CURRENT PRODUCTION MODELS

SIKORSKY HELICOPTERS





TABLE OF CONTENTS

	Sikorsky Model	Department of Defense or Commercial Designation	
	S-58	SH-34J, UH-34D, CH-34A	S-58
facilities Sikorsky Aircraft's operations are primarily concentrated in two areas: the modern manufacturing and engineering facilities in the 1,370,000 square	S-61	SH-3A, CH-3B, CH-3C, S-61L, S-61N	S-61
foot Stratford plant, shown left, and the expanded overhaul and repair facilities of the 516,000 square foot Bridgeport plant. These two main plants are supplemented by two hangar and service areas at the Bridgeport Municipal Airport. A brief description of Sikorsky helicopter produc-	S-62	HH-52A, S-62A	S-62
tion models follows	S-64	S-64A	S-64
	S-65	CH-53A	S-65



SH-34J. This sonar-equipped, Sikorsky S-58 helicopter is used by the U.S. Navy in anti-submarine warfare missions. The Coast Guard uses a variant of this model for search and rescue — D.O.D. designation HH-34F. Rescue equipment replaces sonar in the Coast Guard configuration.

Its sonar gear down, a Navy SH-34J helicopter hovers a few feet above the sea listening for a submarine contact. Destroyer escorts circle nearby.



SH-34-J FORMERLY NAVY HSS-1N SIKORSKY S-58 SERIES

performance

(at Normal Gross Weight in NASA Standard Air)
High Speed (S.L.)
Cruising Speed (S.L.) 84 knots
Best Rate of Climb (S.L.) (N.R.P.)1,100 fpm
Hovering Ceiling in Ground Effect (T.O.P.) 4,900 feet
Hovering Ceiling (O.G.E.) (T.O.P.)2,400 feet
Service Ceiling9,500 feet
Fuel Consumption (Cruising Speed)88 gal/hr.
Range (with 295 gals, usable fuel which includes 10% reserve at cruising speed) 255 naut. mi.
Engine, One Wright R-1820-84 Take-off Power . 1,525 BHP Normal Rated Power with 115/145 fuel 1,275 BHP

Normal Gross Weight13,000 lbs.
Useful Load 4,725 lbs.
Weight Empty, with standard equipment 8,275 lbs.
Alternate Gross Weight14,000 lbs.
dimensions
Fuselage Length 46'9"
Fuselage Width
Height Overall (to top of tail rotor)15'11"
Main Rotor Diameter (blade tip circle) 56'0"
Tail Rotor Diameter (blade tip circle) 9'6"
Main Landing Gear Tread
Passenger Cabin Length
Passenger Cabin Width 5'0"
Passenger Cabin Height 5'9"



A fleet of UH-34D's leaves a carrier deck in an amphibious vertical envelopment operation.

UH-34D. Utility version of the S-58, this helicopter is employed by the Marine Corps to carry cargo and troops in vertical envelopment tactics. The commercial cargo version, called S-58B, has a configuration similar to the UH-34D. The commercial airline configuration is called S-58C.



FORMERLY MARINE HUS-1 SIKORSKY S-58 SERIES

performance

(at Normal Gross Weight in NASA Standard Air)
High Speed (S.L.) 106 knots
Cruising Speed (S.L.) 84 knots
Best Rate of Climb (S.L.) (N.R.P.)1,100 fpm
Hovering Ceiling in Ground Effect (T.O.P.) 4,900 feet
Hovering Ceiling (O.G.E.) (T.O.P.)2,400 feet
Service Ceiling9,500 feet
Fuel Consumption (Cruising Speed)88 gal/hr.
Range (with 251 gals, usable fuel which includes 10% reserve at cruising speed)215 naut, mi.
Engine, One Wright R-1820-84 Take-off Power, 1,525 BHP Normal Rated Power with 115/145 fuel 1,275 BHP

