

Christine M. Darden

January 1996 Calendar

If Christine Darden and her colleagues are successful, a commercially viable, American-made supersonic airliner may take off by 2005. "There are several decision points in developing this technology," says Darden. "Can we lower the level of this engine noise? Can we reduce engine emissions of nitrous oxide?"

Even after those hurdles are crossed, there are more waiting. "We have to look at aerodynamics, the flight deck, control systems, and materials," Darden says. Using scale models of airplanes in a wind tunnel, Darden searches for aerodynamic shapes that may reduce the effects of sonic boom. (A sonic boom is the explosive sound caused by the shock wave proceeding an aircraft traveling faster than the speed of sound, which is about 738 miles per hour at sea level.) "It's a tremendous challenge," Darden says.

