

Sikorsky MH-60S SEAHAWK[®] Helicopter Proven multi-mission maritime system





Maritime Proven

Modern navies face budget realities and operational imperatives that have never been more demanding. Maritime nations need the best equipment available if they desire to maximize their ability to perform multiple missions in the demanding at-sea environment.

Sikorsky is meeting this need with the MH-60S SEAHAWK[®] helicopter, featuring a spacious and easily configurable cabin that facilitates true multi-mission flexibility. Based on its battle-proven predecessors, the UH-60 BLACK HAWK utility helicopter and the U.S. Navy's multi-mission SH-60B SEAHAWK helicopter, the MH-60S provides state-of-the-art controls, displays and decision aids as well as a sophisticated, fully-integrated sensor suite. Used by the U.S. Navy for Logistics, Troop Transport, Organic Airborne Mine Countermeasures (OAMCM) and Armed Helicopter (to include Combat Search and Rescue) missions, the MH-60S is an extremely capable and modern weapon system. It plays a significant role in today's high-density, information-intensive littoral and open-ocean maritime environments.

In addition to its outstanding multi-mission performance, MH-60S customers will benefit from its prominent position in the U.S. Navy rotorcraft inventory. Those who select the MH-60S for their maritime multi-mission helicopter needs gain the advantage of interoperability with the U.S. Navy, as well as timely access to logistics and spares support and pre-planned technology upgrades.

THE BOTTOM LINE

MH-60S delivers all the attributes and benefits of the battle-proven BLACK HAWK and SEAHAWK helicopters, plus U.S. Navy commonality, in a reliable, proven performer.

Naval Helicopter Legacy



A pioneer in vertical flight systems, Sikorsky has built four generations of high-performing maritime helicopters.

The MH-60S SEAHAWK is no exception as it combines some of the traditional missions of its U.S. Navy predecessors, the SH-60B, SH-60F and HH-60H helicopters. Greatly enhanced over these earlier models, the MH-60S features an upgraded glass cockpit and significant mission improvements for greater flexibility. The result is an aircraft with unique capability as an airborne multi-mission naval platform and a fitting continuation of the Naval Hawk's legacy of success.

A global fleet of more than 600 Naval Hawks has flown more than 2.5 million flight hours under the most demanding conditions.

THE BOTTOM LINE Backed by a legacy of service and performance, the MH-60S delivers maximum utility and effectiveness.





NAVY 20 "



True Multi-Mission Platform

Operating around the globe in the most demanding environments, the MH-60S helicopter has proven to be an exceptional, reliable and versatile multimission maritime platform.

Its missions include:

- Troop Transport
- Vertical Replenishment (VERTREP)
- Vertical Onboard Delivery (VOD)
- Search And Rescue (SAR)
- Medical Evacuation (MEDEVAC)
- Non-combatant Evacuation Operations (NEO)
- AIRHEAD Operations
- Special Warfare Support
- OAMCM
- Anti-Surface Warfare (ASuW).

MH-60S customers will benefit from a comprehensive U.S. Navy upgrade plan that ensures the platform will continue to evolve to meet future needs and requirements for all missions.





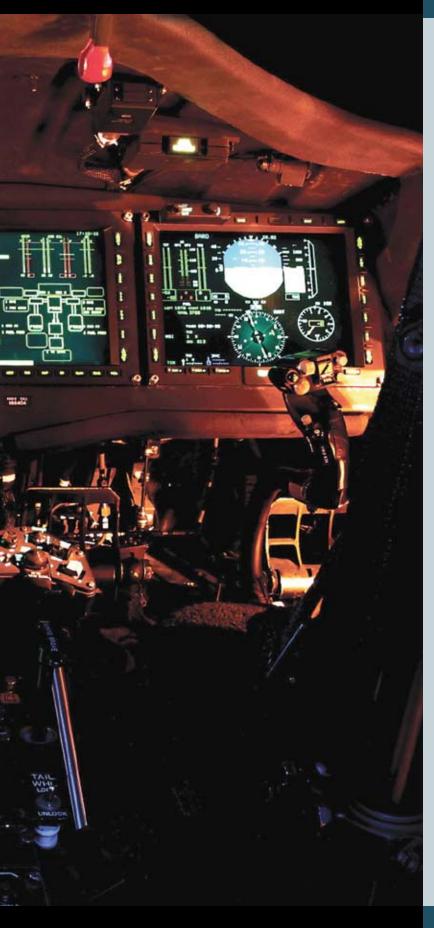
As part of the upgrade plan, the Organic Airborne Mine Countermeasures (OAMCM) suite will be capable of employing the following systems to detect and destroy mines: Sonar Mine Detection System, Airborne Laser Mine Detection System, Airborne Mine Neutralization System, Organic Airborne and Surface Influence Sweep and Rapid Airborne Mine Clearance System.

