

International Test and Evaluation Program (ITEP)



In FY24, the Director signed 16 new project agreements (PAs) supporting international T&E. These PAs facilitate the planning and execution of cooperative T&E projects, transfer of necessary test equipment and materials, and exchange of T&E-relevant information through working groups (WGs), reciprocal use of test facilities (RUTF), and cooperative testing under the International Test and Evaluation Program (ITEP). The ITEP holds an additional 17 ongoing PAs established with our partners prior to FY24.

PROGRAM OVERVIEW

The United States holds 12 bilateral memorandums and two multilateral memorandums with international partners. During FY24, discussions continued with additional prospective international partners pursuant to negotiating bilateral agreements. ITEP was established pursuant to a legislative proposal submitted by DOT&E and enacted into law in 2001. The SECDEF delegated administration of the program to DOT&E in 2003. Prior to ITEP, test services were generally provided to international partners through foreign military sales.

MISSION

The ITEP permits establishment of bilateral and multilateral memorandums between the United States and international partners. Such agreements are enablers for expediting the development and fielding of advanced warfighting technologies and supporting T&E infrastructure and capabilities.

FY24 KEY ACTIVITIES

In FY24, DOT&E signed 16 new PAs and/or annexes/ amendments to existing PAs and supported 17 previously established PAs. Each PA is described below in alphabetical order by partner country and contains the title at the time the PA was signed. Bilateral agreements are first, followed by multilateral PAs. The 33 PAs in effect during FY24 are as follows:

1. Test and Evaluation of the Australian Special Operations Engineer Regiment (SOER) Chemical, Biological, Radiological, and Nuclear (CBRN) Defense and Explosive Ordnance Disposal (EOD) Tactics, Techniques, and Procedures (TTPs) RUTF PA

- This PA with Australia went into effect in September 2021 and lasts until September 2031. It permits testing at Dugway Proving Ground, Utah.
- The PA included one new annex in FY24 that allows the Australians to conduct additional testing.

2. Laboratory and Field Test and Evaluation (T&E) of the Chemical and Biological (CB) Defensive Material of the Australian Defence Science and Technology Group (DSTG) RUTF PA

- This PA with Australia went into effect in April 2022 and lasts until April 2032. It permits testing at Dugway Proving Ground, Utah.
- The PA allows Australian Defence Force's personnel to periodically test and evaluate CB agent testing in both laboratory and field environments. The goal is to provide support to improve the Australian Defence Force's CBRN defensive capabilities through the protection of personnel from the strategic, tactical, and physiological impacts of exposure to toxic chemicals, materials, and CBRN weapons.
- The PA included one new annex in FY24 that allows the Australians to conduct additional testing.

3. Electronic Warfare Operational Test 2016 RUTF PA

- This PA with Canada went into effect in March 2020 and lasts until October 2025. It permits testing at Naval Research Laboratory Hawaiian Operating Areas, and Marine Corps Air Station, Kaneohe Bay, Hawaii.
- The PA enables the United States and Canada to continue the at-sea T&E of the electronic warfare (EW) suites fitted in Canadian Navy ships. It is conducted in Hawaii, where the United States will simulate anti-ship missile attacks to validate the Canadian Softkill System.
- The PA included one new amendment in FY24 that extended the duration of the testing due to delays related to COVID-19.

4. SIMULATION DISPLAY (SIMDIS™) Sustainment for Sensors, Weapons, Analysis and Tactical Display Developments RUTF PA

- This PA with Canada went into effect in March 2020 and lasts until October 2025. It permits testing at the Naval Research Laboratory, Washington, DC.
- The PA provides T&E support to the Canadian Department of National Defence's SIMDIS Integration Laboratory and technical staff

for the sustainment, testing and validation of the SIMDIS display software development. SIMDIS data from various sensors, weapons, and simulations will be evaluated for use in operational analyses for tactical development and platform procurement programs.

- The PA included one new amendment in FY24 that allows the Canadians to conduct additional testing.

5. Tactical Armored Personnel Vehicle Testing RUTF PA

- This PA with Canada went into effect in February 2022 and expired in December 2023. It facilitated testing at Aberdeen Test Center, Aberdeen Proving Ground, Maryland.
- The PA permitted the U.S. DoD to provide T&E support to a Canadian Department of National Defence acquisition program. The testing and validation of the tactical armored personnel vehicle consisted of tilt table test (one and two axles), circular test, double-lane change test, J-turn test, sine and dwell test, on-center steer test and a step steering test, suspension vibration, and tire characterization.

6. Combat Hammer Omnibus RUTF PA

- This PA with Canada went into effect in November 2006 and lasts until November 2026. It permits testing at various U.S. Air Force bases.
- The PA addresses operational effectiveness and suitability testing of all aspects of the CF-18 air-to-ground weapons system.

