







# **CH-53K**

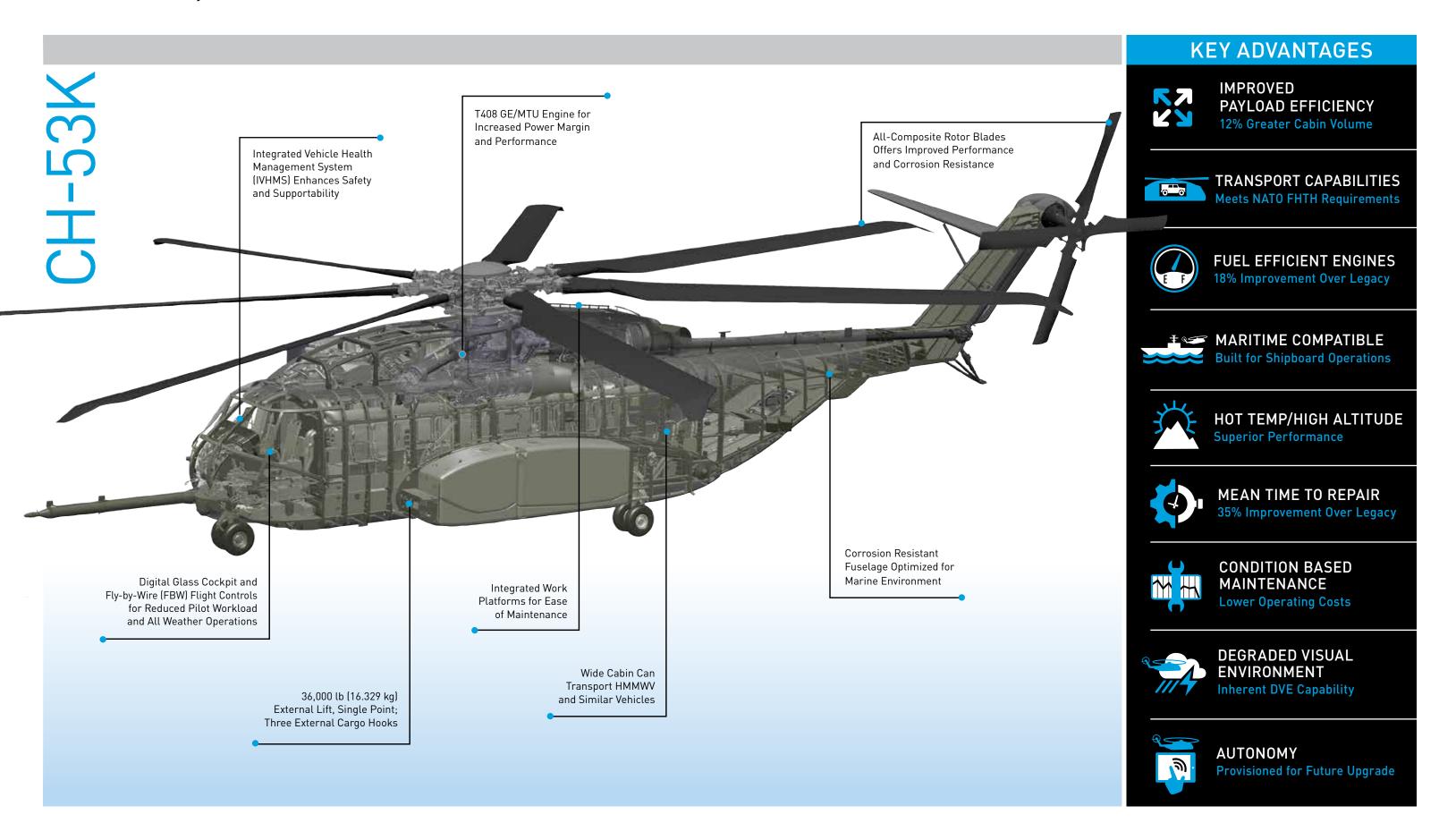
With its all new, integrated modern design, the CH-53K is an intelligent aircraft developed to 21st century standards for improved safety, reliability and maintainability, offering:

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



#### **UNMATCHED BENEFITS**

For Missions Today and Tomorrow



## ONE AIRCRAFT, MANY MISSIONS

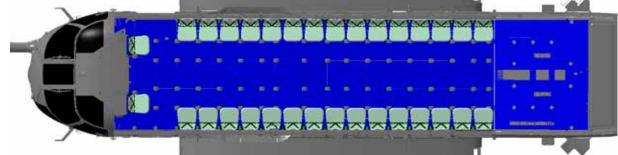
Transport More Material More Rapidly

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)



