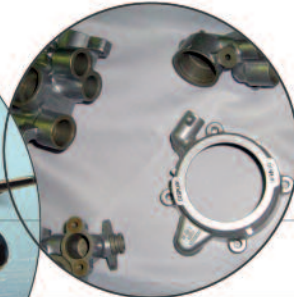
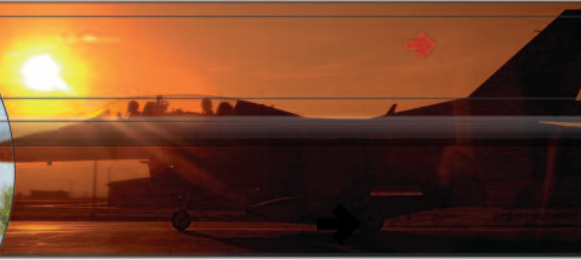
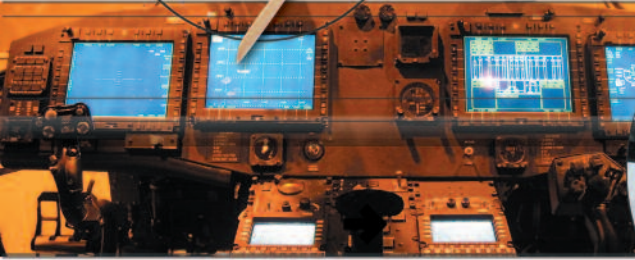
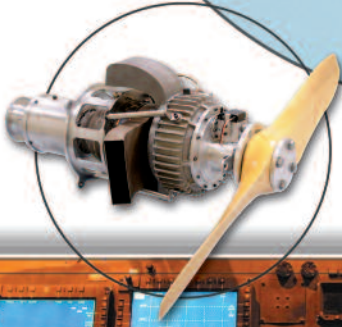
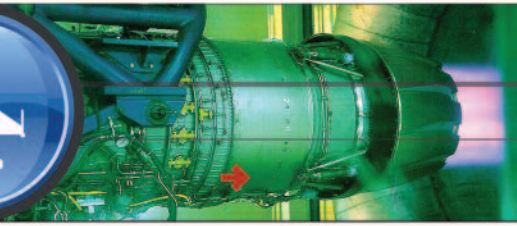


AEROSPACE





F-16 Modernization

TAI is ready to meet the modernization/upgrade requirements of countries with F-16s in service. The Falcon-up, Falcon Star and MLU modifications of a total of 17 Block 15 of the Royal Jordanian Air Force (RJAF) F-16s are being performed by TAI. The PO-III program of the TuAF includes the prototype development and verification processes of a total of 10 TuAF F-16s in three different blocks and the Serial Modernization of a total of 149 F-16C/D Block 40 and 50 aircraft as well as the manufacture of fully-verified modification kits. TAI also contracted for the modernization of 42 Pakistan Air Force F-16 aircraft.



T-38 Avionics Modernization (ARI)

A total of 55 TuAF T-38A aircraft are to be upgraded under the ARI program, which will be carried out under the prime contractorship of TAI. During the Prototype Phase, the modification of five aircraft will be performed at TAI facilities. The remaining 50 production aircraft will be modified at TuAF 1st Air Supply and Maintenance Center as part of Serial Production Phase.



C-130 Avionics Modernization (Erciyes)

Under the program, the avionics modernization of a total of 13 TuAF C-130B/E aircraft will be realized. Being the prime contractor of the Erciyes program, TAI, will complete the modernization of two prototype aircraft, and oversee the modernization of the remaining 11 aircraft at TuAF 2nd Air Supply and Maintenance Center.



S-70 Modernization (YARASA)

YARASA is a development, modernization and systems integration program, implemented in two phases, for a total of four S-70 Black Hawk Helicopters in the inventory of the Turkish Armed Forces. TAI is the prime contractor for the SSM. The program comprises Auxiliary Fuel Tank Integration (AFTI) and Avionics Integration (AVINT) phases.

AVINT phase, comprises system development, avionics system integration and the re-design and formation of both structural and electronic infrastructure of S-70 Black Hawk helicopters.

