

## **Tom Benson**

Tom Benson is a retired aerospace engineer from the NASA Glenn Research Center. He earned bachelor and masters degrees in aerospace engineering from Ohio State University in 1971. He spent four years in the U.S. Air Force at Wright Patterson AFB doing supersonic wind tunnel testing and installed engine performance calculations for the F-5E, YF-16, YF-17, and B1-A. He then returned to graduate school at OSU to work on a PhD. Mr.



Benson started at NASA in 1978. During the 80's and 90's, he built, verified, and applied computer fluid dynamics (CFD) programs to model the flow of gases through high speed propulsion systems, working on the NASP project, and serving on an international AGARD Working Group on computational modeling. He also worked for several years in developing computation models for microgravity liquids, including an experiment that flew on the Space Shuttle. Mr. Benson has published papers on CFD simulation of fundamental fluids problems, including jet-in-crossflow and unsteady flow past a cylinder.

During the last 15 years of his NASA career, Mr. Benson worked in educational outreach. He is the author of The Beginner's Guide to Aeronautics, a large educational website that houses the many interactive computer programs he had written, including FoilSim, EngineSim, and RocketModeler. Mr. Benson was a frequent presenter for NASA's Digital Learning Network, delivering lessons to students using interactive television. During the Centennial of Flight Celebration honoring the Wright Brothers, he and Roger Storm gave educational presentations around the country as Wilbur and Orville. He has also participated in the Cleveland Ingenuity Science and Art Festivals. Mr. Benson was selected to participate in the Smithsonian Folklife Festival in Washington, D.C. during the summer of 2007, honoring NASA. As part of the exhibit, he ran a small wind tunnel on the Washington mall to show the public how aero engineers use wind tunnels to determine aircraft performance. For his work with the Network of Educator Astronaut Teachers (NEAT), he was invited to witness the last launch of the Space Shuttle (STS-135) at the Kennedy Space Center.

In retirement, he enjoys spending more time with his children and grandchildren. He also sings in three choirs at St. Adelbert's Church in Berea, Ohio, including playing bass guitar in the contemporary choir and singing tenor in the Gregorian Chant schola choir.