



SIKORSKY

CH-53K[®]

THE ONLY
HEAVY LIFT SOLUTION

CH-53K[®] is a trademark of the U.S. Navy



THE KING OF HEAVY LIFT

Unparalleled Performance

With a 36,000 lb (16,300 kg) external lift capability and a cabin 12 inches (30 cm) wider than legacy aircraft, the CH-53K[®] heavy lift helicopter combines power and versatility like nothing else that flies. It is at home in searing desert heat, arctic cold and everything in between.

Flying a range of missions - carrying cargo or vehicles, transporting troops or airlifting the wounded - the CH-53K is designed to operate on land or at sea. In high altitude/hot temperature environments, the CH-53K can carry twice the payload of its predecessors, allowing missions to be performed faster, safer and more efficiently than ever before.



THE VALUE OF ALL NEW

Smarter. Safer. More Efficient.



CH-53K® KING STALLION™

With its all new integrated modern design, the CH-53K is an intelligent aircraft developed to 21st century standards for improved safety, reliability and maintainability, offering:

- Enhanced Performance and Mission Capability
- Improved Survivability Features
- Predictive Maintenance Capability
- Commercial Level Availability Rates
- Lower Life Cycle Costs
- Significant Growth Potential



SPEED IS MISSION CRITICAL

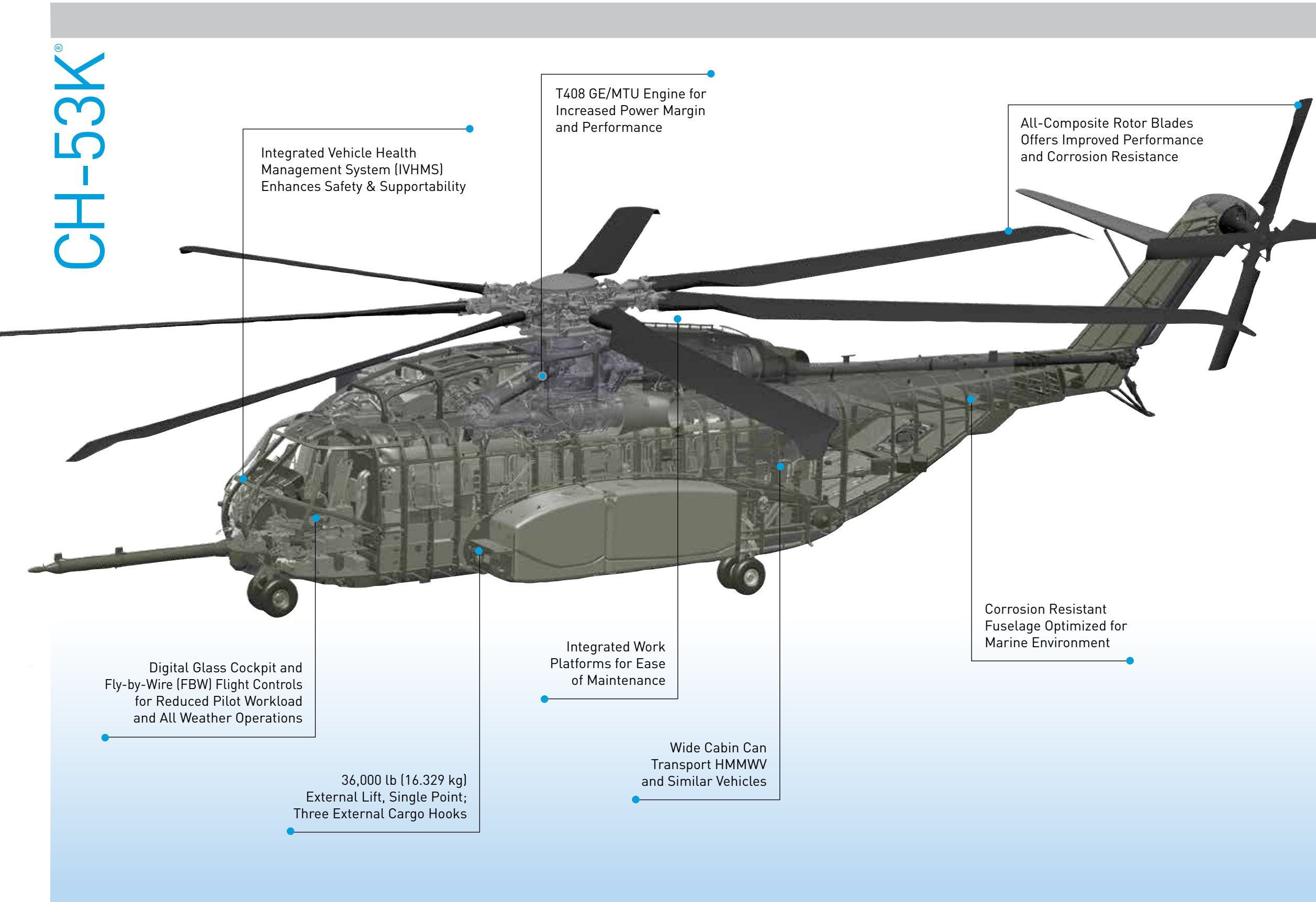
With its unrivaled speed, lift capacity and maneuverability, the CH-53K[®] can complete the most demanding mission requirements in less time with fewer sorties than other helicopters in its class. At 170 kts (315 km/hr) cruise speed, the CH-53K has the ability to get in and out of critical situations quickly, reducing exposure of its passengers & crew in hostile environments.