Similar upgrades are being designed for the Armed Helicopter Weapon System (AHWS) with capabilities of performing the following missions: Combat Search and Rescue (CSAR), Maritime Interdiction Operations (MIO), organic Surface Warfare (SUW), Force Protection (FP), expanded Special Warfare Support (SWS) and Carrier Plane Guard/SAR.

THE BOTTOM LINE A true multimission maritime platform, the MH-60S was designed with a strategic plan for future growth and phased enhancements, including a wide array of new capabilities that will maximize mission effectiveness.

Modern Cockpit for All Missions





The Lockheed Martin avionics suite Common Cockpit,[™] based on open systems architecture and Commercial Off The Shelf technology (COTS), plays a vital role in support of information management and interoperability. Additionally, its scaleable architecture and modular design enhances affordability, while meeting functional and growth requirements.

The fully-integrated glass cockpit and mission sensor suite of the MH-60S delivers maximum functionality, while increasing safety and reducing pilot overload.

The U.S. Navy Common Cockpit incorporates avionics equipment advances in the following areas:

- Four 8 x 10 inch (20.3 x 25.4 cm) full color, night vision device capable, sunlight-readable, multi-function mission and flight displays
- Fully digital communication suite
- Common programmable keysets for pilots and aircrew
- Fully integrated global positioning satellite unit/ inertial navigation system
- Mass memory data storage device
- Ruggedized integrated mission computer
- Flight management computer and operational software.

THE BOTTOM LINE The advanced cockpit in the MH-60S maximizes multi-mission flexibility while enhancing safety and reducing pilot workload.

Flexible Response for Mission Success



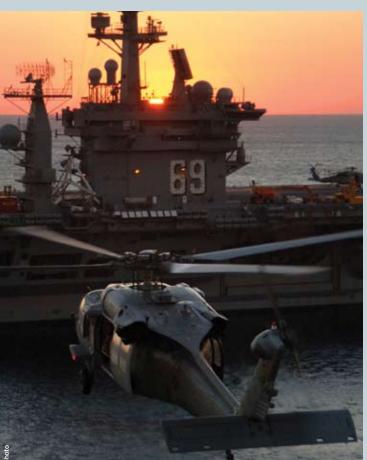


The MH-60S plays a key role in the U.S. Navy's maritime dominance posture by providing its multimission capabilities from the decks of all naval aviation capable platforms, including carriers, cruisers, amphibious ships, destroyers and frigates.

The MH-60S offers standard and optional equipment for superior offensive and defensive operations in open-ocean and coastal environments. It is ideal for handling numerous contacts in a confined space and is designed to complement other elements of the force. This capability supports the U.S. Navy's Network Warfare vision and enhances overall mission effectiveness.

By selecting the MH-60S, modern navies worldwide will benefit from interoperability with the U.S. Navy fleet, which translates into allied navy forces operating synergistically to provide greater combat capability and leverage common support.

THE BOTTOM LINE The dynamic multi-mission approach inherent in the MH-60S delivers maximum flexibility and superior interoperability.



Superior Safety and Survivability

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When it comes to survivability, it's hard to top the MH-60S. The MH-60S has built-in tolerance to small-arms fire and most medium-caliber high-explosive projectiles. Plus, like the rest of the HAWK family, it incorporates airframe and landing gear features for a high degree of battlefield survivability.

It is particularly noteworthy that the U.S. Navy compiled more than 100,000 accident-free flight hours with the MH-60S in its first three years of fleet operation, while concurrently achieving mission-capable rates in excess of 90 percent.

THE BOTTOM LINE The MH-60S combines the latest in safety and survivability enhancements with the ruggedness of the crashworthy, battle-proven SEAHAWK helicopters.

