

EQUIPMENTALK: Aluminum Adds To Goliath's Efficiency



CARRIER construction near completion

The USS *Enterprise* is the world's first nuclear-powered aircraft carrier and the largest ship in the world. It will be launched at the yard of its builder, Newport News Shipbuilding and Dry Dock Company, on September 28.

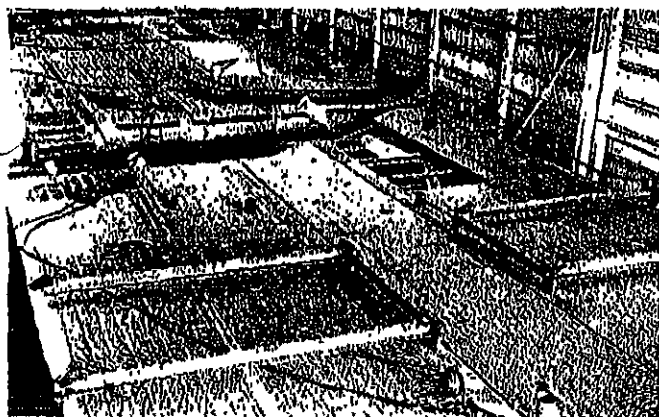
The 1,100-ft giant will have four aluminum plane-carrying elevators spotted along its 252-ft-wide flight deck. The Aluminum Company of America is supplying the material for the elevators which will handle the carrier's advanced jet planes.

The elevators, three to starboard and one to port, are of all-welded construction, in high-strength Alcoa alloy 5456. Each is 52 ft wide and 85 ft long, and weighs 105 tons. This is said to be a 30-ton saving over high tensile steel. Lighter, less bulky machinery than normally could be used will supply operating power to raise and lower the aluminum structures.

Each elevator was built around three load-carrying structural systems.

All I-beams used were fabricated of aluminum plate that ranged up to 2 in. in thickness, using a semi-automatic welding set-up. The top surface of each elevator was fabricated by welding short lengths of T-shaped extrusions, spaced 1½ in. apart, crosswise between 30-ft-long I-beams, 12 in. deep. This system rests on a secondary structure built of 16-in. deep I-beams. The entire weight of each elevator is carried by huge 10-ft-deep beams, that form the main supporting structural system.

The carrier's eight nuclear reactors are expected to operate five years on the first charge of fuel. With the danger of fuel shortage removed, the 86,000-ton mobile air base can run at sustained speeds of more than 30 knots, for practically unlimited periods.



FOUR ALUMINUM ELEVATORS (two of which are shown above) will be spotted along 252-ft-wide flight deck of USS *Enterprise*



LARGE BUT LIGHTWEIGHT, aluminum elevators weigh 30 tons less than steel equivalent. Made of Alcoa alloy 5456, elevators weigh 105 tons apiece

Report Exhibit Space 75-Percent Sold At 1960 Marine Suppliers Show

The National Associated Marine Suppliers, Inc., sponsor of the Annual Marine Supplies & Equipment Show to be held this year at the Roosevelt Hotel in New York City on November 16, 17 and 18, have announced that 75 percent of all available space has been booked for the event.

The show began last year with a modest 87 booths. The total space available has been boosted this year to 102 booths, showing how well the exposition was received and the desire generated to make the Supplies & Equipment Show a continuing event.

Exhibitors so far booked include:

The Steamship Historical Society of America
Decca Radar, Inc.

Eastern Cold Storage Insulation Co., Inc.
Anschütz & Co., Germany
Siemens & Schuckertwerke, Germany
Siemens & Halske, Germany
The Arneson Corp.
The Arneson Electric Co., Inc.
Corrosion Dynamics, Inc.
Port Electric Supply Corp.
Oceanic Electric Manufacturing Co., Inc.
American Metal Bearing Co., of California
Boston & Lockport Black Co.
Pittsburgh Coke & Chemical Co.
A/B Svenska Flakfabriken, Sweden
ARSCO Corporation
Baylor Distributors, Inc.
Magna-Bond, Inc.
Corrosion Reaction Consultants, Inc.
Rust-Olaum Corporation
John N. Thorp Co.
Liquam-Vitae Products Corp.

Wire Rope Corporation of America
El-Nor Medical Supply
Maritac Corp.
Evis, N.Y., Inc.
Engelhard Industries, Inc.
Anemostat Corp. of America
Waterloo Register Co., Inc.
Sudbury Laboratories/Marine Engine Specialties Corp.
Socany Point Products Co.
Greenwich Mills Company
American Hardware Corp. — Rutland, Vt.
Eastburn Marine Chemical
The Federal Paint Co., Inc.
Davco-Raynolds Paint Co.
Edda Shipping Co., Inc.
Columbian Rope Co.
Koppers Co. — Tar Products Div.
Aerquip Corp.
Schling Lock Co.

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