



APNT/SPACE PNTAX QUICK FACTS

ASSURED POSITIONING, NAVIGATION AND TIMING/SPACE CROSS-FUNCTIONAL TEAM

PNTAX Overview

- ▶ The PNT Assessment Exercise (PNTAX) is an annual exercise hosted by the Assured Positioning, Navigation and Timing/Space Cross-Functional Team (APNT/Space). PNTAX provides a global positioning system (GPS)-challenged operational environment to demonstrate new technologies, obtain direct feedback from Soldiers, and support the Combined Joint All-Domain Command and Control concept (CJADC2).
- ▶ PNTAX will help the U.S. Army retain advantages over adversaries and accelerate investments for future capabilities in support of the Army Readiness and Modernization Strategies, ensuring overmatch for 2028 maneuvers and beyond.
- ▶ This year, PNTAX will be integrated as part of Project Convergence for the first time. PNTAX is taking place from October 18th-29th at White Sands Missile Range (WSMR), New Mexico.

Why PNTAX?

- ▶ Today's Warfighters face GPS-contested operational environments across the Campaign of Competition and in all domains.
- ▶ The U.S. military is already "operating in the most aggressive electronic warfare environment on the planet" with "adversaries testing us every day." (USSOCOM CG)
- ▶ Advances in Electronic Warfare and cyberspace technologies are constantly emerging and are growing in complexity.
- ▶ Complex urban terrain, crowding of the Radio Frequency spectrum, and electromagnetic interference all offer further challenges.
- ▶ PNTAX provides a real-world operational environment for participants to use. The CFT also encourages anyone to participate – military, other government agencies, industry, academia, etc. If you have a technology and you want to assess its ability to operate in a live-sky GPS challenged environment, you can do that at PNTAX.
- ▶ Participants are also allowed to collect their own data and make their own assessments. The information collected will help the CFT better understand not only how systems perform but also how they can impact future Soldier operations in contested environments.

PNTAX and Project Convergence

- ▶ This year, PNTAX will be happening in conjunction with Project Convergence, offering a GPS-challenged component to the exercise. A number of the technologies demonstrated at PNTAX will also participate in the Project Convergence exercise in Yuma, AZ.

PNTAX Past Years

- ▶ PNTAX '19 was recognized as the largest test ever held at Stallion Range Complex, New Mexico. The CFT assessed over 80 dismounted, mounted and Navigation Warfare (NAVWAR) capabilities and systems.

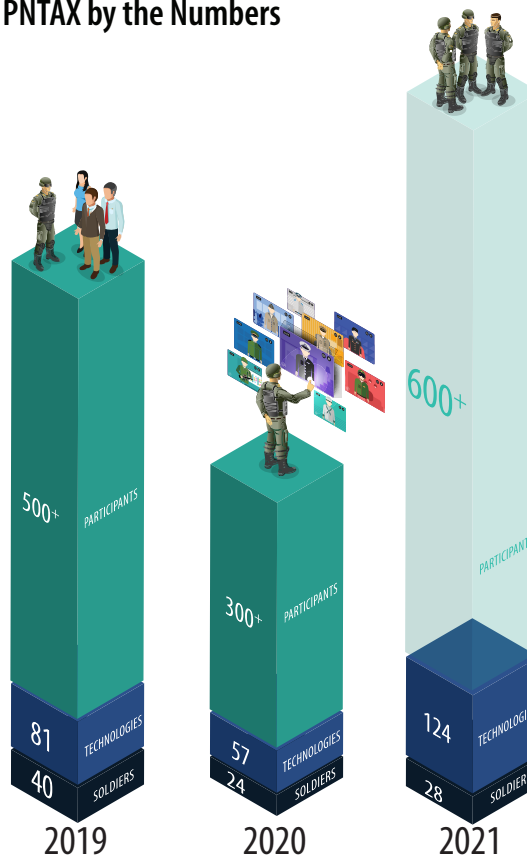
This included Brigade Combat Team and below ability to operate within a real-world anti-access/area denial environment, the ability to identify GPS threats and assess situation awareness, long-range precision targeting/firing capability, and formation requirements in theater. Close to 40 soldiers from I Corps, U.S. Army Europe (USAREUR), Colorado and New Mexico National Guard, U.S. Army Special Operations Command, Joint Special Operations Command, and the Army Cyber Directorate participated in the event.

- ▶ PNTAX '20 brought together over 300 government partners including the Federal Bureau of Investigation, industry personnel, Soldiers, and airmen to conduct live prototype demonstrations, using various threat scenarios and assessed over 55 dismounted, mounted, static, and aerial platforms, fire systems/munitions, and NAVWAR sensor systems and architectures. Some of these platforms included the M777 Howitzer, Patriot, Stryker vehicles, and a U.S. Air Force airframes.

PNTAX 2021

- ▶ PNTAX '21 will be the largest event yet, with 124 technologies participating and 600+ participants.
- ▶ Government week will take place 18-22 October. Industry week will take place 25-29 October. A Designated Visitors Day will take place 21-22 October.
- ▶ PNTAX will assess mounted, dismounted, and NAVWAR systems at nearly every domain level - air, land, space and cyberspace - and will include a live fire demonstration.

PNTAX by the Numbers



"PNTAX helps the Army inform requirements, validate and refine concepts, address capability gaps, and assess solutions for future Army Warfighting technologies. To do this, we provide a live-sky GPS challenged environment for military and industry to operate their own system capabilities, collect data, and support capability assessments."

– Mr. Willie Nelson, Director of the APNT/S CFT

"We're getting exposed to stuff that we didn't even know existed. It's very cool to see the new threats that we may be experiencing in combat, while at the same time we can provide a lot of feedback to the engineers about details they might not have realized, having not used it in an operational environment."

– SSG Gregory Lowell, Fire Support Non-Commissioned Officer from Joint Base Lewis-McChord in Washington

"Today's Soldiers are already operating in GPS challenged environments. Army operations rely on the ability to shoot, move and communicate and when GPD is challenged so are these core functions. PNTAX is exploring what systems and technologies are out there to support Army operations regardless of their environment."

– Mr. Benjamin Pinx, Integration Director for the CFT (2018-2020)