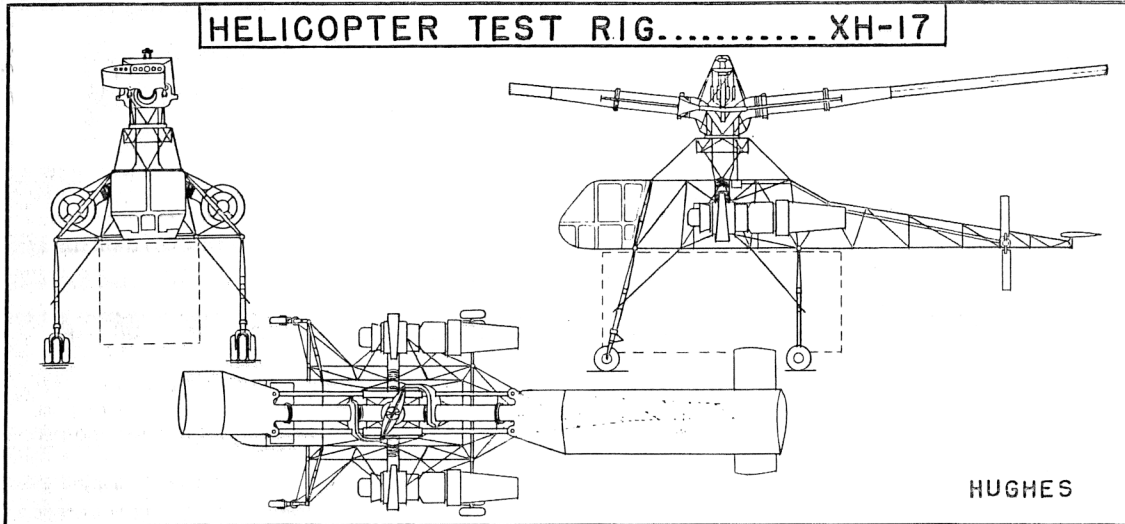


Characteristics Summary

HELICOPTER TEST RIG..... XH-17



Disc area 13,272 sq ft Length (rotors operating) 130.0 ft
 Disc dia. 130.0 ft (fuselage) 53.3 ft
 Height 30.1 ft

AVAILABILITY			PROCUREMENT			
Number available			Number to be delivered in fiscal years			
ACTIVE	RESERVE	TOTAL				

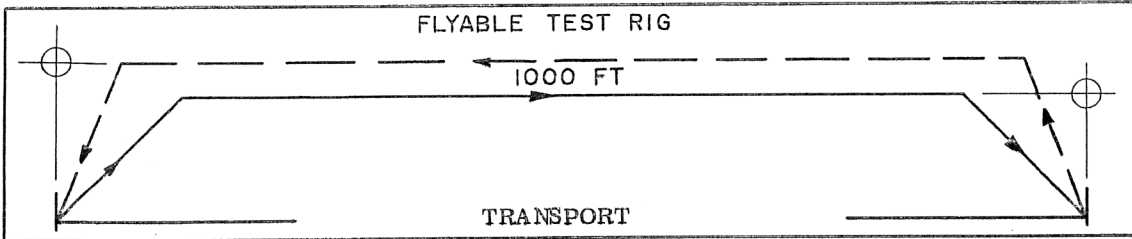
STATUS

1. Original design by Kellett. Air Force contract transferred to Hughes.
2. Full scale ground test rig was first constructed and tested. Upon completion ground test rig was made flyable.
3. Authorization: TI-2090 dated 9 April 1946
4. First Test (ground test rig): 22 Dec 49
5. First Flight (test rig): 16 Sep 52
6. Aircraft is grounded pending study of high vibratory stresses in main rotor blades.
7. Aircraft is undergoing several "fixes" to correct deficiencies in the main rotor blades.
8. Next Flight: Dec 54 (est)

FEATURES

The XH-17 is a heavy-lift two place helicopter test rig powered with two General Electric modified J35 turbo-jet engines. These engines supply compressed air through the rotor blades to four tip burners at each blade tip, where fuel is added and burned. A total of 3480 rotor horsepower (normal) at 88 rotor rpm at sea level is developed by the power cycle. The turbine controls consist of two throttles, one for each turbine which control the turbines for starting, stopping, and getting up to speed. A single hand-twist throttle on the collective pitch lever regulates the flow of fuel and air to the tip burners. Flight controls are hydraulically actuated. Design provides for external attachment of cargo (10,284 lb. max). The maximum fuel capacity is 636 gallons.

Characteristics Summary Basic Mission XH-17



PERFORMANCE		
COMBAT RADIUS	COMBAT RANGE	S P E E D
12 naut. mi with 10,284 lb payload at 73 knots avg. in 0.34 hours.	26 naut. mi with 10,284 lb payload at 74 knots avg. in 0.37 hours	COMBAT 78 knots at 1000 ft alt, nor power MAX 78 knots at 8000 ft alt, nor power BASIC 78 knots at 5000 ft alt, nor power
C L I M B	C E I L I N G	T A K E - O F F
870 fpm sea level, take-off weight normal power	13,100 ft 100 fpm, take-off weight normal power	ground run 0 ft no assist — ft assisted
1650 fpm sea level, combat weight normal power	16,800 ft 500 fpm, combat weight normal power	over 50 ft height 0, ft no assist — ft assisted
L O A D	W E I G H T S	H O V E R I N G C E I L .
Cargo 10,284 lb Fuel: 636 gal protected 0 $\frac{\%}{\%}$ droppable 0 $\frac{\%}{\%}$ external 0 $\frac{\%}{\%}$	Empty 28,562 lb Combat 31,270 lb Take - off 43,500 lb limited by performance	14,100 ft combat weight normal power VERTICAL CLIMB 20 fpm sea level, take-off weight, normal power

- N O T E S**
- Performance Basis:
(a) Estimated data.
 - Performance Reference: Hughes Report No. NA-809, "Standard Aircraft Characteristics", dated December 1949.
 - Revision basis: To conform to MIL-C-5011A