7. Her Majesty's Canadian Ship (HMCS) Windsor Testing RUTF PA

- This PA with Canada went into effect in April 2022 and lasts until April 2025. It permits testing at the Atlantic Undersea Test and Evaluation Center, Commonwealth of the Bahamas.
- The PA covers testing of the Mk 48 Mod 7 Advanced Technology Torpedo, as well as the combat systems of HMCS Windsor.

8. Crash Truck Foam Test (CTFT) Project Equipment Transfer (PET)

- This PA with Canada went into effect in October 2022 and lasts until October 2026. It permits testing at Tyndall AFB, Florida.
- The purpose of the CTFT PET is to test cleanout procedures to transition aircraft rescue firefighting vehicles from aqueous film-forming foam to fluorine-free firefighting foam.

9. The Canadian Forces Electronic Warfare Support Test and Evaluation (CFEWS T&E) RUTF PA

- This PA with Canada went into effect in March 2023 and lasts until March 2027. It permits testing at Shirley's Bay, Ottawa, Canada.
- The EW software and the Scenario Simulation Controller are part of a U.S. DoD-owned EW and reprogramming software suite managed by the U.S. Navy's Next Generation Electronic Warfare Program Office. Testing CFEWS at Shirley's Bay unique configuration can benefit from the testing of EW capabilities by the scenarios contained in the EW toolset. The testing of CFEWS capabilities utilizing the U.S. DoD's EW toolset and components of its EW programming toolset (i.e., the Scenario Simulation Controller), monitoring, and analysis.

10. Technology Experimentation and Characterization Field Trials (TECFT) RUTF PA

- This PA with Australia went into effect in May 2023 and lasts until October 2026. It permits testing at Dugway Proving Ground, Utah.
- The PA allows the Australian SOER to conduct Counter CBRN (C-CBRN) testing in increasingly realistic environments against updated threat representative scenarios in an operationally realistic environment. The goal is to enhance and improve current TTP and to develop additional TTP for operational gaps identified during these test events.

11. Combat Archer II Omnibus RUTF PA

- This PA with Canada went into effect in December 2015 and lasts until December 2025. It permits testing at Tyndall AFB, Florida.
- The PA addresses operational effectiveness and suitability testing of the Canadian Air Force's CF-18 air-to-air weapon systems using

a total system approach that includes man, munitions, and machines.

- The PA included one new annex in FY24 that allows the Canadians to conduct additional testing.

12. Reciprocal Use of Test Facilities (RUTF) Project Arrangement (PA) Concerning Electronic Warfare (EW) Operational Test (OPTTEST) 2016 with Canada

- This PA with Canada went into effect in May 2016 and lasts until March 2026. It permits testing at Marine Corps Base Hawaii, Oahu, Hawaii.
- The PA provides a Naval Research Laboratory Learjet aircraft fitted with anti-ship missile simulators and technical staff for at-sea testing and validation for the Canadian Multi Ammunition Softkill System.
- The agreement included one new amendment in FY24 that allows the Canadians to conduct additional testing.

13. Advanced Distributed Modular Acquisition System (ADMAS) Instrumentation Equipment and Material Transfer Arrangement

- This PA with Germany went into effect in October 2020 and lasts until October 2024. It permits testing in Koblenz, Germany.
- The PA between the United States and Germany enables the U.S. Army's T&E Command to transfer the ADMAS instrumentation and software tools to the Bundeswehr Head of Robotics Research and Development in Koblenz. The transfer is valid for three years, and allows Germany to standardize test procedures, data analysis techniques, and T&E methodology for testing autonomous robotic vehicles and associated technology.

14. T&E of the German Bundeswehr CBRNE Defense TTPs RUTF PA

- This PA with Germany went into effect in June 2021 and lasts until June 2026. It permits testing at Dugway Proving Ground, Utah.
- The PA enables the German Bundeswehr to develop and test its defense TTP against Chemical, Biological, Radiological, Nuclear, and

Explosive (CBRNE) threats. The U.S. Army hosts the tests, providing threat representative scenarios to support the evaluation of the operational effectiveness of new detectors, to include mass spectrometers, multi-gas measuring devices, radiation detection devices, personal protective equipment (PPE), and decontamination equipment in an operationally representative environment.

- The PA included three new annexes in FY24 that allow the Germans to conduct additional testing. Testing under all three annexes concluded in FY24.

15. Partnership for Autonomous Robotic Test Instrumentation WG TOR

- This WG with Germany went into effect in April 2018 and lasts until April 2028.
- The WG was established to harmonize T&E instrumentation and autonomous/robotic requirements, study feasibility of future cooperative T&E program activities, and exchange data reports on specific T&E issues of mutual interest with Germany.

