

## CH-47F TRANSPORTABLE FLIGHT PROFICIENCY SIMULATOR (TFPS)



### Training Category/Level Utilized:

Aviation/Level 1

### Logistic Responsible Command, Service, or Agency:

PEO STRI

### Source and Method of Obtaining:

PM Cargo/NAVAIR Acquisition.

### Purpose of Trainer:

The purpose of the CH-47F Transportable Flight Proficiency Simulator (TFPS) is to provide a means for initial and proficiency training of pilots, instructor pilots, and maintenance test pilots on CH-47F. CH-47F systems and aerodynamics are modeled to provide a realistic flight environment for CH-47F pilots. The "out the window" scene will be simulated for Visual Meteorological Conditions (VMC), Instrument Meteorological Conditions (IMC), and for Night Vision Goggles (NVG) training. CH-47F TFPS will be High Level Architecture (HLA) compliant. The threat environment is simulated using Computer Generated Forces (CGF). The CH-47F TFPS supports training on Army XXI tasks.

The CH-47F TFPS will have the capability to be operated and maintained at the company level and to deploy with the company anywhere in the world. The CH-47F TFPS can be operated by a minimum of one pilot at either of the crew stations, and by a maximum of two pilots in the crew stations and one Instructor/Operator.

### Functional Description:

The CH-47F TFPS, Device TBD, is a transportable, training system capable of simulating ground, takeoff, flight, operational, and landing characteristics of the CH-47F under a wide range of realistic environmental conditions. On board aircraft, systems are simulated/stimulated for both normal and emergency operating procedures.

### Physical Information:

The CH-47F TFPS is contained in two 14' x 28' containers, that when complexed together, occupy a 28' x 28' footprint. The device is designed to withstand a 164 knot wind when tied down to a concrete slab. The device requires a two 200 Amps, 60 Hertz supplies to power the device and provided Environmental Control Units. The ECUs will support operation between - 40C and 54C. The enclosure is light tight to support Night Vision Goggle (NVG) operation.

### Equipment Required, Not Supplied:

None

### Special Installation Requirements:

A 70 ton crane, 15 ton, and a 1.5 ton fork lift are required to complex and decomplex the device on a concrete pad. The concrete pad should be 70' x 70'. The heaviest enclosure half weighs approximately 37,000 lb.

### Power Requirements:

Two 200 Amps supplies of 120/208, 3-phase Y w/ground power is required for the device.

### Applicable Publications:

TM01-6930-719-10 CH-47F TFPS Operators Manual  
 TM01-6930-719-23&P CH-47F TFPS System Interface Manual  
 TD01-6930-719-10 CH-47F TFPS Commercial-Off-The-Shelf Manuals

### Reference Publications:

TM 01-6910-719-10

### Training Requirements Supported:

CH-47F Operational Requirements Document (ORD)  
 CH-47F System Training Plan (STRAP)  
 TC 1-271 The Aircrew Training Manual for Cargo Helicopter CH-47F Draft.