Normal Gross Weight	13,000 lbs.
Useful Load	
Weight Empty, with standard equipment	
Alternate Gross Weight	
dimensions	
Fuselage Length	46'9"
Fuselage Width	5'8"
Height Overall (to top of tail rotor)	
Main Rotor Diameter (blade tip circle)	
Tail Rotor Diameter (blade tip circle)	
Main Landing Gear Tread	14'0"
Passenger Cabin Length	12'10"
Passenger Cabin Width	
Passenger Cabin Height	



U. S. Army helicopters fly a mission over the rugged Bavarian Alps.

CH-34A. This utility version of the Sikorsky model S-58 performs the same functions for the Army as the UH-34D does for the Marines — personnel and cargo transport. A variation, the CH-34C, is the same as CH-34A with one exception; the CH-34C has Automatic Stabilization Equipment installed.



FORMERLY ARMY H-34A SIKORSKY S-58 SERIES

performance

(at Normal Gross Weight in NASA Standard Air)
High Speed (S.L.)
Cruising Speed (S.L.) 84 knots
Best Rate of Climb (S.L.) (N.R.P.)1,100 fpm
Hovering Ceiling in Ground Effect (T.O.P.)4,900 feet
Hovering Ceiling (O.G.E.) (T.O.P.)2,400 feet
Service Ceiling
Fuel Consumption (Cruising Speed)88 gal/hr.
Range (with 251 gals, usable fuel which includes 10% reserve at cruising speed) 215 naut. mi.
Engine, One Wright R-1820-84 Take-off Power, 1,525 BHP Normal Rated Power with 115/145 fuel 1,275 BHP

Normal Gross Weight	bs.
Useful Load 5,250 ll	bs.
Weight Empty, with standard equipment 7,750 Il	bs.
Alternate Gross Weight13,600 II	
dimensions	
Fuselage Length	9"
Fuselage Width 5'	8"
Height Overall (to top of tail rotor)15'1	1"
Main Rotor Diameter (blade tip circle) 56'	
Tail Rotor Diameter (blade tip circle) 9'	
Main Landing Gear Tread 12'	0"
Passenger Cabin Length	0"
Passenger Cabin Width 5'	0"
	9"



The U.S. Navy's twin-turbine helicopter weapons system hovers near a destroyer.

SH-3A. This all-weather Sikorsky S-61 with watertight hull utilizes its high speed and long range in anti-submarine warfare. A complete weapons system, the SH-3A carries sonar and armament.





performance

(at Normal Gross Weight in NASA Standard Air) (U.S. Navy Specification Minimums)=
High Speed (S.L.) (N.R.P.) 129 knots
Best Rate of Climb (S.L.) (N.R.P.)1,550 fpm
Best Rate of Climb (S.L.) (T.O.P.) One Engine 270 fpm
Hovering Ceiling (O.G.E.) (T.O.P.)6,000 feet
Service Ceiling
Fuel Consumption (Cruising Speed)1,090 lbs/hr.
Range (with 695 gals, usable fuel which includes 10% reserve at cruising speed)465 naut, mi.
ASW Endurance
Engines, Two General Electric T58-GE-8B Turboshaft Take-off Power at 19,500 RPM (5 minutes) . 1,250 SHP Maximum Continuous at 19,500 RPM 1,050 SHP

ASW Mission Gross Weight	17,768	lbs.
Useful Load	6,574	lbs.
Weight Empty, with standard equipment	11,194	lbs.
Maximum Recommended Gross Weight	19,100	lbs.
dimensions		

Fuselage Length	
Fuselage Width	7'1"
Height Overall (to top of rail rotor)	16'8"
Main Rotor Diameter (blade tip circle)	62'0"
Tail Rotor Diameter (blade tip circle)	10'0"
Main Landing Gear Tread	13'0"
Passenger Cabin Length	19'3"
Passenger Cabin Width	
Passenger Cabin Height	5'31/2"

of or ASW operation. For cargo and personnel transportation which do not have the stringent hovering requirements of the ASW mission, use the considerably increased performance on the following page for the CH-3B.