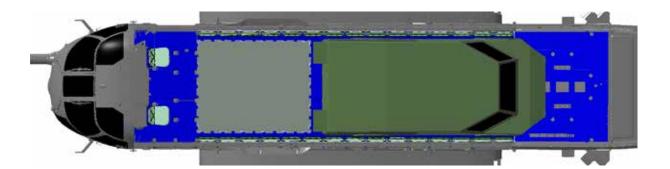


Interior Cabin Mission Configurations

#### **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

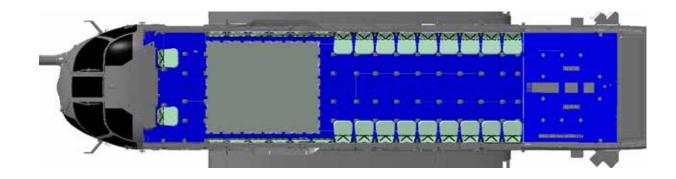




#### MIXED TRANSPORT (TROOP/CARGO)

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

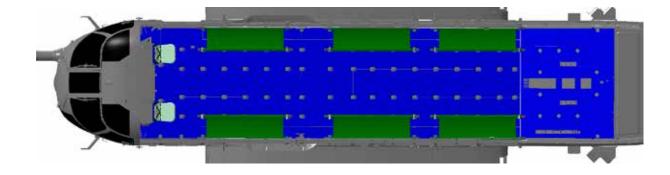




#### MEDICAL EVACUATION

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





<sup>\*</sup>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

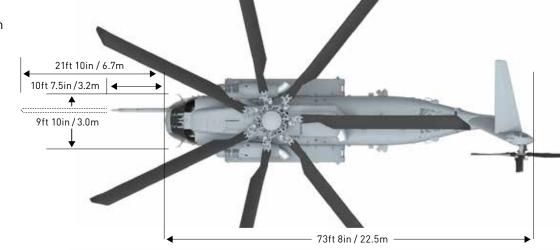
## DESIGNED WITH THE FUTURE IN MIND

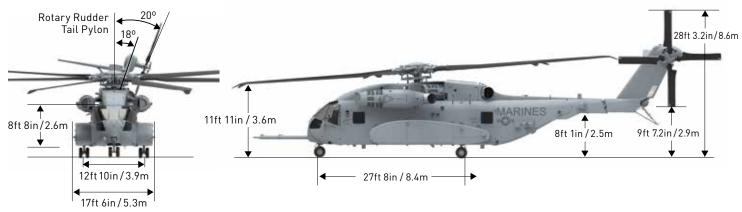




#### **Rotor Diameters**

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





# **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 Standard USMC 40"x 48" Wooden Pallets Full 463L Pallets Half 463L Pallets Tactical Bulk Fuel Delivery System	300 lb/ft <sup>2</sup> 2,500 (x qty 6) lb 10,000 (x qty 2) lb 5,000 (x qty 5) lb 3 x 800 gallon tanks	1.470 kg/m <sup>2</sup> 1.100 (x qty 6) kg 4.500 (x qty 2) kg 2.300 (x qty 5) kg 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 (@ 6.8lb/gallon = 15,545 lb) 2 cells per sponson	8.653 liters (@0.82 kg/liter = 7.095 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

#### **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



### 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



#### MAINTENANCE TRAINING

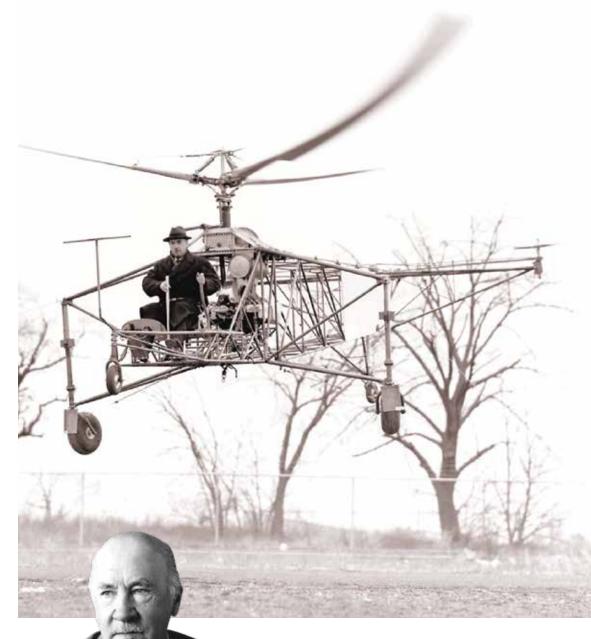
- Initial, Transition, Recurring
- Airframe & Powerplant
- Avionics, Flight Controls & Electrical
- Electronic Classroom
- Cargo Load Trainers
- Composite Maintenance Trainers





## **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



# Lockheed Martin Your Mission is Ours™.

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