16. Reciprocal Use of Test Facilities Project Arrangement (RUTF PA) Concerning Test and Evaluation of the German Special Forces Reconnaissance and Combat Vehicle (AGF2)

- This new PA with Germany went into effect in July 2024 and lasts until July 2025. It permits testing at various U.S. test facilities.
- The PA allows the German Army to test their new ground combat vehicle, AGF2, in a variety of climatic conditions.

17. Assault Rifle in Extreme Environments RUTF PA

- This new PA with Germany went into effect in May 2024 and lasts until May 2025. It permits testing at various U.S. test facilities.
- The PA allows the German Bundeswehr to test their new assault rifle in three different environments (desert, cold, and tropical) at U.S. test ranges.

18. Reciprocal Use of Test Facilities Project Arrangement Concerning Test and Evaluation

(T&E) of the German Special Forces G39 19 Suppressed Assault Rifle, P14 Pistol, and AG40-4 Grenade Launcher in Extreme Environments

- This new PA with Germany went into effect in May 2024 and lasts until May 2026. It permits testing at various U.S. test facilities.
- The PA enables the German Bundeswehr to test an assault rifle, pistol, and grenade launcher in three different environments (desert, cold, and tropical) at U.S. test ranges in the coming year.

19. Land Platforms Autonomy and Robotics WG Terms of Reference (TOR)

- This WG with Italy went into effect in January 2020 and lasts until January 2030.
- The WG, led by the U.S. Army, exchanges data with Italy on test operating procedures and standard operating procedures relevant to testing unmanned vehicle maneuverability and weaponized autonomous platforms. The group is also sharing technology development updates on data acquisition, precision tracking and system surveillance, and other measurement techniques concerning T&E of autonomous vehicle systems. This WG effort will facilitate demonstration of test capabilities at facilities responsible for testing autonomous systems' mobility and weapon systems performance.

20. Memorandum of Understanding between the Japanese Defense Forces and the US DoD for Test and Evaluation Program (TEP) Cooperation

- This new PA with Japan went into effect in March 2024 and lasts until March 2049.
- The purpose of the TEP memorandum of understanding is to allow T&E activities that are authorized in accordance with the national procedures of the participants.

21. Reciprocal Use of Test Facilities Project Arrangement Concerning Netherlands F-35 Follow-On Operational Test and Evaluation

- This new PA with the Netherlands went into effect in May 2024 and lasts until February 2034. It permits testing at Edwards AFB, California.

- The PA evaluates the operational effectiveness, suitability, survivability, lethality, and vulnerability of the capabilities for the Ministry of Defense F-35 Air System in an operationally realistic environment.

22. Memorandum of Understanding Between the Department of Defense of the United States of America and the Minister of Defence of the Kingdom of the Netherlands for Test and Evaluation Program (TEP) Cooperation

- This PA with the Netherlands went into effect in February 2004 and lasts until February 2034.
- The purpose of the TEP memorandum of understanding is to allow the general provisions and conditions that will apply to the initiation, conduct, and management of T&E activities that are authorized in accordance with the national procedures of the participants.
- The PA included one new amendment in FY24, which extended the duration by ten years until 2034.

23. Over-the-Horizon Weapon System Reciprocal Use of Test Facilities Project Agreement

- This new PA with Norway went into effect in April 2024 and lasts until April 2026. It permits testing at Andøya Test Center in, Andøya, Norway.
- The objective of the Over-the Horizon Weapon System RUTF PA is to test and evaluate two Over-the-Horizon Weapon System encanistered missile-test assets.

24. Oceanographic and Acoustic Systems (OAS) Reciprocal Use of Test Facilities Project Agreement

- This PA with Norway went into effect in September 2023 and lasts until September 2027. It permits testing in Norwegian territorial waters.
- The PA permits T&E of U.S. DoD oceanographic and acoustic systems aboard a Norwegian Ministry of Defense (NO MOD) vessel in Norwegian waters. The U.S. DoD and NO MOD will leverage the unique traits of the Norwegian waters and a NO MOD vessel under NO MOD command to (1) determine the viability of U.S. DoD oceanographic sensors to capture sub-

mesoscale and other oceanic motions, and (2) determine the capabilities of U.S. DoD acoustic instruments to evaluate the effects of sub-mesoscale motions on acoustic transmission-loss variability and other factors. The NO MOD will test and evaluate the U.S. DoD oceanographic and acoustic equipment during three sea trials.

25. T&E of the United Kingdom 28 Engineer Regiment (C-CBRN), Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Defense Tactics, Techniques, and Procedures (TTPs) RUTF PA

- This PA with the United Kingdom went into effect in January 2021 and lasts until January 2031. It permits testing at Dugway Proving Ground, Utah.
- The PA enabled the development and testing of partner defense TTP against CBRNE threats. The U.S. Army Dugway Proving Ground hosts the tests, providing threat-representative scenarios to support evaluation of the operational effectiveness of new detectors, PPE, and decontamination equipment in an operationally representative environment. Tests also included the firing of various weapons by soldiers in protective clothing to evaluate the clothing's potential effects on mission effectiveness.