The CH-3B carries personnel and cargo to one of the two Texas Towers off the Massachusetts coast.

CH-3B. Cargo and personnel carrying version of the S-61, the CH-3B is available for quick delivery. Similar to the SH-3A, this utility helicopter is equipped with troop seats instead of sonar.



CH-3B SIKORSKY S-61A

performance

(at Normal Gross Weight in NASA Standard Air)
High Speed (S.L.) (N.R.P.)
Cruising Speed (S.L.)
Best Rate of Climb (S.L.) (N.R.P.)1,500 fpm
Best Rate of Climb (S.L.) (T.O.P.) One Engine 170 fpm
Hovering Ceiling in Ground Effect (T.O.P.) 9,000 feet
Hovering Ceiling (O.G.E.) (T.O.P.)5,000 feet
Service Ceiling
Fuel Consumption (Cruising Speed)1,175 lbs/hr.
Range (with 700 gals, usable fuel which includes 10% reserve at cruising speed)470 naut. mi.
Engines, Two General Electric T58-GE-8B Turboshaft Take-off Power at 19,500 RPM (5 minutes) .1,250 SHP Maximum Continuous at 19,500 RPM 1,050 SHP

Normal Gross Weight	
Weight Empty, with standard equipment 9,911	
Alternate Gross Weight21,500	lbs.
dimensions	
Fuselage Length 54	4'9"
Fuselage Width	7'1"



This utility version, called S-61R by Sikorsky, incorporates a rear loading cargo ramp for rapid loading of wheeled vehicles, cargo, and troops.

The CH-3C, due for its first flight in 1963, will hustle heavy equipment and personnel to missile sites and other strategic areas.



SIKORSKY S-61R

6'6"

performance

(at Normal Gross Weight in NASA Standard Air)
High Speed (S.L.), Military Power 143 knots
High Speed (S.L.), N.R.P
Cruising Speed (S.L.) Maximum Range 126 knots
Best Rate of Climb (S.L.) Military Power1,960 fpm
Best Rate of Climb (S.L.) Military Power, Single Engine
Hovering Ceiling in Ground Effect, Military Power
Hovering Ceiling (O.G.E.) T.O.P3,700 feet
Service Ceiling
Fuel Consumption
Range (with 700 gals, usable fuel which includes 10% reserve at cruising speed)425 naut. mi.
Engines, Two General Electric T58-GE-8C Turboshaft Military Power at 19,500 RPM (30 minutes) . 1,250 SHP Normal (Continuous Cruise) at 19,500 RPM . 1,050 SHP

weights

Normal Gross Weight
Useful Load 8,072 lbs.
Weight Empty, with standard equipment11,248 lbs.
Alternate Gross Weight22,000 lbs.
dimensions
Fuselage Length
Fuselage Width 7'1"
Height Overall (to top of tail rotor)18'11"
Main Rotor Diameter (blade tip circle) 62'0"
Tail Rotor Diameter (blade tip circle) 10'4"
Main Landing Gear Tread 13'4"
Passenger Cabin Length



SIKORSKY S-61 SERIES

performance

weights

Normal Gross Weight		
Useful Load		
Weight Empty, with standard equipment	,11,333	lbs.
dimensions		
Contract to the second		



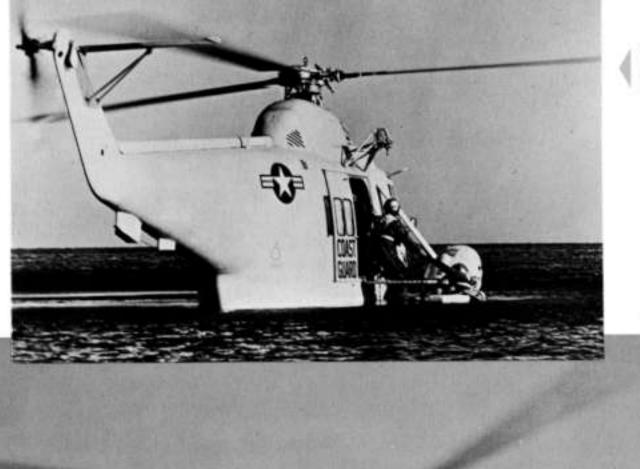
S-61N mockup. This aircraft was observed from every angle for passenger comfort.