Turkish Primary And Basic Trainer Aircraft (HÜRKUŞ)

Under the Turkish Primary and Basic Trainer Aircraft (HÜRKUŞ) program; the design, development, testing, verification, manufacturing and civil certification of an indigenous training aircraft is going to be performed. HÜRKUŞ will be designed and certified in accordance with EASA CS 23 standard.

HÜRKUŞ is going to have night and day mission capability, tandem seating and a single turboprop engine. With this aircraft, general purpose, instrument flight, navigation and formation training phases will be realized. In order to realize these training stages; the aircraft shall have the standard aircraft systems, cabin pressurization, escape system, oxygen system.

Technical Specifications:

Cruise Speed: > 250 kts

Maximum Speed: 311 kts

Take-off Weight: 3,000kg

Engine Power: 1,600hp

G Limits: +7G / -3.5G

Climb: 15,000ft in 5 min.

Seating Configuration: Stepped Tandem

Pressurization: Yes

Anti-G System: Yes

OBOGS: Yes

O/O Ejection Seat: Yes

Avionics: All Digital.



HELICOPTERS

ATAK Programme

As a result of the aim of providing the Turkish Land Forces [TLFC] with a Attack/Tactical Reconnaissance helicopter capability, TAI will produce and customize according to user needs, a total of 51 platforms with 41 options, as well as provide integrated logistics support, in the ATAK Helicopter Programme.

Under the role of Prime Contractor TAI, will be the sole source for the airframe for the global market place, as well as the owner of the propriety rights for the particular configuration, while also performing final assembly and flight operations. TAI additionally holds the world-wide marketing rights of the helicopter, excluding only Italy and the UK.



Baykar Makina



Mini UAV

Bayraktar Mini UAV Systems have been designed and manufactured by the Kale/Baykar Partnership with the maximum use of local infrastructure and capabilities. Each System comprises: Four Bayraktar Mini UAV platforms, Two Ground Control Stations, Two Data Terminals, Four CCD or CMOS Colour Day Cameras and Two IR Night Cameras. Powered by two electric engines, the Bayraktar Mini UAV can operate at a distance of up to 15km and loiter over the target area for almost 60 minutes. Equipped with an INS/GPS-aided navigation system, the air vehicle can climb to 12,000ft, but its operational altitude is 2,000ft.



Unmanned Aerial Vehicle (GlobIHA)

The GlobIHA mini UAV, provides its operators instant reconnaissance capability together with video and telemetry data by its unique software interface and Real Time Control hardware in 15km range and 1,5 hrs flight endurance. With minimal training even unexperienced operator can control all the stages of mission under difficult weather conditions by day and by night. At the end of the mission GlobIHA returns to its preprogrammed recovery point by landing on its strong body without any damage to its payload.

Wingspan: 1,510mm
Length: 1,400mm
Weight: 3.1kg
Data Transmission Range: 15km
Endurance: 75 Minutes

Cruise Speed: 65km/h
Max. Speed: 110km/h
Mission Altitude: 150-1,500ft
Propulsion: Electrical
Battery: Rechargeable Li-Polymer Battery



Turkish Indigenous MALE UAV – TIHA

The TIHA Programme includes the development of an indigenous prototype Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicle (UAV) to meet the requirements of the Turkish Armed Forces (TAF) for surveillance and reconnaissance. The system is to be completely designed by Turkish engineers working on the programme. The TIHA system under development will be dedicated to surveillance, reconnaissance, fixed-and-moving target detection, identification, classification, tracking and real time data/image transfer missions.

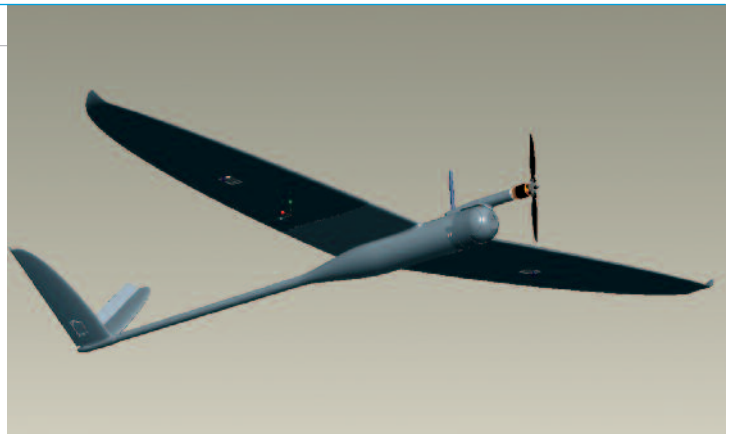
Remotely Controlled Target Drones (Turna and Keklik)

