

# Sikorsky Archives News

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## IN THE SPAN OF JUST ONE DECADE



*From the R-4 in 1943 to the S-56 in 1953*

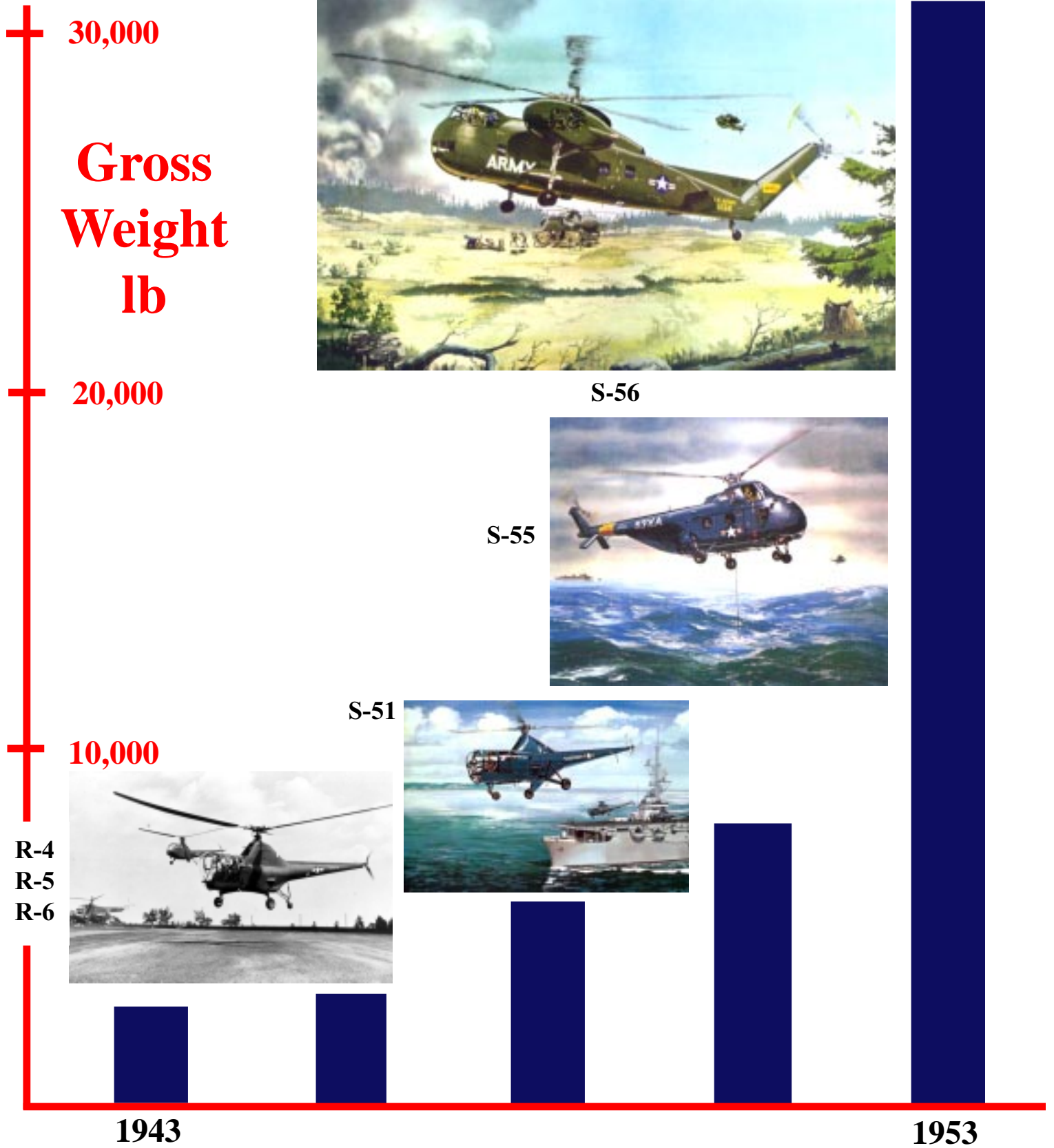


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S-56



S-55



R-4  
R-5  
R-6



S-51

A graphic depiction of progress over the decade

The S-51 was followed by the S-52 in Feb. of 1947, and was the first Sikorsky production helicopter with all metal rotor blades. The S-52 was a company funded program purchased by the Navy for the Marines, and was later procured by other government agencies.

The S-52 was the first Sikorsky helicopter to be modified with a turbine engine and was designated the XH-39 (S-59). The Franklin piston engine was replaced with a Turbomeca Artouste I shaft turbine engine.