S-61N. This commercial S-61 is a 27 passenger carrier that is similar to the S-61L. It utilizes the same time-tested and FAA approved S-61L components that have resulted in decreased operating costs and extended times required between overhauls. Unlike the S-61L, this helicopter incorporates dual pontoons to facilitate water landings.



SIKORSKY S-61 SERIES

performance



As the helicopter puts down next to the survivor, a crewman moves out on the platform and assists the survivor directly onto the platform and into the cabin.

HH-52A. This Coast Guard search, rescue and utility helicopter version of the Sikorsky S-62 lands and takes off from water. It is equipped with a rescue platform which extends from the cabin door.



FORMERLY COST GUARD HU2S-1G SIKORSKY S-62 SERIES

performance

(at Normal Gross Weight in NASA Standard Air)

(at Normal Gross Weight in NASA Standard All)
High Speed (S.L.) 95 knots
High Speed (S.L. at 7000 lbs. gross weight) with ASE installed 108 knots
Cruising Speed (S.L.) 85 knots
Best Rate of Climb (S.L.) (N.R.P.)1,080 fpm
Hovering Ceiling in Ground Effect (T.O.P.) 12,200 feet
Hovering Ceiling (O.G.E.) (T.O.P.) 1,700 feet
Service Ceiling
Fuel Consumption (Cruising Speed)429 lbs/hr.
Range (with 324 gals, usable fuel which includes 10% reserve at cruising speed) 400 naut, mi.
Engine, One General Electric T58-GE-8B Turboshaft Take-off Power at 19,500 RPM (5 minutes) .1,250 SHP* Maximum Continuous at 19,500 RPM 1,050 SHP*

weights

Normal Gross Weight	lbs.
Useful Load	lbs.
Weight Empty, with standard equipment 5,083	lbs.
Alternate Gross Weight8,300	lbs.

dimensions

Fuselage Length
Fuselage Width5'10"
Height Overall (to top of tail rotor)16'0"
Main Rotor Diameter (blade tip circle)53'0"
Tail Rotor Diameter (blade tip circle) 8'9"
Main Landing Gear Tread12'2"
Passenger Cabin Length14'0"
Passenger Cabin Width 5'4"
Passenger Cabin Height 6'0"

^{*}Usable engine horsepower is limited to 670 SHP for continuous operation (N.R.P.); 730 SHP for hover, takeoff and climb (5 minute limitation); 845 SHP for emergency operation regardless of temperature and altitude.



SIKORSKY S-62 SERIES

performance

weights

Normal Gross Weight	
Useful Load	
Weight Empty, with standard equipment 4,840 lbs.	
dimensions	
Fuselage Length	
Fuselage Width	
Height Overall (to top of tail rotor)16'0"	
Main Rotor Diameter (blade tip circle)53'0"	
Tail Rotor Diameter (blade tip circle) 8'9"	
Main Landing Gear Tread	

The S-62A has demonstrated its capability to perform at these altitudes. However, from lack of adequate test sites during the certification program for the S-62A, the FAA approved Flight Manual reflects the following altitude limitations.

1. Maximum Take-off Altitude 7,000 feet 2. Maximum Altitude to Hover O.G.E. 8,000 feet 3. Maximum Landing Altitude 10,000 feet

^{**} Usable engine horsepower is limited to 670 SHP for continuous operation (N.R.P.) and 730 SHP for hover, takeoff and climb (5 minute limitation) regardless of temperature and altitude.