Important MH-60S survivability and crashworthiness features include:

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(1) Redundant flight control system

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- 2 Ballistically tolerant upper controls and hub
- (3) 23 mm tolerant main rotor blades
- (4) Redundant fail-safe tail rotor controls
- (5) Self-sealing fuel tanks
- (6) High mass components retained in 20/20/10G crash conditions

- (7) Modular transmission with fail-safe lubrication
- (8) Triple redundant hydraulic and electrical system

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- (9) Spall-resistant windshield and cockpit structure
- (10) Jettisonable cockpit windows
- (11) Load limiting crew seats
- (12) Energy absorbing landing gear

World-Class Service and Support



Sikorsky support is fast, knowledgeable, on site and on time.

We keep modern navies flying, with aroundthe-world and around-the-clock service. Our comprehensive program includes spare parts, overhaul and repair, training, on-site technical and logistics representatives, ground support equipment, publications and more.

Naval Forces flying the MH-60S will benefit from economies of scale and the U.S. Navy's long-term support of a fleet of more than 250 MH-60S aircraft. With the U.S. Navy leading the way, potential logistics issues arising from parts obsolescence are eliminated, and operators may participate in future upgrade programs as they become available.

Innovative programs such as Fleet Management, Performance Based Logistics (PBL) and Depot Partnerships are just a few of the innovative services Sikorsky employs to increase aircraft availability/readiness, improve ease-of-use and reduce cost of ownership.

Additionally, MH-60S operators will benefit from today's fast-paced information environment by having instant access to the electronic product technical manuals, updates and training.

THE BOTTOM LINE The MH-60S worldwide customer service team will work with your personnel to maximize mission readiness, improve ease-of-use and reduce costs.



Additional Maritime Capability

The MH-60S helicopter was designed to support the U.S. Navy's helicopter master plan and meet fleet and combat support needs – and it does all that and more.

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As the entire spectrum of maritime rotary wing mission requirements cannot be addressed by a single aircraft model, the U.S. Navy will rely on a combination of MH-60S and MH-60R helicopters to meet all of its needs.

The MH-60R helicopter complements the mission capabilities of the MH-60S helicopter by performing Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASuW) concurrent with routine helicopter missions like Logistics and Search and Rescue.

What's more, a wide array of future upgrades is planned for both models. Additionally, the MH-60S and MH-60R share the identical multifunction digital glass cockpit. The airframe and cockpit commonality between the two aircraft provide exceptional flexibility of support, maintenance and training, thereby yielding significant savings.

While they are both strong performers individually, together they can provide the most complete and complementary package of capabilities for maritime customers.

THE BOTTOM LINE *The MH-60S and MH-60R deliver a complete package of capabilities for modern maritime customers.*





MH-60S Configuration and Options

Base Configuration

The MH-60S helicopter features two T700-GE-401(C) engines with integrated particle separator. The engines, transmission/drive train and rotor system are fully marinized. Shipboard compatible, the helicopter comes with standard automatic main rotor blade fold along with manual tail pylon and tail rotor fold.

F	Utility/Vertical Replenishment (VERTREP)	Organic Airborne Mine Countermeasures (OAMCM)	Armed Helo Weapon System (AHWS)
14 crashworthy troop seats (12 troops and 2 crews)	•	•	•
Dual sliding cabin door and windows	•	•	•
9,000 lb (4082 kg) cargo hook with enlarged cargo door	•	•	•
Internal fuel tanks, 360 gal (1363 l) total	•	•	•
Provisions for auxiliary fuel tanks 2 x 200 gal (757 l) (interr	nal) •	•	•
Automatic rotor brake	•	•	•
Fuel dump	•	•	•
External rescue hoist	•	•	•
Integrated avionics with 1553 data bus	•	•	•
Enhanced Advanced Flight Control System (AFCS) with			
naval modules and coupled hover capability and tow cou	ple •	•	•
Environmental control system	•	•	•
Active Vibration Control (AVC)	•	•	•
Hover Infrared Suppressor System (HIRSS)	•	•	•
Hover In-Flight Refueling (HIFR)	•	•	•
Wire strike	•	•	•
Underwater locator beacon provision	•	•	•
Provisions for strap litter lit and aeromedical evacuation k	it •	•	•
Integrated Health and Usage Monitoring System (HUMS)	•	•	•
Sonar mine detection system			
Airborne laser mine detection system		۵	
Airborne mine neutralization system		D	
Organic airborne & surface influence sweep			
Rapid airborne mine clearance system		۵	
Auxiliary internal fuel tanks 200 gal (757 l) each,			
single or dual configuration			
Forward Looking Infrared (FLIR)			
External weapons system			
Crew served guns			
- 7.62 mm, window mount (2)			<u> </u>
- 0.50 cal door mount (2)			
Radar Warning System (RWS)			
Missile/Laser Warning System (MWS)/(LWS)			
Infrared countermeasures			
Countermeasures dispensing system			۵
Digital moving map			
Cockpit/cabin floor armor			
Tactical data link			٦

The baseline MH-60S aircraft comes standard with the provisions for the optional OAMCM mission kits required to perform the unique mission mentioned above.

