

MD-12 update

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Flying Toward the 21st Century in Style

The first meeting of the MD-12 Airline Interior Advisory Team was held at the Douglas Aircraft Company facility in Long Beach, California, on July 28-29, with participants from 10 airlines in attendance.

The goal of the interior advisory group is to design a baseline interior that encourages airline aesthetic individuality while maintaining part commonality. Over the next two years the team will focus on specific details of the styling, layout, configuration, and system interfaces. The objective of this first meeting was to obtain concurrence on the interior loft (i.e., general styling) and such configuration features as the 60-inch-wide entry door.

One full day was devoted to reviewing and making decisions on specific styling details, using the 60-foot full scale mockup of the MD-12 interior. The team decided that the 21st century look of three-aisle lofting should be preserved even for two-aisle configurations. However, a reduced ribbing effect along the sidewalls and ceilings was requested as well as modified lighting and broadened window reveals.



The remainder of the meeting was devoted to specific configuration details. In addition to approving the 60-inch-wide entry door and a 40-inch-wide stairwell, the team discussed the location of pilot crew rests, disabled passenger accommodations, and component (galley and lavatory) flexible location zones.

Future meetings will be

held tri-annually, with the next meeting tentatively scheduled for late October-early November. For further information, contact either of the team co-chairs, Deborah Beron-Rawdon at mail code 801-69 or Peg Billson at mail code 801-56, Douglas Aircraft Company, 3855 Lakewood Blvd., Long Beach, California 90846.



MD-12 Wind Tunnel Testing Begins

MD-12 aerodynamic development continues on track with low-speed wind tunnel testing now under way.

The testing is designed to prove that the wing will work as well during landing and takeoff as it does in cruise and that the advanced aerodynamic technology incorporated into the cruise wing is accompanied by an advanced technology high-lift system.

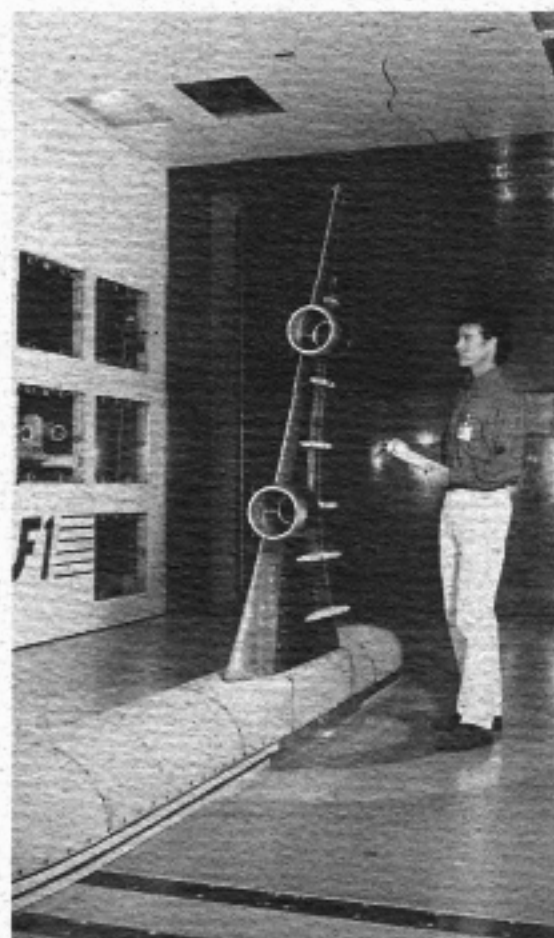
The low-speed model is being tested at the ONERA tunnel in France. It is a 7.5-percent scale semi-span model designed to investigate basic low-speed characteristics, flap and slat optimization, nacelle installation effects, and a variety of other aerodynamic studies.

The 7.5-percent model is an impressive piece of hardware measuring nearly 8 feet in height and more than 14.5 feet in length. The steel billet that became the wing box for the model weighed approximately 5,000 pounds prior to machining.

To ready it for other components including flaps, slats, and pylons, the piece underwent 6 months of around-the-clock, 7-days-a-week machining.

The model has 1,200 pressure taps, 2 miles of tubing, and consists of more than 1,000 parts.

It will be subjected to more than 800 hours of testing over a 5-month period.



MD-12 wing model is undergoing wind tunnel tests in Europe.

New Wing Design Key to MD-12 Success



The goal underlying the concept for the MD-12 is to provide the airlines of the world with an aircraft that will offer the greatest efficiency, longest range, and largest commercial payload available.

Key to this concept is the wing design.

More than 50-percent larger than the MD-11 wing, the wing design for the MD-12

is a blend of ingredients for improved performance that balances technology with improvements in manufacturing, support, and operating costs.

The wing design is intended to support a family concept for high-capacity, long-range passenger, freighter, and combi aircraft.

For a feature to be incorporated into the wing design,

it must undergo an intense examination process to determine how it contributes to the balance of improved efficiency and reduced manufacturing, support, and operating costs.

Working on the design is a multi-disciplined team who draw upon the vast experience McDonnell Douglas has gained through decades of developing and producing high-performance aircraft.

At the team's disposal are the latest tools in design technology, including the Integrated Product Development (IPD) process and an electronic development fixture that is used for detailed form and fit assurance. New automation developments are also being used for data management.