SIKORSKY

CH-53K

THE ONLY HEAVY LIFT SOLUTION
THE KING OF HEAVY LIFT
Unparalleled Performance

With a 34,000 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
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
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 and crew in hostile environments.
UNMATCHED BENEFITS
For Missions Today and Tomorrow

CH-53K

**KEY ADVANTAGES**

- **FUEL EFFICIENT ENGINES**
  18% Improvement Over Legacy

- **MEAN TIME TO REPAIR**
  35% Improvement Over Legacy

- **MARITIME COMPATIBLE**
  Built for Shipboard Operations

- **CONDITION BASED MAINTENANCE**
  Lower Operating Costs

- **AUTONOMY**
  Provisioned for Future Upgrade

- **IMPROVED PAYLOAD EFFICIENCY**
  12% Greater Cabin Volume

- **TRANSPORT CAPABILITIES**
  Meets NATO FHTH Requirements

- **HOT TEMP/HIGH ALTITUDE**
  Superior Performance

- **DEGRADED VISUAL ENVIRONMENT**
  Inherent DVE Capability

- **T408 GE/MTU Engine**
  for Increased Power Margin and Performance

- **All-Composite Rotor Blades**
  Offers Improved Performance and Corrosion Resistance

- **Corrosion Resistant Fuselage**
  Optimized for Marine Environment

- **Wide Cabin Can**
  Transport HMMWV and Similar Vehicles

- **Integrated Work Platforms**
  for Ease of Maintenance

- **Corrosion Resistant**
  Fuselage Optimized for Marine Environment

- **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 Vehicle Health Management System (IVHMS)**
  Enhances Safety and Supportability
ONE AIRCRAFT, MANY MISSIONS

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 443L, Half 443L, Standard Wood, etc.) without any reconfiguration

MEDICAL EVACUATION
• Quad Stacked, Standard Litter
• 24 Patients
• Easy Litter Installation/Removal for Patient Loading

Flexible configurations offer rapid changeover for maximum mission effectiveness.

Interior Cabin Mission Configurations

*Additional seating and cabin configuration mix options available
LAUNCH INTO ANY ENVIRONMENT

- Three Individual Cargo Hooks
- Triple Redundant Fly-By-Wire (FBW) Flight Controls
- Weapons Equipment Provisions
- Enhanced Survivability
- Fully Shipboard Compatible
- Aerial Refueling
- Automated Blade Fold < 2 Minutes
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) 158 ktas 293 km/hr
Hover Out of Ground Effect Gross Weight (Sea Level Standard) 88,000 lb 39,900 kg
Service Ceiling (International Standard Atmosphere) 16,000 ft 4,880 m
Service Ceiling (International Standard Atmosphere + 24°C) 13,200 ft 4,020 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/ft² 1.470 kg/m²
- 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 6.5 ft 2.0 m
# Seats 34 Crashworthy Seats (2 Pilots, 2 Crew Chiefs, 30 Troops)
# Litters 24

Internal Fuel Capacity 2,286 gallons (8.653 liters)
- (8.8 lb/gallon = 15,545 lb) 2 cells per sponson
- (80.82 kg/liter = 7.095 kg)
Internal Aux Fuel Capacity 2,400 gallons (9.085 liters)
- (16,320 lb) 7 (450 kg)
- 3 x 800 gallon tanks 3 x 3,028 liter tanks

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

Rotor Diameters
- Main Rotor = 79 ft / 24.1 m
- Tail Rotor = 20 ft / 6.1 m
CH-53K SUSTAINMENT SOLUTIONS
Smart Maintenance Leads to Greater Availability and Lower Operating Costs

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 and 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 trouble shooting leads to reduced maintenance time

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
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

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

OVER 100 YEARS OF INNOVATION
Proud of Our Legacy...Excited About Our Future