Improved Turbine Engine

The Improved Turbine Engine Program (ITEP) is a new development turbine engine designed to power the enduring and future aviation force. The Improved Turbine Engine (ITE) will be the power plant for the Future Attack Reconnaissance Aircraft (FARA), Apache (AH-64E), and Black Hawk (H-60) helicopter fleets. It is an ACAT IC program to develop, integrate, test, and qualify a next generation 3,000 Shaft Horse Power class turbine engine to provide world-wide operational performance to the Combatant Commander. Since the 1970s, the weights of the Black Hawk and Apache helicopters have increased from adding ammunition, aviation survivability equipment, and enhanced technologies to meet increased mission demands. The increased weight from the mission-enhancing and safety improvements has negatively impacted the performance of these helicopters, especially in operational areas where high/hot condition (6,000 Feet/95° Fahrenheit) flights are often required. The ITE will replace the current T700 engine within the Black Hawk and Apache fleets to provide more power with greater fuel efficiency, and is designed to fit in the current engine bays at a similar weight. The ITEP will align with the Army Operational Power and Energy Strategy, the DoD Operational Energy Strategy, and the National Defense Strategy.

The focus of the Improved Turbine Engine Program is to develop the following capabilities and improvements for Black Hawk and Apache fleets while remaining affordable:

- Significant fuel savings and power enhancement over the current – 701D engine
- World-wide performance @ 6K/95
- Modular design that enables field level repair
- Lower Operations and Sustainment (O&S) costs