UNMATCHED BENEFITS

For Missions Today and Tomorrow

CH-53K[®]



Integrated Vehicle Health Management System (IVHMS) Enhances Safety & Supportability

T408 GE/MTU Engine for Increased Power Margin and Performance

All-Composite Rotor Blades Offers Improved Performance and Corrosion Resistance

Digital Glass Cockpit and Fly-by-Wire (FBW) Flight Controls for Reduced Pilot Workload and All Weather Operations

36,000 lb (16,329 kg) External Lift, Single Point; Three External Cargo Hooks

Integrated Work Platforms for Ease of Maintenance

Wide Cabin Can Transport HMMWV and Similar Vehicles

Corrosion Resistant Fuselage Optimized for Marine Environment

KEY ADVANTAGES



IMPROVED PAYLOAD EFFICIENCY
12% Greater Cabin Volume



INTEROPERABILITY
Meets NATO FHTH Requirements



FUEL EFFICIENT ENGINES
18% Improvement Over Legacy



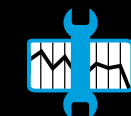
MARITIME COMPATIBLE
Built for Shipboard Operations



HOT TEMP/HIGH ALTITUDE
Superior Performance



MEAN TIME TO REPAIR
35% Improvement Over Legacy



CONDITION BASED MAINTENANCE
Lower Operating Costs



DEGRADED VISUAL ENVIRONMENT
Inherent DVE Capability



AUTONOMY
Provisioned for Future Upgrade

ONE AIRCRAFT, MANY MISSIONS

Transport More Material Than Ever Before

Flexible configurations offer rapid changeover for maximum mission effectiveness.

TROOP TRANSPORT

- 32 Crashworthy Seats
- Rapid Seat Installation/Removal
- Entry through Ramp or Side Door
- Integrated Mobile Aircrew Restraint System (IMARS)



CARGO TRANSPORT

- 463L Cargo Pallet Fast Locking System
- Invertible Cargo Rollers Stow in Place
- Rear Ramp for Rapid Loading/Unloading
- 103 inch (262 cm) wide Cabin Ramp



MIXED TRANSPORT (TROOP/CARGO)

- Forward Mounted Cargo Winch
- Folding Seats for Rapid Stowage
- All NATO standard pallets (Full 463L, Half 463L, Standard Wood, etc.) without any reconfiguration