Two types of target drones, as well as their launchers and ground equipment, were designed and produced to meet the firing/target tracking requirements of the Turkish Armed Forces (TAF) artillery units. The development of the Firing Target Drone 'Turna' and the Tracking Target Drone 'Keklik', the first Turkish designed and produced target drones in the inventory of TAF, continues. TAI's Standard Target Drone System - Turna/S has proven its operational flexibility, low risk and cost effectivity with live firings in real operational environment. With the accumulated experience and feedback from the user, a new generation aerial target system, designated Turna/G has been developed. Turna/G, can not only autonomously operate beyond visual range, but also track pre-defined courses, can also be monitored and commanded through a ground control station.



Efe UAV System

The Efe UAV System is designed for day and night Surveillance, Target Acquisition and Reconnaissance, Target Recognition and Identification missions. Efe System can be operated real time from ground operator and can perform (pre)programmed missions. Efe System can display real time sensor data on ground station up to 12km for 1,5 hours. Efe UAV is capable of flying fully autonomously, as well operator can fly it with assist of the autopilot. Very easy hand launching, belly landing and parachute landing on difficult ground makes Efe System operational at any place. One Efe System consist of 1 UAV, 1 Ground Station, 1 Ground Data Terminal, a Day Time Payload, 1 Infrared Payload, 1 Spare Parts Set. These equipment is carried in a ruggedized backpack.



Karayel UAV System

The Karayel Tactical UAV System is designed for Surveillance, Target Acquisition and Reconnaissance, Target Recognition and Identification missions. Long mission endurance with 10 hours and high operational altitude with 18,000 feet makes it very attractive in its class. Retractable landing gears not only increase the flight performance but also clear the payload view. Karayel has a capability of 150km video data transfer range. Karayel carries a Stabilized Gimbal with Day Sensor, IR Night Sensor, LD (Laser Designator) and LP (Laser Pointer). Karayel can take-off, operate and land autonomously and in harsh environment, a catapult take-off and steerable parachute landing is optional.

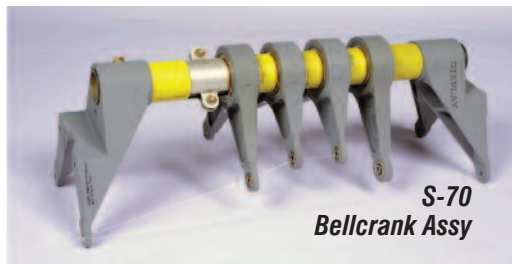


Alp Aviation

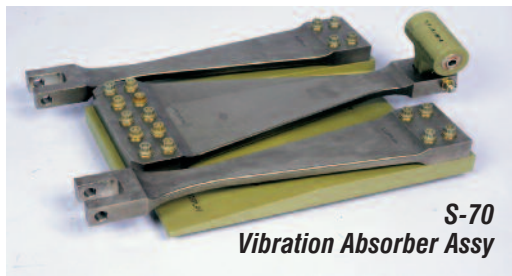


S-70
Flight Control Assemblies & Flight Safety Parts

Alp Aviation is a significant supplier of flight control assemblies, airframe components and tail rotor drive shafts for Sikorsky's Black Hawk, Sea Hawk and S-76 platforms, and is qualified as the only non-US flight safety parts supplier source for Sikorsky. Alp Aviation also supports several US and International programmes, including the F-35, F135, F-22, A380 and Boeing 787.