S-64-A SIKORSKY S-64 SERIES

performance

(at Normal Gross Weight in NASA Standard Air with External Load Drag Equivalent to 129 Square Feet)
High Speed (S.L.)
Cruising Speed (S.L.) 95 knots
Best Rate of Climb (S.L.) (N.R.P.)1,400 fpm
Best Rate of Climb (S.L.) (Military Power) One Engine
Hovering Ceiling in Ground Effect (T.O.P.)9,700 feet
Hovering Ceiling (O.G.E.) (T.O.P.)4,700 feet
Service Ceiling
Fuel Consumption (Cruising Speed)3,460 lbs/hr.
Range (with 880 gals, usable fuel which includes 10% reserve at cruising speed)150 naut, mi.
Engines, Two Pratt & Whitney JFTD 12A-1 Turboshaft Anticipated Take-off Power at 9,000 RPM 4,620 SHP Military Power at 9,000 RPM (30 minutes) 4,050 SHP Normal Rated Power at 9,000 RPM 3,200 SHP

Normal Gross Weight
Useful Load
Weight Empty, with standard equipment 17,240 lbs.
dimensions
Length Overall (blades extended) 88'2"
Width Overall (less blades)21'10"
Height Overall (to top of tail rotor) 24'8"
Main Rotor Diameter (blade tip circle) 72'0"
Tail Rotor Diameter (blade tip circle) 15'8"
Main Landing Gear Tread
Ground Clearance (without pod) 9'4"



The free world's newest and largest heavy assault helicopter provides the U. S. Marines with a fast ship-to-shore vehicle.

CH-53A. The CH-53A helicopter carries a payload of 4 tons for a mission radius of 100 miles. Troop seating arrangement provides space for 30 troops and one heliteam leader. For evacuation of wounded, 24 litters plus three attendants' seats are installed in place of troop seats. For cargo transfer, a powered cargo handling system permits rapid loading and unloading of cargo by one man . . . a-ton-a-minute.



CH-53A SIKORSKY S-65A

anticipated performance

Design Mission (with 10% reserve fuel)
Payload, outbound/return8,000/4,000 lbs.
Flight Radius
Altitudesea level
Average Speed, outbound/return150/150 knots
Maximum Speed, at gross weight 170 knots
Hover Ceiling, out of ground effect7,200 feet
Engines, two T64-GE-6 Turboshaft
Normal Rating, each
Military Rating, each (30 minutes) 2,690 SHP
Maximum Rating, each (10 minutes)2,850 SHP

Weight Empty	20,950	lbs.
Useful Load	12,534	lbs.
	dimensions	
Fuselage Length	6	712"

Fuselage Length	67'2"
Fuselage Width	8'10"
Height Overall (to top of tail rotor)	4'11"
Main Rotor Diameter (blade tip circle)	72'0"
Tail Rotor Diameter (blade tip circle)	16'0"
Main Landing Gear Tread	13'0"
Passenger Cabin Length	30'0"
Passenger Cabin Width	7'6"
Passenger Cabin Height	

EXTENSIVE TEST FACILITIES

Extensive development and testing of helicopter components by Sikorsky Aircraft decreases costs by extending time intervals between required overhaul of major components, by decreasing daily maintenance requirements and by lowering spare parts replacement rates.

Laboratory and test facilities are available in the engineering wing of the Stratford plant for research in the fields of hydraulics, radio, electronics, metallurgy, and aircraft component development. Complete facilities for bench testing components, tie-down testing of static test articles, and dynamic component testing are also available.

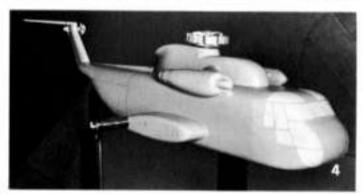
The main rotor test stand of 8,000 horsepower capacity (1.), the largest of its type in the industry, is an example of the many exclusive pieces of equipment designed and built by Sikorsky for helicopter development. Research and development facilities for transmission systems, components, and general product improvement are located in both Stratford and Bridgeport. These are augmented by the United Aircraft Corporation's major research and test installations, including IBM computers and wind tunnels, located at East Hartford, Connecticut.