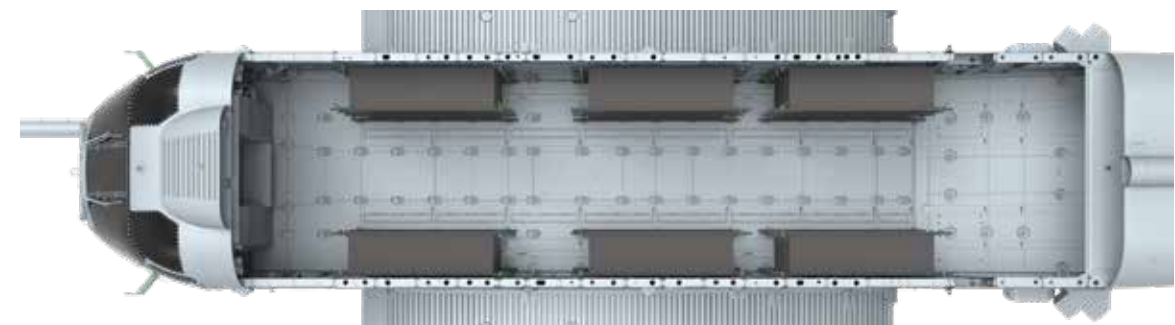
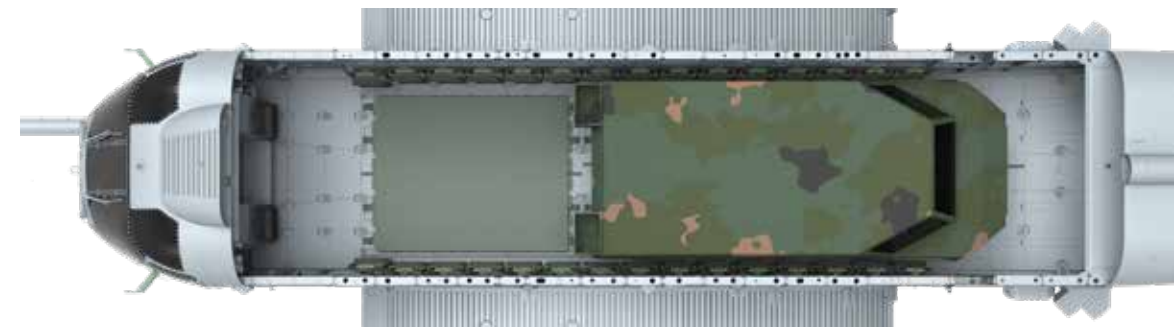
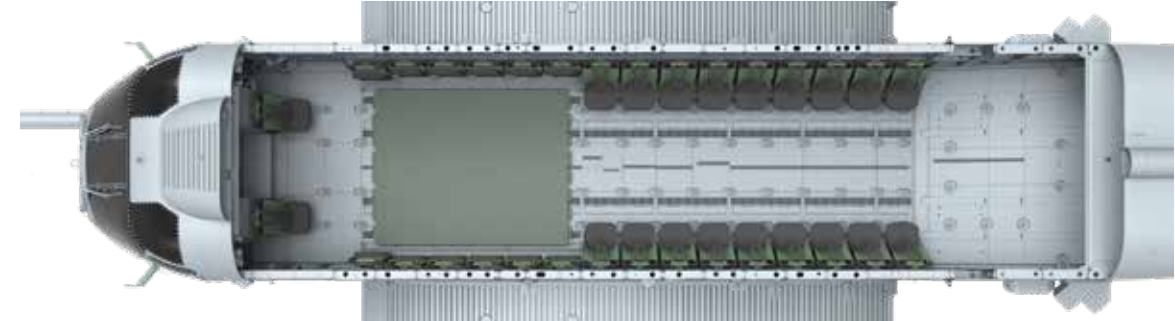
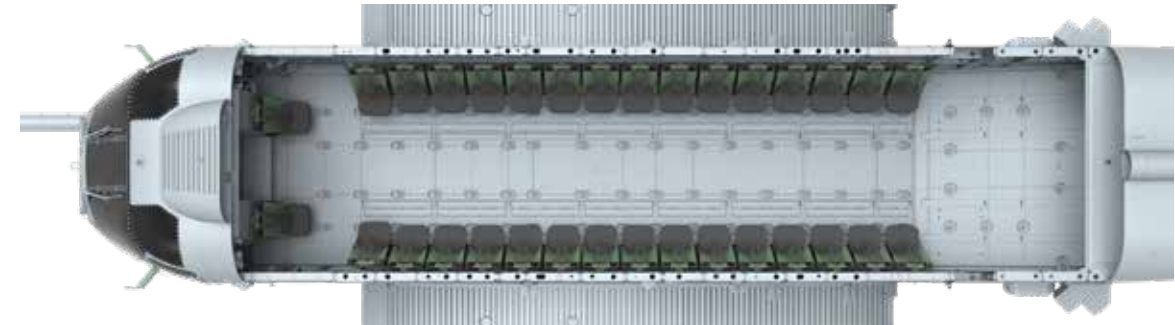


