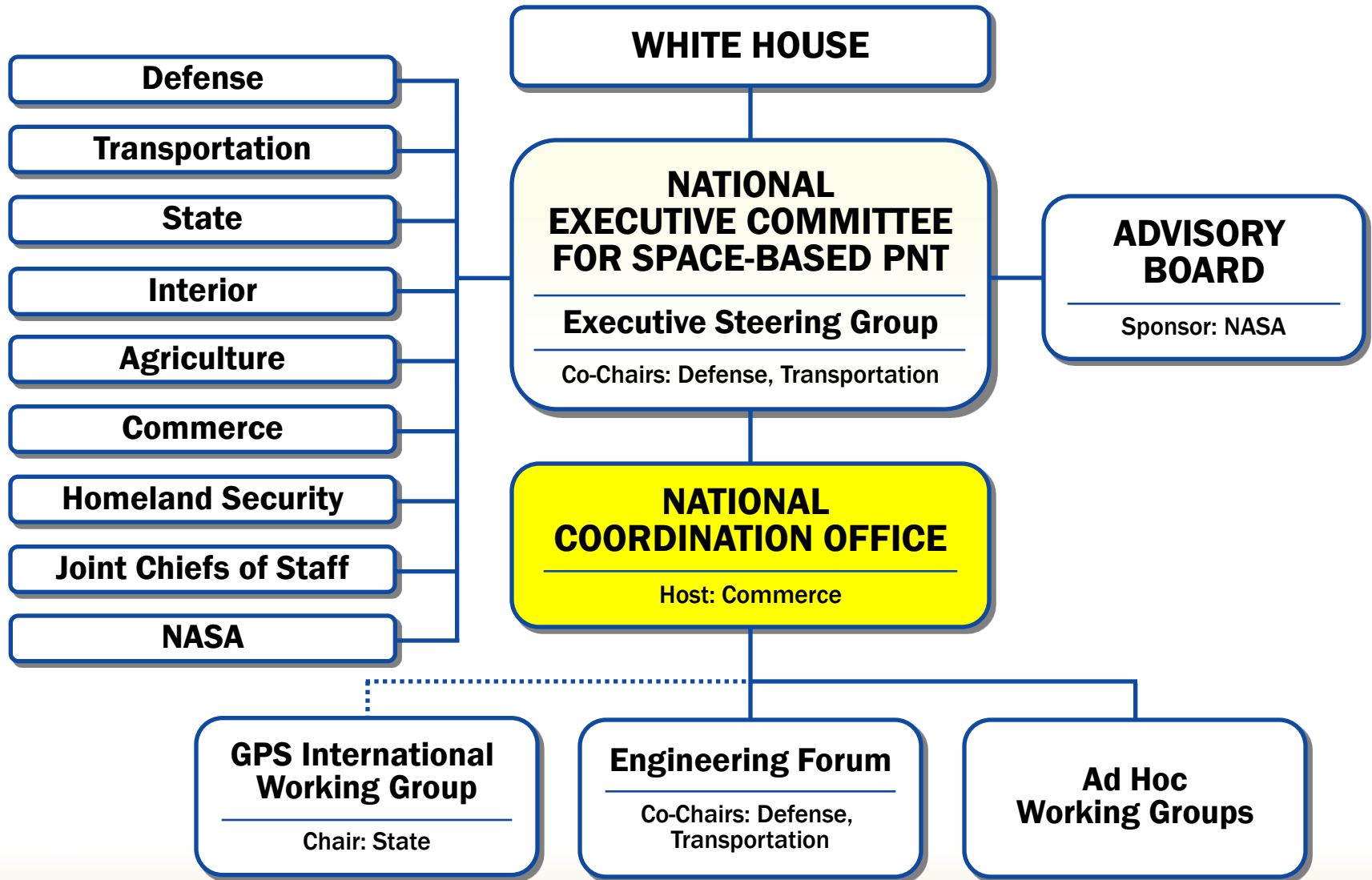
# Overview



- **U.S. Space-Based PNT Organization**
- **Policy and Issues Update**
- **Spectrum Update**
- **GPS.gov**



# U.S. Space-Based PNT Organization Structure





# National Coordination Office (NCO) for Space-Based PNT



- **Director:** Anthony Russo, DOT
- **Deputy Director:** Col Harold Martin, DOD/AF
- Ken Alexander, DOT/FAA
- Maj Ben Calhoun, DOD/AF
- Robert Crane, DHS
- Anita Eisenstadt, State
- Rick Foote, DOC/NOAA
- Dan Good, USDA
- Glenn Guempel, DOI
- Jason Kim, DOC
- Jim Burton, Overlook
- Steve Sidorek, Overlook

