

CH-47 Chinook/Improved Cargo Helicopter (CH-47F)



Mission

Transport ground forces, supplies, ammunition and other battle-critical cargo in support of worldwide combat and contingency operations.

Description and Specifications

As the Army's only Objective Force heavy-lift cargo helicopter capable of intra-theater cargo movement of payloads greater than 9000 lbs, the CH-47 Chinook/Improved Cargo Helicopter (CH-47F) is an essential component of the Army Vision. The CH-47F program will remanufacture 300 of the current fleet of 431 CH-47D Chinook helicopters, install a new digital cockpit, and make modifications to the airframe to reduce vibration.

The upgraded cockpit will provide future growth potential and will include a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. Airframe structural modifications will reduce harmful vibrations, reducing operations and support (O&S) costs and improving crew endurance. Other airframe modifications reduce by approximately 60 percent the time required for aircraft tear down and build-up after deployment on a C-5 or C-17. These modifications significantly enhance the Chinook's strategic deployment capability.

A separate but complementary effort is the installation of more powerful and reliable T55-GA-714A engines that improve fuel efficiency and enhance lift performance by approximately 3900 lbs. Installation of an improved crashworthy extended range fuel system (ERFS II) will enable Chinook self-deployment and extend the operational radius of all other missions. A program is also underway to reduce O&S costs through the joint development with the United Kingdom of a low-maintenance rotor hub.

Max gross weight: 50,000 lbs

Max cruise speed: 170 knots/184 miles per hour

Troop capacity: 36 (33 troops plus 3 crewmembers)

Litter capacity: 24

Sling-load capacity: 26,000 lb center hook, 17,000 lb forward/aft hook, 25,000 lb tandem

Minimum crew: 3 (pilot, co-pilot, and flight engineer)

Foreign Counterpart

Russia: MI-26; United Kingdom: EH-101.

Foreign Military Sales

Australia, Egypt, Greece, Taiwan. Direct Sales: Korea, Netherlands, Singapore, Spain, and United Kingdom.

Program Status

- **3QFY98** Awarded the engineering and manufacturing development (EMD) contract, slated for completion FY03.

T55-GA-714A Engine:

- **1QFY98** Commenced low-rate initial production (LRIP).
- **1QFY00** First unit equipped.
- **2QFY00** Currently fielding for the CH-47D/MH-47D/MH-47E.

Extended Range Fuel System (ERFS):

- **4QFY98** Awarded the improved ERFS II production contract. Initial deliveries were deployed in support of operations in Kosovo.
- **2QFY00** ERFS received a full materiel release.
- **3QFY01** First flight (EMD).

Projected Activities

- **1QFY05** First LRIP CH-47F delivery.
- **2QFY06** First unit equipped.

T55-GA-714A Engine:

- **2QFY08** Scheduled completion.

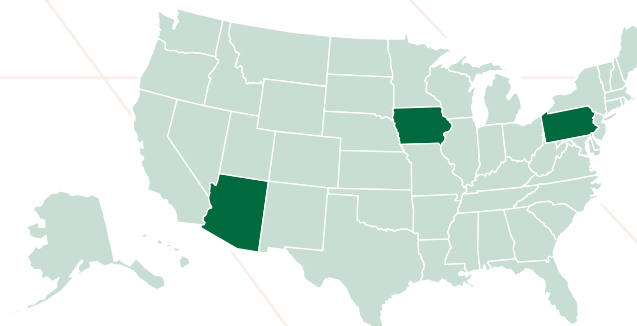
Prime Contractors

Aircraft: Boeing (Philadelphia, PA)

Cockpit Upgrade: Rockwell Collins (Cedar Rapids, IA)

Engine Upgrade: Honeywell (Phoenix, AZ)

ERFS II: Robertson Aviation (Tempe, AZ)



See appendix for list of subcontractors