

**SIKORSKY AIRCRAFT
S-61N MAINTENANCE MANUAL, SA 4043-80**

DIMENSIONS AND AREAS - DESCRIPTION

1. General.

Principal dimensions and areas of the helicopter are given in figure 1 and table 1.

TABLE 1

DIMENSIONS AND AREAS

GENERAL

Rotary wing disc diameter	62 ft
Rotary rudder disc diameter	*10 ft 4 in. **10 ft 7.25 in.
Width (overall)	
Maximum (with blades stationary)	62 ft
Minimum (with blades stationary)	59 ft 4 in.
Minimum (with blades removed)	
Large Sponsons	19 ft 11 in.
Small Sponsons	17 ft
Fixed Main Landing Gear	14 ft 8 in.
Length (overall)	
Maximum (blades at extreme positions)	72 ft 10 in. = 108 ft
Minimum (blades at minimum positions)	67 ft 11 in.
Height (overall)	
Maximum (rotary rudder blade at high position)	*18 ft 10 in. **18 ft 11.62 in.
Minimum (rotary rudder blade at low position)	*17 ft 10 in. **17 ft 11.55 in.

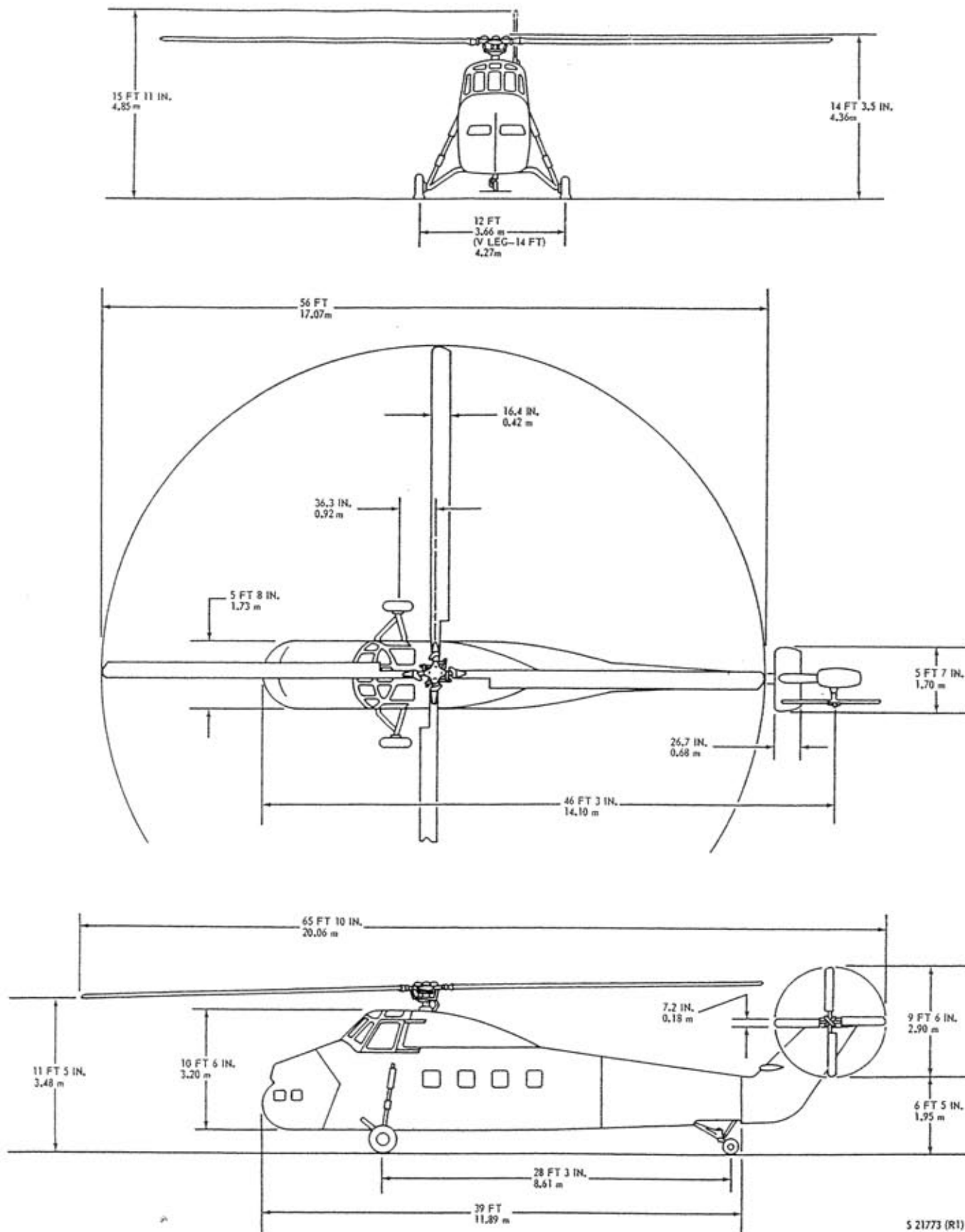
ROTARY WING BLADES

Number	5
Airfoil section (curve identification)	NACA 0012
Total blade area (five blades)	202 sq ft
Area per blade	40.4 sq ft
Area of rotation (disc area)	3019 sq ft
Rotary wing head and blade radius	31 ft
Chord at root with tabs	18.25 in.
Chord at tip with tabs	18.25 in.
Disc loading (at normal gross weight)	5.64 lb per sq ft
(at 20500-lbs gross weight)	6.79 lb per sq ft
Rotor solidity ratio (total blade area divided by disc area)	0.0669

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TABLE 1 (Cont)

ROTARY WING BLADES (Cont)	
Ground clearance (rotating)	12 ft 3 in.
Ground clearance (static)	9 ft
ROTARY RUDDER BLADES	
Number	5
Airfoil section	NACA 0012
Total blade area (five blades)	*11.75 sq ft
	**12.3 sq ft
Area per blade	*2.35 sq ft
	**2.46 sq ft
Area of rotation (disc area)	*83.9 sq ft
	**88.3 sq ft
Rotary rudder and blade radius	*5 ft 2 in.
	**5 ft 3.62 in.
Chord at root with tabs	7.34 in.
Chord at tip with tabs	7.34 in.
Rotor solidity ratio (total blade area divided by disc area)	*0.1401
	**0.1393
Ground clearance (rotating)	*8 ft 6 in.
	**8 ft 4.37 in.
Ground clearance (static)	*8 ft 6 in.
	**8 ft 4.37 in.



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Figure 1-1. Three-View Dimensions