

## International Test and Evaluation (IT&E)

Managed by DOT&E, the International Test and Evaluation Program (ITEP) continues to be a valuable tool in addressing warfighter needs. ITEP bilateral and multilateral agreements allow for Cooperative Test and Evaluation (CTE) Project Agreements (PAs); Equipment and Material Transfers; Working Groups; and, unique to ITEP, Reciprocal Use of Test Facilities (RUTF) PAs. ITEP is an important enabler in fielding advanced technologies for U.S. forces, as well as for our allies. Through access to test capabilities of international partners, some key representative technologies that may be tested abroad include hypersonic vehicles, autonomous systems, cyber defenses, and chemical/biological countermeasures.

The United States has bilateral agreements with 11 of its closest allies and 1 multilateral agreement, the Multinational Test and Evaluation Program (MTEP) Memorandum of Understanding with Australia, Canada, New Zealand, and the United Kingdom (UK). During FY20, bilateral discussions continued with two other potential international partners to establish new bilateral agreements. Further progress was made in completing the Trans-Atlantic MTEP, involving France, Germany, Italy, the UK, and the United States. This agreement is structured so more countries may be added after it enters into force.

In FY20, DOT&E approved 16 program documents including: 1 Terms of Reference, 2 CTE PAs, and 13 RUTF PAs. One CTE PA allowed the U.S. Air Force and Army to jointly conduct a unique extreme cold weather test using a Canadian test range. Taking place in January 2020 at Goose Bay Air Base, Canada, personnel from the U.S. Air Force, U.S. Army, and Royal Canadian Air Force tested new equipment, materials, and processes to perform rapid damage assessment and crater repair in extreme cold weather conditions (Figure 1).



Figure 1. American and Canadian airmen pouring rapid setting concrete in Goose Bay, Canada.

This event demonstrated the ability to rapidly repair an airfield as well as the durability of repairs through simulated C-17 airlifter traffic. This test illustrates the value of ITEP in sustaining operational capability under realistic, adverse conditions (Figure 2).

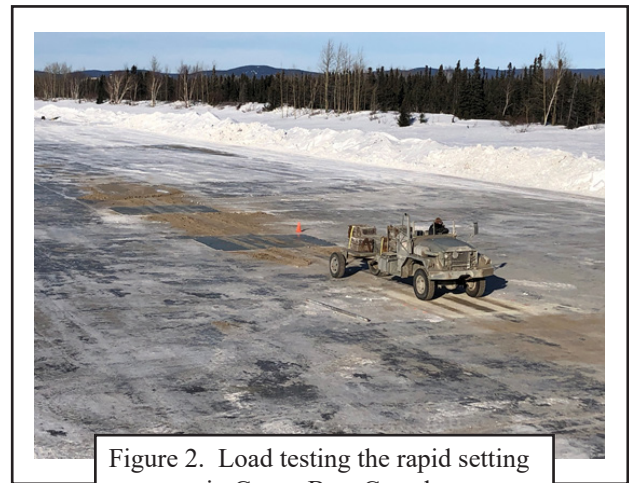


Figure 2. Load testing the rapid setting concrete in Goose Bay, Canada.

Under a RUTF PA, the U.S. Army is testing protective clothing against actual chemical warfare agents using the UK’s Porton Man test mannequin. The information collected during this testing will inform fielding decisions for the Uniform Integrated Protection Ensemble Family of Systems.

Under another RUTF PA, the U.S. Navy evaluated the effectiveness of the Canadian CH-147F helicopter and the capability of Canadian Tactical Aviation personnel to conduct realistic mission sets in an electronic warfare threat environment. This test had an added nuance. An Australian pilot was on board the Canadian aircraft during testing to observe for potential Australian acquisition of the Canadian system.

Planning was largely completed this FY for testing a British surface-to-air missile (Sky Sabre) at White Sands Missile Range, New Mexico. Sky Sabre (and several other tests) experienced delays as a result of coronavirus pandemic restrictions and the resultant effects to U.S. range availability and travel restrictions imposed on test personnel. Nonetheless, testing is expected in mid-FY21 which will qualify the missile for operational use. This test program satisfies an urgent operational requirement of the UK and is an illustration of how ITEP strengthens relationships with international partners.

Table 1 lists all bilateral and multinational IT&E projects signed in FY20.

# FY20 DOD PROGRAMS

**TABLE 1. IT&E PROJECTS IN EFFECT IN FY20**

IT&E PROJECTS	ENTRY INTO FORCE/EFFECTIVE DATE	TEST ACTIVITY DATES AND LOCATIONS
Weapons Effects against Structural Targets T&E RUTF PA	September 1, 2020	October/November 2020 at Pendine, UK
Next-Generation Oxime T&E RUTF PA	August 4, 2020	October 2020 at Fort Detrick, Maryland
T&E of Protective Ensembles Using the Porton Man CTE PA	May 12, 2020	TBD at Porton Down, UK
SIMULATION DISPLAY Sustainment for Sensors, Weapons, Analysis, and Tactical Display Developments RUTF PA	March 31, 2020	April 2020 at the Naval Research Laboratory, Washington, District of Columbia
Project Raider Data Evaluation RUTF PA	March 11, 2020	March 2020 at Naval Research Laboratory, Washington, District of Columbia
Amendment 5 to the Integrated Air and Missile Defense RUTF PA (Formidable Shield)	March 4, 2020	May 2021 in the Hebrides Range, UK
Amendment 2 to the Electronic Warfare Operational Test RUTF PA	March 2, 2020	July 2022 in the coastal waters of Hawaii
Tactical Armored Personnel Vehicle Testing RUTF PA	February 11, 2020	November 2020 at Aberdeen Proving Grounds, Maryland
CH-146 Radar Warning Receiver Validation and Operational Readiness Assessment RUTF PA*	February 3, 2020	March 2020 at Naval Air Warfare Center, China Lake, California
Combat Archer RUTF PA Annex 2020-01*	January 24, 2020	January 2020 at Eglin AFB, Florida
Amendment 1 to the Simulation Testing of Energy Attenuating Crew Seats RUTF PA	January 23, 2020	TBD by Naval Air Systems Command
Land Platforms Autonomy and Robotics Working Group TOR	January 22, 2020	
Amendment 1 to the Small Arms Ammunition or Related Equipment RUTF PA	January 16, 2020	Ongoing at Army North American Regional Test Center, Independence, Missouri
Distant Spider IV CTE PA*	November 25, 2019	January 2020 at Woomera Test Range, Australia
Heterogeneous Multiphase Reactive Blast T&E RUTF PA	October 30, 2019	November 2019 at Suffield Research Centre, Canada
Amendment 2 to the Field Evaluation of the German Chemical Biological Radiological Nuclear Defence Commands Chemical Response Tactics, Techniques, and Procedures RUTF PA	October 2, 2019	October 2019 at Dugway Proving Grounds, Utah
AFB – Air Force Base; CTE – Cooperative Test and Evaluation; IT&E – International Test and Evaluation; PA – Project Agreement; RUTF – Reciprocal Use of Test Facilities; TOR – Terms of Reference; UK – United Kingdom		
* Testing has completed.		