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KEY CRITERIA FOR FREE-DECK NAVAL AIRCRAFT HANDLING SYSTEMS

Free-deck naval aircraft handling systems are an agile, flexible, and affordable alternative to integrated systems when the aircraft and sea conditions allow their use.



THE VERY BEST FREE-DECK SYSTEMS INCLUDE THESE 5 FEATURES.

1

FAST AND PRECISE CONTROL

Agile handling capabilities ensure aircraft can be quickly and precisely maneuvered into position in the hangar or on the deck for takeoff.

LOOK FOR SYSTEMS THAT:

- Enable capture times of less than 12 seconds
- Support variable traverse speeds up to 5 km/h
- Provide on-the-spot turning capabilities



2

INTUITIVE, SINGLE-PERSON OPERATION

Easy traversing by a single on-deck operator simplifies aircraft management and increases safety.

LOOK FOR SYSTEMS THAT:

- Let the operator walk beside the aircraft as it is being moved
- Enable full visibility of the entire aircraft and the surrounding area during maneuvering
- Are controlled using one joystick for drive speed and direction and another for steering



3

COMPACT, LOW-PROFILE, AND RUGGED DESIGN

The right physical design features increase ease-of-use, flexibility, and durability.

LOOK FOR SYSTEMS THAT:

- Interface directly with the aircraft with no need for tow bars or airframe modifications
- Fit well beneath the fuselage on a wide variety of aircraft
- Are built with high-grade stainless steel and include minimal welding detail



4

PROVEN OPERATION IN THE FIELD

Always choose a free-deck system that is proven to perform in scenarios that match your requirements.

LOOK FOR SYSTEMS THAT:

- Have maneuvered your models of helicopters, fixed-wing aircraft, and unmanned aerial vehicles (UAVs)
- Operate safely on your ship classes and in your typical sea states
- Can perform the required aircraft maneuvering and towing tasks on the ship deck and on the ground



5

THE FLEXIBILITY TO PERFORM OTHER MOVING TASKS

The most flexible free-deck systems can also be used for other tasks on the ship and on the ground.

LOOK FOR SYSTEMS THAT:

- Accommodate a tow bar for moving trailers and trolleys
- Can be stacked and used in a stacked configuration
- Can be customized for applications such as handling skid helicopters and scissor lift work platforms



GET PURPOSE-BUILT, FREE-DECK NAVAL AIRCRAFT HANDLING

The robust, flexible, and affordable Multi-Aircraft Nose Tail Interface System (MANTIS) aircraft tug from Curtiss-Wright's EMS Division meets all of the key criteria for free-deck naval aircraft handling systems.

The MANTIS attaches directly to the aircraft, with no need for tow bars or airframe modifications. And it is intuitively controlled by a single operator.

LEARN MORE

Learn more about the purpose-built MANTIS free-deck naval aircraft handling system from Curtiss-Wright at www.cw-ems.com/indal.