During the mid 1940's, Sikorsky produced three experimental XHJS-1 (S-53) for the Navy in competition with the Piasecki XHJP-1. The new program was to replace the HO3S-1 (S-51) aircraft supporting the fleet. The Piasecki XHJP-1 (HUP) tandem rotor aircraft won the competition. Sikorsky built a tandem rotor helicopter in 1948 to evaluate the tandem concept. Mr. Sikorsky's conclusion was that "two rotors are like two cooks in one kitchen". He considered that two vertical thrust rotors would not be too readily controllable. So the single main and tail rotors became the standard for all Sikorsky helicopters.

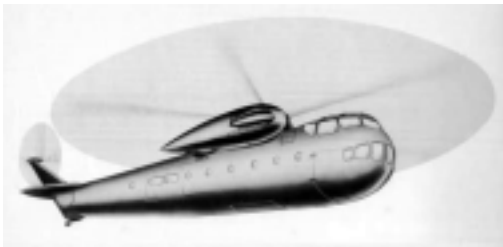


Clockwise from top right: Navy HO5S-1, S-54, Coast Guard HO5S-1, Army XH-39, XHJS-1 (S-53), and Army/Air Force YH-18.



## The First of the Heavy Lift Helicopters.

The S-56 was originally proposed to the Navy in three options to meet lift and speed requirements.



Option 1- Helicopter



Option 2-Piston Engined Compound

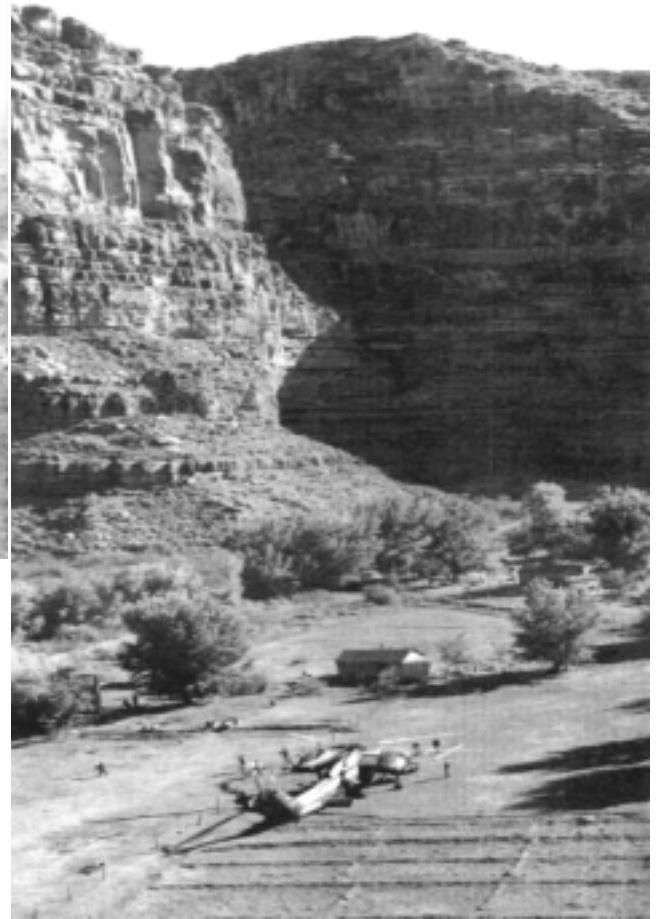


Option 3-Turboprop Compound

In 1953 The HR2S-1 (S-56) was born as a twin-engine, single main rotor helicopter comparable in size to the Douglas DC3 twin engine transport aircraft. Two Pratt & Whitney R2800 engines, similar to those which powered the F4U Corsair and P47 Thunderbolt fighters of World War II were mounted outboard of the fuselage on short wing stubs. Rotor blades and tail section were foldable for easy handling and stowage aboard aircraft carriers.



Photos clockwise from top right: HR2S-1 (S-56), S-56 disembarking troops, S-60 (the original flying crane), Navy HR2S-1W with radome, two shipborne Marine CH-37C aircraft, and Navy HR2S-1W with radome.



**In November of 1964, Marines flew five CH-37's (S-56) into the Grand Canyon to supply materials to rebuild a school for the Havasupai Indians. The helicopters flew down 2,500 feet to the canyon floor. Over 50,000 pounds of supplies were delivered by the aircraft from the Marine Air Group 36, HMH 462. The total operation took twenty one trips over a three hour period. The aircraft was an Army workhorse.**



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Newsletter designed and edited by  
**Lee Jacobson**  
**and John Daniell**

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