MEDICAL EVACUATION

- Quad Stacked, Standard Litter
- 24 Patients
- Easy Litter Installation/ Removal for Patient Loading



Interior Cabin Mission Configurations



LAUNCH INTO ANY ENVIRONMENT

All-Weather, Day/Night, Long-Range, Heavy Lift Operations



"The aircraft has performed for 21 minutes in the worst brownout conditions with zero degradation of the engines." – Lt. Gen. Wise



- C-17/C-5 Air Transportable
- Rapid Disassembly/Reassembly
- Simplified Loading/Unloading Process



- Triple Redundant Fly-By-Wire Flight Control System
- Interoperable/Net-Ready Communication Systems
- Improved Reliability/Maintainability



- Enhanced Force Protection
- Weapons Equipment Provisions/ Defensive Armament Systems
- Integrated Mobile Aircrew Restraint System



- Enhanced Survivability
- Armored Cockpit and Cabin
- Defensive Counter Measure System



- Day/Night Air-to-Air Refueling
- Self-Deploying Capability
- Rapid Ground Refueling Capable



- Fully Shipboard Compatible
- Auto Blade Fold ← 2 Minutes
- Same Footprint as Legacy Aircraft

DESIGNED WITH THE FUTURE IN MIND

The CH-53K® is poised for significant capability growth for years to come. Its avionics and flight control systems are designed to accommodate future software upgrades, and its internal payload capability may be increased substantially in the future with relatively simple modifications. The CH-53K integrates the latest rotor-wing technologies into a heavy-lift helicopter for today, and tomorrow.



