Torch Expertise is on a Global Scale Torch provides research, development, engineering, scientific, and analytical disciplines to ensure that developed systems have been properly tested and evaluated. These disciplines include test architecture and scenario design, test planning, test resources and provisioning, pre-mission risk reduction analysis, and post-mission data reduction and analysis. We develop software to parse, reduce, and analyze raw data collected from the tested system. Torch supports a full range of test articles (component, system, system of systems) and test venues (HWIL, flight test, ground test).

## Test Architecture & Scenario Design

Operational and threat representative designs that exercise the system under test in an executable, cost-efficient manner, yielding a data set that meets all system evaluation requirements.

## **Test Resources & Provisioning**

Identification, management, and deconfliction of all test resources, such as instrumentation, telemetry, range sensors, communications, and facilities required for successful test execution and data collection.

## Pre-Mission Risk Reduction Analysis

Pre-mission risk reduction activities using digital and HWIL simulations, identification and analysis of risk items, and pre-mission checkouts of the system under test.

## Post-Mission Data Reduction & Analysis

Reduction and analysis of collected test data to validate test construct or conditions, assess system performance, and identify observed anomalies.

Torch Tests and Evaluates Torch Tests and Evaluates Torch analytical teams are continually advancing the tools, processes, and phenomenology needed to analyze our ability to defend against increasingly complex systems. Torch teams leverage artificial intelligence through machine learning to create better testing results. Through using AI, our teams can overcome many hurdles of automated software testing.