S-70
Bellcrank Assy



S-70
Vibration Absorber Assy



S-70
Fitting Assy

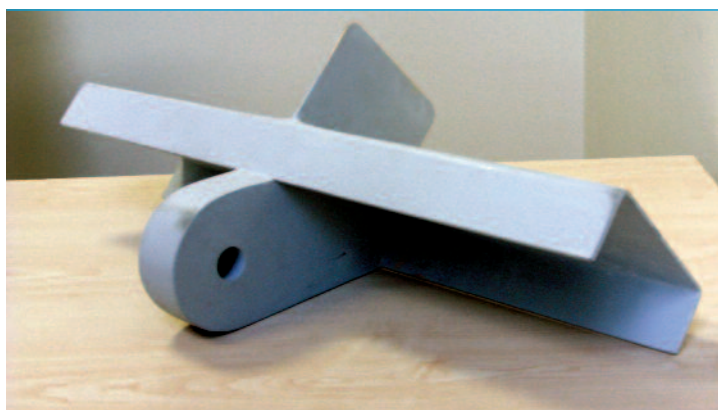


F135 Engine
Rear Hub



S-70
Swash Plate

ATARD



Ailerons

The wings of new generation military transport aircraft like A400M and now also the fuselages of new generation commercial aircraft like Airbus A350 and Boeing 787 are mainly made up of composite materials. With KEKKE-ÜRTEGE a new, single-step, cost-effective production method is being developed to co-manufacture the spar of the ailerons used on commercial aircraft like Airbus A320 and Boeing 737 along with their ribs and fittings. Ailerons, spoilers, tail planes, elevators, rudders of almost all modern aircraft are made up of composite materials.

A400M

TAI acts as the lead National Industry Representative for Turkey, in the design and development of the A400M programme. In partnership with Airbus Military SL in keeping with the 10 A400M LoadMaster aircraft slated for Turkey, the Turkish Aerospace Industries is responsible for design, development and production of various structural parts and systems. The structural work packages include forward-center fuselage, ailerons and spoilers, paratroop doors and the emergency exit door, hatches, tail cone, rear fuselage 'section A' upper shell, whereas systems work packages include lighting and water/waste systems.



Maintenance, Repair and Overhaul (MRO)

TEI is one of the largest engine MRO centres in Turkey, for both fixed and rotary wing platforms. The company provides MRO services for the Makila 1A1, CT7 and TF33-PW-100A engines, as well as components, as well as engine module repairs to condition, inspection and repair programmes in the context of the Engine Structural Integrity Programme (ENSIP) for F110-GE-100/129 Engines.



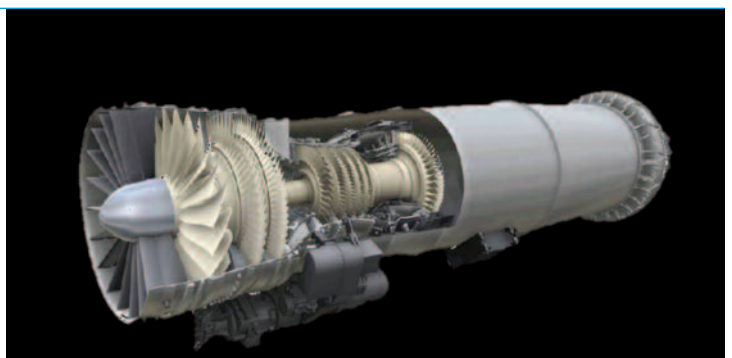
A400M-TP400 Engine Components

TEI participates in the TP400 engine project, to power the A400M military transport, as a risk and revenue sharing partner, and is sole source for the modules under its responsibility.



Joint Strike Fighter (JSF) F136 Engine

TEI, provides parts manufacturing, engineering and all engine-related activities, starting from System Development Phase, integrating Turkish aerospace capabilities with the world under the Joint Strike Fighter (JSF) F136 Engine Programme.





Airworthiness Certification Services (ACSS)

STM has been tasked by the Turkish Ministry of National Defence (MoND) to establish the local technical infrastructure in order to initiate and maintain the National Airworthiness Certification activities of the country's military aircraft.

Airworthiness Certification Services include: Preparation of contract clauses; Determination of certification basis; Tailoring of airworthiness requirements; Establishing the means of compliance; Evaluation of design and product organizations.