SIKORSKY CH-53K® THE ONLY HEAVY LIFT SOLUTION

CH-53K® and King Stallion™ are trademarks of the Department of the 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
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

36,000 lb (16.329 kg) External Lift, Single Point; Three External Cargo Hooks

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

Integrated Work Platforms for Ease of Maintenance

Wide Cabin Can Transport HMMWV and Similar Vehicles
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

All-Composite Rotor Blades
Offers Improved Performance and Corrosion Resistance

Corrosion Resistant Fuselage
Optimized for Marine Environment
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

*Additional seating and cabin configuration mix options available
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.
Rotor Diameters
Main Rotor = 79ft / 24.1m
Tail Rotor = 20ft / 6.1m
## CH-53K® SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empty Weight</td>
<td>43,878 lb (19,000 kg)</td>
</tr>
<tr>
<td>Maximum Design Gross Weight (MDGW)</td>
<td>88,000 lb (39,900 kg)</td>
</tr>
<tr>
<td>Maximum Gross Weight with Internal Load</td>
<td>74,000 lb (33,600 kg)</td>
</tr>
<tr>
<td>Velocity @ Maximum Continuous Power (Sea Level Standard) @ 74,000 lb</td>
<td>170 kts (315 km/hr)</td>
</tr>
<tr>
<td>Hover Out of Ground Effect Gross Weight (Sea Level Standard)</td>
<td>88,000 lb (39,900 kg)</td>
</tr>
<tr>
<td>Service Ceiling @ 74,000 lb (International Standard Atmosphere)</td>
<td>16,200 ft (4.94 m)</td>
</tr>
<tr>
<td>Service Ceiling @ 74,000 lb (International Standard Atmosphere + 24°C)</td>
<td>13,250 ft (4.04 m)</td>
</tr>
<tr>
<td>External Lift Mission Payload, @ 110 nm (204 km) Radius of Action</td>
<td>27,000 lb (12.200 kg)</td>
</tr>
<tr>
<td>External Load Hook Rating - Center (Single Point)</td>
<td>36,000 lb (16.300 kg)</td>
</tr>
<tr>
<td>External Load Hook Rating - Fwd/Aft</td>
<td>25,200 lb (11.400 kg)</td>
</tr>
<tr>
<td>Internal Cargo System:</td>
<td></td>
</tr>
<tr>
<td>Floor Loading</td>
<td>300 lb/ft² (1.470 kg/m²)</td>
</tr>
<tr>
<td>Standard USMC 40”x 48” Wooden Pallets</td>
<td>2,500 (x qty 6) lb (1.100 kg)</td>
</tr>
<tr>
<td>Full 463L Pallets</td>
<td>10,000 (x qty 2) lb (4.500 kg)</td>
</tr>
<tr>
<td>Half 463L Pallets</td>
<td>5,000 (x qty 5) lb (2.300 kg)</td>
</tr>
<tr>
<td>Tactical Bulk Fuel Delivery System</td>
<td>3 x 800 gallon tanks (3 x 3030 liter tanks)</td>
</tr>
<tr>
<td>Aircraft Length (blades and tail unfolded)</td>
<td>99 ft (30.2 m)</td>
</tr>
<tr>
<td>Aircraft Width</td>
<td>17.5 ft (5.3 m)</td>
</tr>
<tr>
<td>Aircraft Height (blades and tail unfolded)</td>
<td>28.3 ft (8.6 m)</td>
</tr>
<tr>
<td>Cabin Length</td>
<td>30 ft (9.1 m)</td>
</tr>
<tr>
<td>Cabin Width</td>
<td>8.6 ft (2.6 m)</td>
</tr>
<tr>
<td>Cabin Height</td>
<td>6.4 ft (2.0 m)</td>
</tr>
<tr>
<td># Seats</td>
<td>34 Crashworthy Seats (2 Pilots, 2 Crew Chiefs, 30 Troops)</td>
</tr>
<tr>
<td># Litters</td>
<td>24</td>
</tr>
<tr>
<td>Internal Fuel Capacity</td>
<td>2,225 gallons (8.423 liters)</td>
</tr>
<tr>
<td></td>
<td>(@ 6.8lb/gallon = 15,130 lb)</td>
</tr>
<tr>
<td></td>
<td>2 cells per sponson</td>
</tr>
<tr>
<td>Internal Aux Fuel Capacity</td>
<td>2,400 gallons (9.085 liters)</td>
</tr>
<tr>
<td></td>
<td>(16,320 lb)</td>
</tr>
<tr>
<td></td>
<td>3 x 800 gallon tanks</td>
</tr>
<tr>
<td></td>
<td>3 x 3.028 liter tanks</td>
</tr>
</tbody>
</table>
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 sponsons & engines
- Fewer total parts
- Repair capability with common tools enabling maintenance tasks to be performed faster and safer
- Logistic Support Representatives

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

Customer Sales & Support 24/7 • 1-800-Winged-S (1-800-946-4337) • International 1-203-386-3029
INTEGRATED VEHICLE HEALTH MANAGEMENT SYSTEM (IVHMS)

SMART MAINTENANCE ALLOWS FOR SMARTER LOGISTICS

Customer Sales & Support 24/7

• 1-800-Winged-S (1-800-946-4337)
• International 1-203-386-3029

Bottom two photos by Cpl. Ethan Pumphret - 2nd Marine Aircraft Wing
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
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
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