

National PNT Advisory Board – May 2023 Recommendation

PNT and Great Power Competition – Resilient PNT Architectures

- **Findings:**

- The transformational success of GPS has encouraged the emergence of new and similar systems elsewhere, notably in Europe (Galileo) and China (BeiDou).
- Like GPS, these newer and highly capable systems are being leveraged into instruments of power and influence.
- GNSS capability has thus become one of the key drivers of global leadership.
- Some nations' PNT architectures integrate terrestrial, LEO and other systems making them far more resilient to GNSS disruption than the U.S.
- This asymmetry could embolden adversaries and affect the outcome of future conflicts.

- **Recommendation(s):**

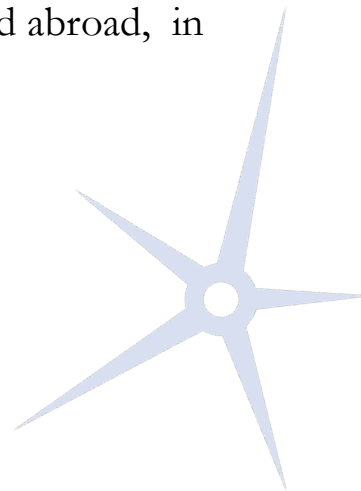
- The US should acknowledge the importance of GPS as a vital contributor to America's role as a global leader.
- The US should attach a high priority to the establishment of a truly resilient PNT architecture, both in the homeland and abroad, in recognition of its potential as both a target and a tool in times of conflict.

- **Reason for Recommendation:**

- National security, preserve world order, avoid war.

- **Consequences of No Action on the Recommendation:**

- US PNT capability asymmetry with others that could contribute to causing armed conflict, loss of status in the world.



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Legislation to Reduce Conflict over Spectrum Use

Finding:

- Recent FCC spectrum-related proceedings have engendered concerns from other agencies based on possible interference with critical systems (e.g., GPS, aircraft radar altimeters, DSRC applications)
- Unresolved concerns can lead to protracted proceedings and contested decisions. This negatively impacts applicants and spectrum users.
- Legislation authorizing the FCC to conduct spectrum auctions has expired and must be renewed.

Recommendation:

- That the Administration, in proposing to reauthorize the FCC's spectrum auction authority, seek a statutory amendment enabling more effective collaboration between the FCC and any executive branch agency concerned that a proposed award of spectrum for private use could potentially compromise the integrity of a federal system.

Reason for Recommendations:

- Need for whole-of-government approach to spectrum allocation

Consequences of No Action on the Recommendation:

- Potential for further conflicts between commercial spectrum use and the requirements of critical federal systems.

