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Martin Marietta Materials, Inc. is an American company and a supplier of aggregates and heavy building materials, with operations spanning 26 states, Canada and the Caribbean. In particular, Martin Marietta Materials supplies resources for the construction of roads, sidewalks and foundations.

Martin Marietta"s Magnesia Specialties business provides a full range of magnesium oxide, magnesium hydroxide and dolomitic lime products.[citation needed]

The Martin Marietta Spacemaster was a proposed configuration for what became the Space Shuttle, which featured an X-24-derived orbiter, and an unusual "catamaran style" booster stage. During launch and ascent, the orbiter would be located in a recess in the booster. The booster"s 14 engines would be located in clusters of seven, at the bottom of both halves of the booster. Unlike the final design for the Space Shuttle, the Spacemaster would lack an external tank, and the boosters would be joined, by means of connecting struts which would also serve as the mounting for the orbiter.

The concept was evaluated in 1967, but was rejected. Martin Marietta went on to produce the Space Shuttle external tank (ET) for the final STS Space Shuttle design (by Lockheed Martin after a merger with Lockheed).

The Martin Marietta X-24 is an American experimental aircraft developed from a joint United States Air Force-NASA program named PILOT (1963-1975). It was designed and built to test lifting body concepts, experimenting with the concept of unpowered reentry and landing, later used by the Space Shuttle.[1] Originally built as the X-24A, the aircraft was later rebuilt as the X-24B.

The X-24 was drop launched from a modified B-52 Stratofortress at high altitudes before igniting its rocket engine; after expending its rocket fuel, the pilot would glide the X-24 to an unpowered landing.[2][3]

The X-24 was one of a group of lifting bodies flown by the NASA Flight Research Center (now Armstrong Flight Research Center) in a joint program with the U.S. Air Force at Edwards Air Force Base in California from 1963 to 1975. The lifting bodies were used to demonstrate the ability of pilots to maneuver and safely land wingless vehicles designed to fly back to Earth from space and be landed like an airplane at a predetermined site.

Lifting bodies" aerodynamic lift, essential to flight in the atmosphere, was obtained from their shape. The addition of fins and control surfaces allowed the pilots to stabilize and control the vehicles and regulate their flight paths.

The X-24 (Model SV-5P) was built by Martin Marietta and flown from Edwards AFB, California. The X-24A

was the fourth lifting body design to fly; it followed the NASA M2-F1 in 1964, the Northrop HL-10 in (1966), the Northrop M2-F2 in 1966 and preceded the Northrop M2-F3 (1970).

The X-24A was a fat, short teardrop shape with vertical fins for control. It made its first, unpowered, glide flight on April 17, 1969 with Air Force Maj. Jerauld R. Gentry at the controls. Gentry also piloted its first powered flight on March 19, 1970. The craft was taken to around 45,000 feet (13.7 km) by a modified B-52 and then drop launched, then either glided down or used its rocket engine to ascend to higher altitudes before gliding down. The X-24A was flown 28 times at speeds up to 1,036 mph (1,667 km/h) and altitudes up to 71,400 feet (21.8 km).

The X-24B"s design evolved from a family of potential reentry shapes, each with higher lift-to-drag ratios, proposed by the Air Force Flight Dynamics Laboratory. To reduce the costs of constructing a research vehicle, the Air Force returned the X-24A to the Martin Marietta Corporation (as Martin Aircraft Company became after a merger) for modifications that converted its bulbous shape into one resembling a "flying flatiron"--rounded top, flat bottom, and a double delta planform that ended in a pointed nose.

There were a variety of "X-24C" proposals floated between 1972 and 1978. Perhaps the most notable was a Lockheed Skunk Works design, the L-301, which was to use scramjets to reach a top speed of Mach 8.[4]