26. T&E of Protective Ensembles Using the Porton Man Test Fixture CTE PA

- This PA with the United Kingdom went into effect in May 2020 and lasts until May 2027. It permits testing at Porton Down, Wiltshire, United Kingdom.
- The PA has enabled extensive use of the Porton Man mannequin to test chemical protective clothing for military personnel.
- Currently, the Porton Man tests are continuing to develop test methods and conduct performance testing of chemical protective ensembles (suits) against actual chemical warfare agents. Porton Man is an articulated, life-size, moving mannequin with a combination of cumulative and real-time sensors that can quantify the permeation and penetration of various threat agents through chemical biological PPE. The Porton Man Cooperative Test and Evaluation (CTE)

PA supports U.S. DoD requirements to protect personnel from chemical biological threats.

27. TOR for Live Fire WG

- This WG with the United Kingdom went into effect in October 2010 and lasts until October 2025.
- The WG, led by DOT&E, was established to identify potential collaborative efforts in LFT&E, to include ground combat vehicles and PPE.

28. Integrated Air and Missile Defense (IAMD) Testing Reciprocal Use of Test Facilities (RUTF) Project Arrangement (PA)

- This PA with the United Kingdom went into effect in November 2012 and lasts until November 2027. It permits testing at the Hebrides Test Range, Scotland, United Kingdom.
- The PA with the United Kingdom permits large-scale missile defense tests every two years, including the latest in the series, Formidable Shield 2023 (FS23). In May 2023, the Maritime Theater Missile Defense Forum participated in Naval Striking and Support Forces NATO exercise FS23. The purpose of FS23 was to improve allied interoperability in a live-fire joint IAMD environment, using NATO command and control reporting structures. Testing included 12 NATO allied and partner nations; 24 ships; more than 35 aircraft; 8 ground units consisting of radars, National Advanced Surface-to-Air Missile System, High Mobility Artillery Rocket System; and nearly 4,000 personnel from across the alliance that participated in the event. Building on the achievements of previous Maritime Theater Missile Defense Forum events, FS23 increased coalition interoperability and joint capabilities through complex scenarios designed to meet tomorrow's air defense and ballistic missile defense challenges.
- The PA included one new amendment in FY24 that allows additional testing at FS25.

29. Counter-Laser Directed Energy Weapons (CLDEW) RUTF

- This PA with the United Kingdom went into effect in April 2023 and lasts until

April 2027. It permits testing at the Army Research Laboratory, Adelphi, Maryland.

- The purpose of this RUTF is to test the laser damage and vulnerability of the United Kingdom's cameras, imaging systems, and optical materials to various lasers.

30. Cybersecurity Assessment Working Group Terms of Reference

- This WG with Australia, Canada, New Zealand, and the United Kingdom went into effect in December 2022 and lasts until December 2027.
- The WG identifies and develops collaborative efforts to increase the cybersecurity of coalition missions and joint weapons systems.

31. Tactics Validation and Operational Readiness Assessment RUTF PA

- This PA with Australia, Canada, and the United Kingdom went into effect in August 2023 and lasts until August 2026. It permits testing at Naval Air Weapons Station, China Lake, California.
- The PA evaluates the effectiveness of the defensive tactics of Royal Canadian Air Force aircraft and to assess the capability of Canadian Tactical Aviation personnel to conduct realistic mission sets in an EW threat environment.

32. Aircraft Electronic Warfare Cooperative T&E Project Arrangement

- This PA with Australia, Canada, and the United Kingdom went into effect in May 2016 and lasts until August 2026. It permits testing at various partner test locations.
- Activities and plans for the coming years under this PA are described in detail in the Center of Countermeasures section of this Annual Report.

33. F-35 Follow-on Operational Test and Evaluation Cooperative Test and Evaluation Project Arrangement

- This new PA with Australia and the United Kingdom went into effect in October 2023 and lasts until October 2033. It permits testing at Edwards AFB and China Lake Naval Air Weapons Station, California.

- The PA allows cooperative FOT&E of the F-35 Joint Strike Fighter air systems. It will support the contributing participants' continued efforts to evaluate the operational effectiveness, suitability, survivability, and lethality of F-35 air systems in operationally representative environments. The contributing participants, under the F-35 FOT&E PA, will also evaluate the interoperability of the F-35 with multiple coalition systems; eliminate redundant T&E costs; increase commonality and interoperability; provide safety, airworthiness, and mishap investigation capabilities; and provide test reports.