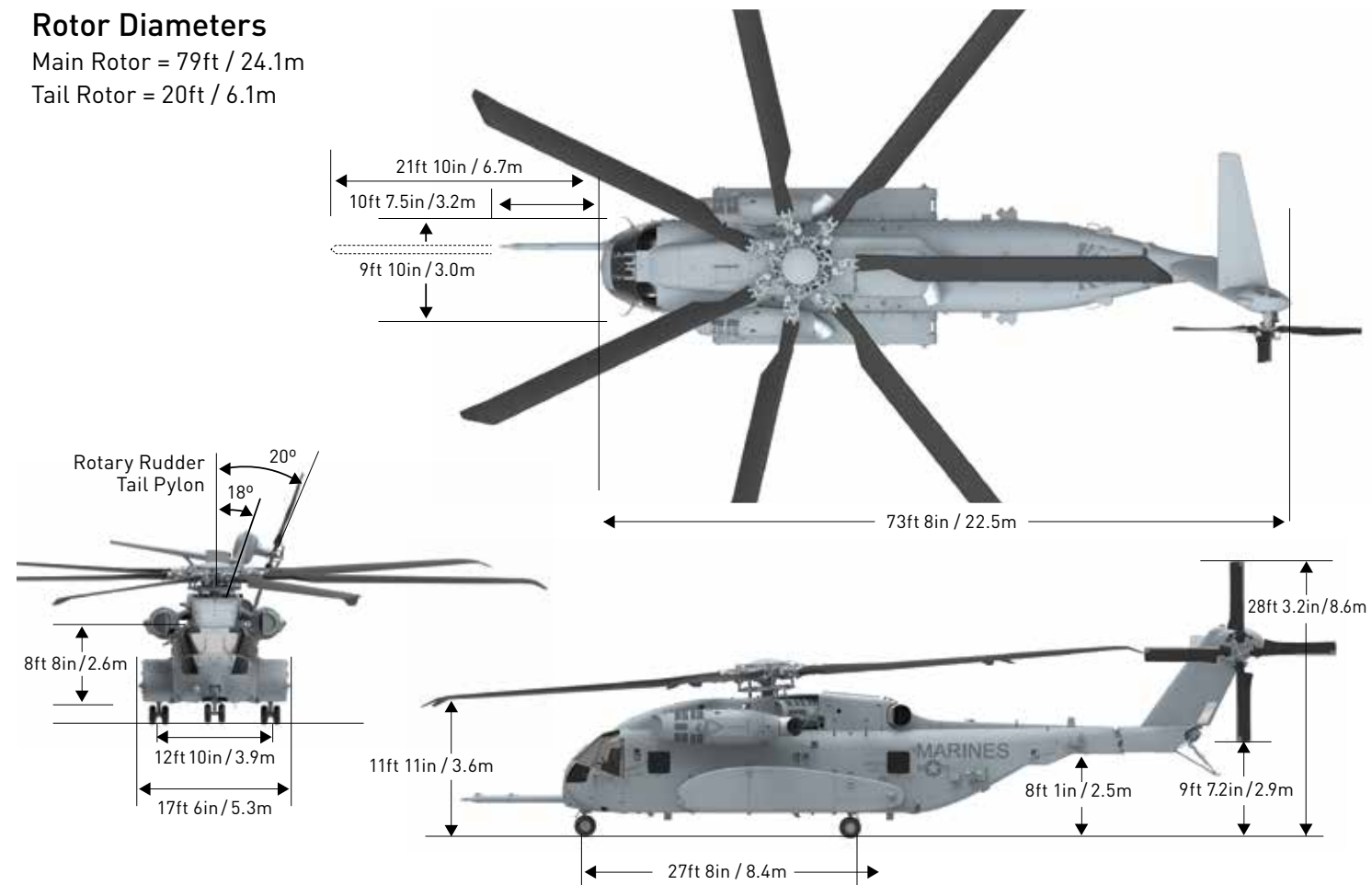


CH-53K[®] SPECIFICATIONS

| | | |
|--|--|---|
| Empty Weight | 43,878 lb | 19,000 kg |
| Maximum Design Gross Weight (MDGW) | 88,000 lb | 39,900 kg |
| Maximum Gross Weight with Internal Load | 74,000 lb | 33,600 kg |
| Velocity @ Maximum Continuous Power (Sea Level Standard) @ 74,000 lb | 170 kts | 315 km/hr |
| Hover Out of Ground Effect Gross Weight (Sea Level Standard) | 88,000 lb | 39,900 kg |
| Service Ceiling @ 74,000 lb (International Standard Atmosphere) | 16,200 ft | 4.94 m |
| Service Ceiling @ 74,000 lb (International Standard Atmosphere + 24°C) | 13,250 ft | 4.04 m |
| External Lift Mission Payload, @ 110 nm (204 km) Radius of Action | 27,000 lb | 12,200 kg |
| External Load Hook Rating - Center (Single Point) | 36,000 lb | 16,300 kg |
| External Load Hook Rating - Fwd/Aft | 25,200 lb | 11,400 kg |
| Internal Cargo System: | | |
| Floor Loading | 300 lb/ft ² | 1.470 kg/m ² |
| Standard USMC 40" x 48" Wooden Pallets | 2,500 (x qty 6) lb | 1,100 (x qty 6) kg |
| Full 463L Pallets | 10,000 (x qty 2) lb | 4,500 (x qty 2) kg |
| Half 463L Pallets | 5,000 (x qty 5) lb | 2,300 (x qty 5) kg |
| Tactical Bulk Fuel Delivery System | 3 x 800 gallon tanks | 3 x 3030 liter tanks |
| Aircraft Length (blades and tail unfolded) | 99 ft | 30.2 m |
| Aircraft Width | 17.5 ft | 5.3 m |
| Aircraft Height (blades and tail unfolded) | 28.3 ft | 8.6 m |
| Cabin Length | 30 ft | 9.1 m |
| Cabin Width | 8.6 ft | 2.6 m |
| Cabin Height | 6.4 ft | 2.0 m |
| # Seats | 34 Crashworthy Seats (2 Pilots, 2 Crew Chiefs, 30 Troops) | |
| # Litters | 24 | |
| Internal Fuel Capacity | 2,225 gallons (@ 6.8lb/gallon = 15,130 lb) 2 cells per sponson | 8,423 liters (@0.82 kg/liter = 6,863 kg) |
| Internal Aux Fuel Capacity | 2,400 gallons (16,320 lb) 3 x 800 gallon tanks | 9,085 liters (7,450 kg) 3 x 3,028 liter tanks |

