

## **EMALS & AAG**

## AIRCRAFT LAUNCH AND RECOVERY SYSTEMS

The Electromagnetic Aircraft Launch System (EMALS) and Advanced Arresting Gear (AAG) are providing cutting-edge capabilities to launch and recover carrier-capable aircraft. Deployed on the world's most advanced aircraft carriers, EMALS and AAG deliver proven efficiencies and performance to support decades of naval aviation operational readiness.

EMALS and AAG's flexible architecture accommodates a variety of U.S. and allied carrier platforms, increasing the potential for greater global interoperability between next generation aircraft carrier designs.

Launch and Recover Current Air Wing

Ready for Future Air Wing

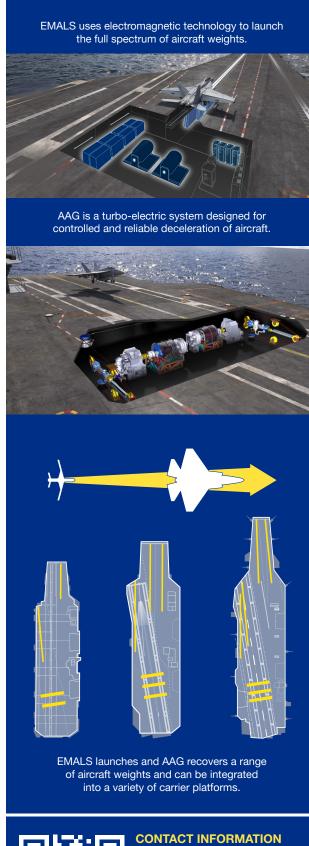
Proven Operational Performance

**Greater Responsiveness** 

Improved Efficiency

Reduced Footprint

Lower Life Cycle Cost





## **EMALS & AAG**

## ONBOARD, ON WATCH, MISSION READY.

- Proven Performance in Operational Conditions
  - » All weather, day, night operations
  - » Minimal interval between catapult launches
- Increased Capability
  - » Range of launch weights and higher speeds
- Lower Life Cycle Cost
  - » 25% fewer personnel, less maintenance
- · High Availability, Reliability and Safety
  - » 100% safety record
  - » Multiple design redundancies ensure safe launch and recovery
- Compatible with Modern Electric Ship Designs
  - » Decreased system weight and footprint
  - » Potential energy source for equipment, weapons
- Consistent Performance
  - » 100% precise EMALS end speeds
  - » 100% precise AAG stopping distances
  - » Smooth acceleration and deceleration reduces fatigue on aircraft and impact on aviators
- System Readiness and Responsiveness
  - » Quick start-up and operational in minutes
- Improved Energy Efficiency
  - » Order of magnitude efficiency increase from energy storage to launch
- Reduced Requirement for Ship Auxiliaries
  - » No steam out of engineering spaces
  - » Reduces water consumption by ~37,000 gal/day of operations
- Ease of Operation and Shipboard Maintenance
  - » Computer controlled for better performance
  - » Sensors monitor system health to assist maintenance
  - » Simple push button controls
  - » Eliminates steam maintenance
  - » Significantly reduces hydraulic maintenance
- Improved Shipboard Quality of Life
  - » Quieter operations compared to legacy systems