



SPACE SHUTTLE ERA

Shuttles Fly Safer with "Glass Cockpits"

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00:00:00,820 --> 00:00:07,500

One of the most significant updates for NASA's fleet of space shuttles was the installation of the Multi-function

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00:00:07,500 --> 00:00:14,050

Display System, or MEDS, in the shuttle's cockpits, making the orbiters safer and easier to fly.

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00:00:14,050 --> 00:00:21,580

The "glass" instruments gave the cockpit a unique appearance, which suggested its well-known name, the "glass

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00:00:21,580 --> 00:00:29,110

The new display system improved the handling of the vehicle using easy-to-see flight information, such as attitude

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00:00:29,110 --> 00:00:36,810

speed -- and many indicators the astronauts need to know during liftoff, landing and for navigation.

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00:00:36,810 --> 00:00:42,980

The electronic system included 11 full-color, flat-panel display screens in the shuttle's cockpit.

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00:00:42,980 --> 00:00:50,770

The screens replaced 32 gauges and electromechanical displays and four cathode-ray tube, or CRT, displays.

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00:00:50,770 --> 00:00:55,650

It's 75 pounds lighter and used less power than the older system.

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00:00:55,650 --> 00:01:02,340

NASA research eventually led to the Federal Aviation Administration certification of electronic flight displays and

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00:01:02,340 --> 00:01:06,550

MEDS became mainstream equipment on all commercial aircraft.

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00:01:06,550 --> 00:01:12,410

What was important on a commercial airliner also was beneficial to the astronauts flying the shuttle.

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00:01:12,410 --> 00:01:19,580

Space shuttle Atlantis was chosen as the first orbiter to receive the glass cockpit during its 1998 modification p

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00:01:19,580 --> 00:01:26,050

and lifted off with its new cockpit display on the STS-101 mission in May of 2000.

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00:01:26,050 --> 00:01:32,260

Shuttle Endeavour was the last spacecraft in the fleet to be outfitted with the electronic display and made its first

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00:01:32,260 --> 00:01:38,520

flight with the improved system in August 2007 on the STS-118 mission.