Sikorsky Aircraft is active in research efforts of other aspects of V/STOL aircraft. In the past 10 years we have conducted research in the flying qualities (2.), performance, and automatic controls for V/STOL aircraft. More recently, navigational systems and human and environmental factor studies have been added.













- 1. 8000 HP Whirl Stand
- 2. V/STOL Flight Simulator
- 3. Dynamic Components Test Stand
- 4. Helicopter in UAC Wind Tunnel
- 5. UAC Computers
- 6. Tail Rotor Test Stand

SIKORSKY PRODUCTION

DEC. 15, 1962

MODEL	YEAR	TOTAL PRODUCED	FLIGHT HOURS*	REMARKS		
R-4	1942	131 Aircraft	50,100 hrs.	Used by USAF, USN, RAF, RNAF, USCG, etc.		
R-5	1944	65 Aircraft	50,100 hrs.	USAF, USN		
R-6	1945	229 Aircraft	34,700 hrs.	USAF, USN		
S-51	1946	220 Aircraft	196,500 hrs.	First commercial aircraft, also saw extensive Korean Service		
S-52	1947	95 Aircraft	32,600 hrs.	USMC in Korea, USCG		
S-55	1949	1,281 Aircraft	2,000,000 hrs.	Very wide use both in military and commercial		
S-56	1955	156 Aircraft	110,000 hrs.	Heavy transport for USMC and Army		
S-58	1954	1,535 Aircraft	1,580,000 hrs.	Extensive military and commercial use		
S-59	1954	2 Aircraft	100 hrs.	Flying test bed for turbine		
S-60	1959	1 Aircraft	300 hrs.	Flying crane prototype		
S-61	1959	153 Aircraft	50,000 hrs.	First FAA certified twin turbine helicopter- amphibious version used by USN		
S-62	1958	23 Aircraft	20,000 hrs.	First Turbine powered amphibious helicopter		
S-64	1962	2 Aircraft	150 hrs.	First turbine powered crane		
	TOTAL	3,893 Aircraft	4,124,550 hrs.			

^{*}Conservative Estimate

SIKORSKY HELICOPTER DESIGNATIONS

CURRENT PRODUCTION MODELS

	S-58	S-61	S-62	S-64	S-65
AIR FORCE		CH-3B CH-3C			
ARMY	CH-34A H-34A CH-34C H-34C	VH-3A HSS-2Z		9.1	
COAST GUARD	HH-34F HUS-1G		HH-52A		
MARINE	UH-34D HUS-1 UH-34E HUS-1A HUS-1AN VH-34D HUS-1Z	VH-3A HSS-2Z			CH-53A
NAVY	SH-34G HSS-1 SH-34J HSS-1N SH-34H HSS-1F	SH-3A HSS-2			
COMMERCIAL	S-58A S-58B S-58C S-58D	S-61A S-61B S-61L S-61N S-61R	S-62A S-62B S-62C	S-64A	S-65A

NOT IN PRODUCTION

	S-51	S-52	S-55	S-56	S-59
AIR FORCE	H-5F H-5G H-5H		H-19A UH-19B H-19B		
ARMY		YH-18	YH-19 UH-19C H-19C UH-19D H-19D	CH-37A H-37A CH-37B H-37B	YH-39
COAST GUARD	H03S-1G		HH-19G HO45-3G		
MARINE			HRS-1 HRS-2 CH-19E HRS-3	CH-37C HR2S-1	
NAVY	HO2S-1 HO3S-1 HO3S-2	H05S-1	H04S-1 H04S-2 UH-19F H04S-3	HR2S-1W	
COMMERCIAL	S-51	S-52	S-55A S-55B S-55C		S-59

HELICOPTER DESIGNATIONS IN COLOR ARE NEW DEPARTMENT OF DEFENSE DESIGNATIONS

Sikorsky Aircraft DIVISION OF UNITED AIRCRAFT CORPORATION Stratford, Connecticut · U.S.A.

Printed in U.S.A.

SP69-2/63-25C lour me