Rotor Diameters

Main Rotor = 79ft / 24.1m
Tail Rotor = 20ft / 6.1m



CH-53K® SUSTAINMENT SOLUTIONS

Smart Maintenance Leads to Greater Availability and Lower Operating Costs

The CH-53K Program leverages digital thread technologies to achieve sustainment savings as well as increased performance and readiness.

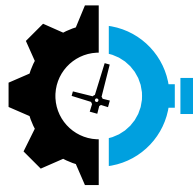
INTEGRATED VEHICLE HEALTH MANAGEMENT SYSTEM (IVHMS)



- Automated system monitors and manages performance of avionics systems, critical dynamic components and engine performance
- Designed to integrate with the customer's enterprise data systems to allow for seamless, centralized status reporting and material management
- Enables shift to condition-based maintenance



MAINTENANCE MADE EASIER



The CH-53K was designed from the beginning with the future maintainer in mind. Using state of the art digital tools, maintenance-friendly designs were incorporated into the final aircraft configuration offering:

- Integrated work platforms, with improved access to spools & engines
- Fewer total parts
- Repair capability with common tools enabling maintenance tasks to be performed faster and safer



SMART MAINTENANCE ALLOWS FOR SMARTER LOGISTICS



- Prepositioned parts based on predictive maintenance
- Maintenance computer makes work order for advanced lead times
- Automated troubleshooting leads to reduced maintenance time



TRAINING FIT FOR A KING

Flying and maintaining the versatile CH-53K® helicopter requires state-of-the-art training. Lockheed Martin's customizable advanced training solutions replicate the functionality, flight characteristics, mission profiles and unmatched capabilities of the CH-53K. This ensures aircrew and maintainers receive the proper training to fulfill critical missions for decades to come.



ADVANCED TRAINING SOLUTIONS

Operational Success Starts with Training

PILOT TRAINING

- Initial, Transition, Recurring
- Mid-Fidelity Mission Rehearsal/Procedural Devices
- High-Fidelity Flight Simulators
- Containerized Flight Training Devices



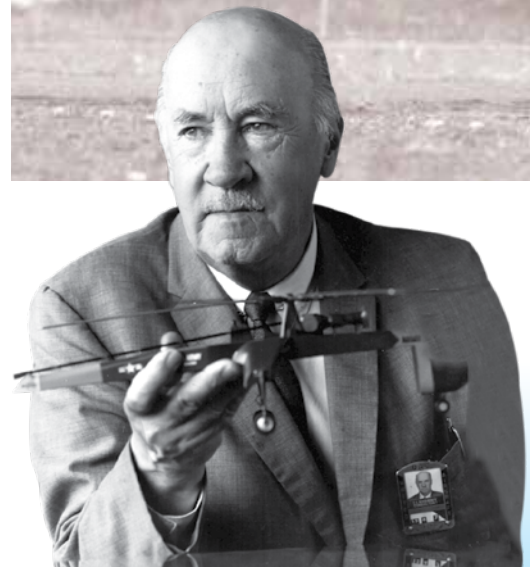
MAINTENANCE TRAINING

- Initial, Transition, Recurring
- Airframe & Powerplant
- Avionics, Flight Controls & Electrical
- Electronic Classroom
- Cargo Load Trainers
- Composite Maintenance Trainers



OVER 100 YEARS OF INNOVATION

Proud of Our Legacy...Excited About Our Future



“I always believed that the helicopter would be an outstanding vehicle for the greatest variety of lifesaving missions.”

Igor I. Sikorsky

Legendary Aviation Pioneer
Founder of Sikorsky



CH-53K® King Stallion



CH-53KIAF

artist rendition



CH-53G Legacy





Lockheed Martin Your Mission is Ours™.



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