



SPACE-BASED POSITIONING  
NAVIGATION & TIMING  
NATIONAL ADVISORY BOARD

# PTA Subcommittee Update

**PTA Subcommittee  
16 November 2022**



# PTA Subcommittee Members and Charter

## **Members:**

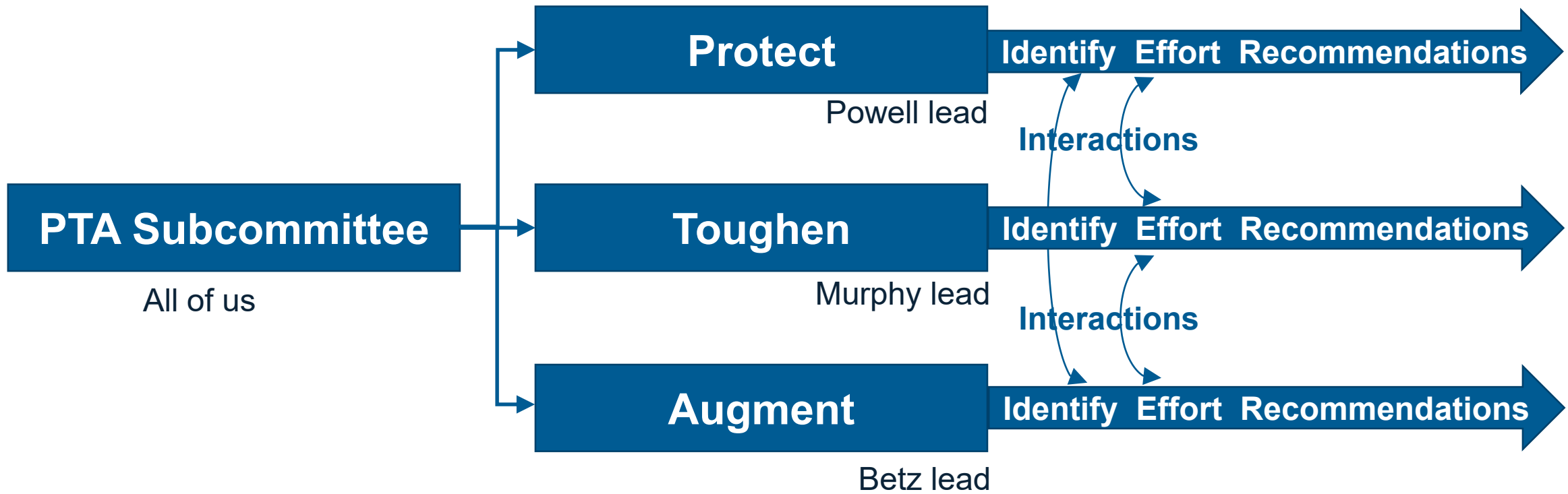
- **John Betz, Chair**
- **Tim Murphy, 1st Vice-Chair**
- **Tom Powell, 2nd Vice-Chair**
- **Scott Burgett**
- **Pat Diamond**
- **Renato Filjar**
- **Michael Hamel**
- **Larry James**
- **Vahid Madani**
- **Todd Walter**

## **Role/ Study Areas:**

- **Protect: Transparent & balanced spectrum management**
- **Toughen: Ensure ITAR does not unduly constrain civil & Commercial interests**
- **Augment: GDGPS, Complementary PNT, GNSS Signal Monitoring**



# PTA Subcommittee Parallel Focus



**Identify and work with key implementers of our recommendations—  
not just the EXCOM**



# Protect Working Group Update

- Activity

- Fact-finding session 1: 14 June – Logan Scott
- Fact-finding session 2: 21 October – James Aviles and Karen Van Dyke

- Outcome

- Logan Scott “J911” concept
  - Uses smartphones to crowdsource GPS interference
  - Requires wireless carrier, regulator support
- SPD-7 directs DOT to conduct Interference Detection for civil PNT
  - Focusing on GNSS Interference Detection, Monitoring, Location, and Attribution
  - Multiple airport interference events in 2022: DEN, LGA, DFW, some unresolved



# Protect Working Group Update (cont.)

- Outcome
  - DOT developing adjacent band spectrum monitoring capability
    - Will conduct “before” and “after” surveys prior to any service deployments
    - Interference metrics and mobile monitoring system
    - Ready for deployment if and when transmissions begin
- Way Ahead
  - Recommend hybrid approach to GPS, adjacent band spectrum protection
    - Seek regulator support for smartphone-based in-band interference detection
    - Support DOT initiatives to monitor, protect adjacent band spectrum



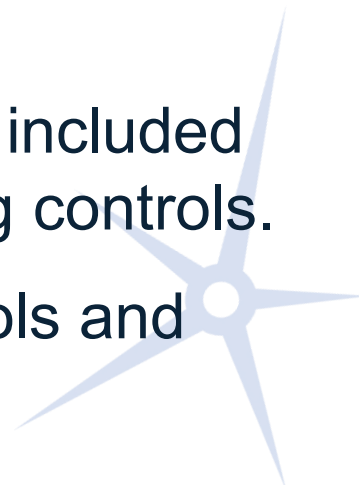
# Toughen Working Group Update

- Activity

- Fact-finding session 1: 3/18/2022
- Fact-finding session 2: 4/21/2022
- Fact-finding session 3: 7/20/2022
- Fact-finding session 4: 11/2/2022
- Fact-finding session 5: Planned

- Outcomes

- FFM1 - Current export control regimes reviewed and clarified. This included some information regarding the established processes for modifying controls.
- FFM2 – General discussion of potential improvements export controls and decision to pursue a white paper.



# Protect Working Group Update (cont.)

- Outcomes (continued)
  - FFM3 – Presentations from 4 CRPA manufacturers about their current products and how export controls are potentially hampering future products.
    - Broader participation by industry and government
  - FFM4 – Presentations from 2 CRPA manufacturers
    - Even more interest from industry
    - Participation by State Department and DTCA
  - Draft White Paper – Capture the learnings so far and make preliminary recommendation
    - Circulated to select members of the committee at this meeting
    - Needs considerable work



# Protect Working Group Update (cont.)

- Way Ahead
  - FFM5 – Presentations from more CRPA manufacturers
    - Discuss pros/cons of potential changes to trade controls
  - Continue White Paper development