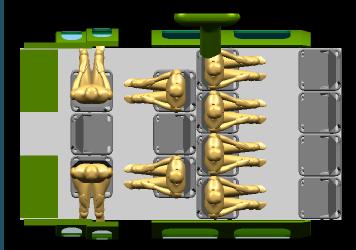
Note: Communication, navigation and mission equipment shall comply with U.S. exportability requirements.

• Standard equipment D Optional equipment

MH-60S Maximum Flexibility

Multiple Cabin Configuration options

The MH-60S features a large cabin which is easily configurable for cargo and passenger transport or any other mission equipment needs.



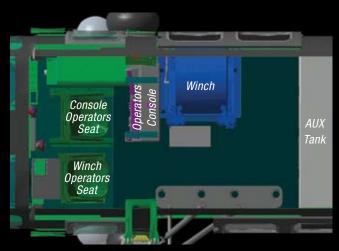
14 seat total with 12 troops and 2 crewman



Cargo handling system with floor flipover rollers



Auxiliary single fuel tank installation



Organic Airborne Mine Countermeasure (OAMCM)



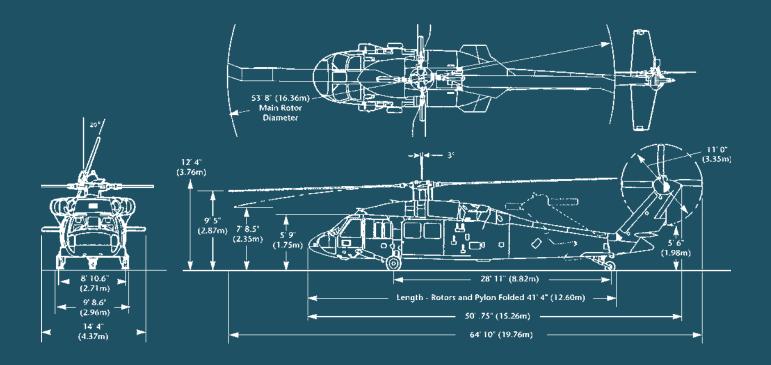
Cargo handling system with floor flipover rollers



Auxiliary dual fuel tank installation

MH-60S Specifications

Characteristics		
Maximum takeoff gross weight	23,500 lb	10,659 kg
Maximum useful load	9,070 lb	4,123 kg
Dash speed	153 kts	284 km/h
Approximate range	245 nm	453 km
Dimensions		
Operating width	53 ft 8 in	16.4 m
Operating length	64 ft 10 in	19.8 m
Operating height	16 ft 0 in	4.9 m
Folded length	40 ft 11 in	12.5 m
Folded width	10 ft 8 in	3.3 m
Folded height	13 ft 3 in	4.1 m
Wheelbase	28 ft 11 in	8.8 m
Main rotor diameter	53 ft 8 in	16.4 m
Tail rotor diameter	11 ft 0 in	3.3 m
Cabin length	12 ft 7 in	3.8 m
Cabin width	6 ft 1 in	1.9 m
Cabin height	4 ft 5 in	1.3 m



There are those who fly. And those who fly Sikorsky.

Sikorsky Naval Hawk helicopters have been operating for decades, accumulating more than 2.5 million flight hours, surpassing by far any other naval fleet. With an estimated 14,000 flight hours monthly, Naval Hawks will continue to be the predominant global maritime rotary wing force.

For elite military operators, Sikorsky is the only way to fly. As the world's premier provider of military rotorcraft, we go above and beyond to deliver a complete helicopter experience. Sikorsky not only sets the standard for rotorcraft excellence and safety — we exceed it with:

- Innovative solutions
- A proven family of high-performing helicopters
- Superior value
- Unparalleled service and support.

In the world of vertical flight, one name stands above the rest. Sikorsky.

For a confidential consultation, demonstration or for more information about the MH-60S helicopter, please contact our military marketing specialist.

There are those who fly. And those who fly Sikorsky.



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