*Many new faces, strong continuity of mission*



# National Space-Based PNT Advisory Board



- Provides independent advice/recommendations on PNT policy and management issues
- 25 members, including 5 international
  - Chair: Hon. James Schlesinger
  - Vice Chair: Dr. Brad Parkinson
- Met Aug 14-15 to discuss ways to measure and communicate economic value of GPS to our Nation



# National Space Policy, 2010



***The U.S. must maintain its leadership in the service, provision and use of Global Navigation Satellite Systems (GNSS)***

- **Provide continuous worldwide access to GPS for peaceful uses, free of direct user charges**
- **Encourage compatibility and interoperability with foreign GNSS services**
- **Operate and maintain constellation to satisfy civil and national security needs**
  - **Foreign PNT may be used to strengthen resiliency**
- **Invest in domestic capabilities and support international activities to detect, mitigate and increase resiliency to harmful interference**



# Recent EXCOM Issues



- **LightSquared Recommendation to NTIA**
  - Testing showed harmful interference, FCC has not approved the proposed terrestrial deployment
- **Interference Detection, Mitigation, and Reporting**
  - Department of Homeland Security IDM activities
- **Development of Spectrum Interference Standards**
  - NTIA and DoT proposing various assessments to begin the journey



# Spectrum Update



- **Jan 2012: EXCOM letter to NTIA on test results**
  - “Unanimous conclusion of the test findings ... proposed mobile network would cause harmful interference to many GPS receivers”
  - No practical solutions or mitigations
- **Feb 2012: NTIA letter to FCC states NTIA conclusions**
  - “it is clear that LightSquared’s proposed implementation ...would impact general/personal and certified aviation GPS receivers”
  - There are no mitigation strategies that solve the problem
- **Feb 2012: FCC proposed to vacate conditional waiver**
  - Would also suspend indefinitely LightSquared’s ATC authorization
  - Comment period closed 30 Mar 2012
  - No further action from FCC since that time

***FCC Statement: “The Commission will not lift the prohibition on LightSquared”***





# Development of Spectrum Interference Standards



- EXCOM proposed to draft new GPS Spectrum interference standards
- NTIA beginning to discuss potential receiver standards to repurpose spectrum in the vicinity of GPS spectrum
- DOT planning assessment to develop spectrum protection criteria for GPS applications

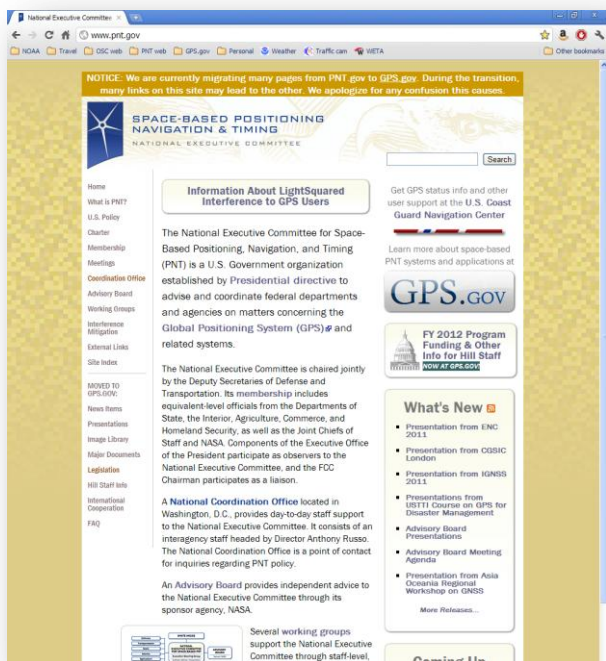
***Spectrum Protection Issues Continue for GPS and Have National-Level Attention***



# GPS.gov



- NCO maintains GPS.gov as a central public resource for official USG information about GPS and related topics
- Recently consolidated PNT.gov website with GPS.gov



- Currently migrating CGSIC website to GPS.gov



# Summary



- **GPS receives national-level attention and guidance**
- **U.S. policy upholds longstanding commitments to free, continuous, worldwide GPS access**
- **Spectrum issues continue for GPS**
  - **Broadband priorities seek to squeeze efficiencies from already congested spectrum**
  - **Development of spectrum interference standards**
- **GPS.gov is an increasingly useful resource for information on GPS and related topics**



# Contact Information



## **Col Harold W. Martin III**

**National Coordination Office for Space-Based PNT  
1401 Constitution Ave, NW – Room 2518  
Washington, DC 20230**

**Phone: (202) 482-6726**

**[Harold.Martin@pnt.gov](mailto:Harold.Martin@pnt.gov)**

**[www.gps.gov](http://www.gps.gov)**