

Paul F. Dye – Aviator, Engineer, Writer

Paul Dye has over 40 years of aviation experience as an engineer, builder and pilot. His scope has ranged from restoring old light aircraft to planning and leading manned spaceflights. His love of flying machines dates back to early childhood, and he became involved with full-sized aircraft as a teenager, rebuilding J-3 Cubs with an FBO in Minnesota. He earned his degree in Aeronautical Engineering with a specialization in aircraft design and flight testing from the University of Minnesota in 1982.

For 33 years, he worked in increasingly responsible roles within the US (NASA) Manned Space Program, both as a technical expert in spacecraft systems and, eventually, as the overall lead of many missions to space. He retired from NASA in 2013 as the longest-serving Flight Director in U.S. history. The winner of many prestigious awards including the Johnson Space Center Director's Commendation, the NASA Outstanding Leadership Medal, and four NASA Exceptional Service Medals, Dye is the author of *"Shuttle, Houston: My Life in the Center Seat of Mission Control"*, his 2020 book covering the shuttle years from the perspective on MCC. He delights in bringing the lessons learned from the most advanced flight operations back to the next generation of space operation professionals and to general aviation pilots and builders. He is well-known as a risk-management specialist, and advises designers and builders – as well as pilots – on ways to build and operate aircraft with greater margins of safety. He is a Leadership Consultant and speaker available to corporations and groups who wish to better their organizations and people.

Always a prolific writer, he has been a frequent contributor to type-club newsletters and web sites for many years. After retiring from NASA as a Lead Flight Director for Human Spaceflight, he became Editor-in-Chief for Kitplanes Magazine, a publication dedicated to supporting the experimental aircraft industry. Now Editor-at-Large, he attends most of the large aviation meetings and fly-ins around the United States, test flies aircraft for individuals and for magazine evaluations, and enjoys speaking to aviation and civic organizations on a variety of topics related to aviation. Dye is a licensed Commercial pilot rated for single and multi-engine, instrument, seaplanes, gliders, and several experimental jet aircraft. He is also a licensed airframe and powerplant mechanic.

PROFESSIONAL EXPERIENCE:

1993-2013 Selected as Space Shuttle Flight Director in November 1993. Trained for the Orbit Flight Director position during 1994 and served as Flight Director for STS-63, the first space shuttle Rendezvous with the Russian Mir Space Station in February of 1995, as well as STS-71, the first shuttle mission to dock with the Russian Mir space station, in July 1995.

Mr. Dye went on to serve as Flight Director for STS-69, a shuttle mission featuring the second flight of the Wake Shield Facility and a host of other science payloads. He served as Flight Director for all Shuttle/Mir missions except for STS-89. His first mission as the Lead Flight Director was the STS-79 mission, which returned the NASA 2 Long Duration Astronaut from the Mir. He was also the Lead Flight Director for two more flights to Mir, STS-86 and the final mission, STS-91. He went on to Lead

the STS-99 Mission in February of 2000, which carried the Space Radar Topography Mission payload, a radar interferometer that mapped all of the earth's surface between the latitudes of 60 degrees north and south. Dye served on special NASA-wide study groups related to safety and high-level manned system requirements. He also served as the Mission Operations Directorate Flight Safety Officer, responsible for flight safety awareness and education for manned space flight. In addition, he served as an ISS Flight Director during Increment Operations and during the period after the Columbia accident, he served as the Strategic Air Search Coordinator in the hunt for Shuttle debris along the entire ground track.

When the Shuttle program finished, Mr. Dye was the longest-serving NASA Flight Director, having flown 39 missions as a Flight Director, 9 of those as the Lead Flight Director. He was the Lead Flight Director for Shuttle rescue operations, and, in particular, STS-400, the rescue mission for the Hubble Space Telescope servicing crew. He continued serving as an active Flight Director for the International Space Station and a training mentor for flight controllers and younger Flight Directors. He retired from his NASA career in January 2013 having flown the entire Shuttle Program, the entire Shuttle/Mir Program, and helped bring the ISS through its assembly and into its operational phase.

1990-1993 Head of the Mechanical and Crew Systems Section, Mission Operations Directorate, with overall responsibility for flight support and crew training for mechanical, hydraulic, and crew systems (including crew escape and In-Flight Maintenance). Served as Systems Division expert on Russian Space Systems and Integration for Shuttle/Mir Missions, as a member of the Headquarters Committee on Flight Crew Selection Standards, and Deputy Chairman of the Hubble Space Telescope Review Team.

1986-1990 Senior Mechanical, Maintenance, Arm, and Crew Systems (MMACS) Flight Controller for the Orbiter, including first re-flight and many subsequent missions. Responsible for operations development of Orbiter Landing and Deceleration System Improvements, including the Drag Chute.

1984-1986 Senior Flight Controller for the Spacelab CDMS and Instrument Pointing System, serving on all shuttle missions incorporating Spacelab hardware during the period.

1982-1984 Systems Flight Controller for Spacelab Command and Data Management System (CDMS) during development and first flight.

1980-1982 Cooperative Education Student, University of Minnesota, working at the Johnson Space Center in Flight Operations on the Spacelab Instrument Pointing System.

SAMPLE PUBLICATIONS:

EDITOR AND CONTRIBUTING AUTHOR

2013-Present Editor-in-Chief for Kitplanes Magazine, www.kitplanes.com

2008-2013 Contributing Editor for Kitplanes Magazine, www.kitplanes.com

AUTHOR

Dye, PF, 2017, Build It Better: The Thinking Homebuilder: Belvoir Publications, 32 p., <https://newsline.kitplanes.com/2017/01/24/build-it-better/>.

Ironflight – Paul F. Dye, 2017-present, Blog, <http://ironflight.com/blog/>

Dye, PF, 2016, Chased by a B-29 Over Florida: A close encounter with *Fifi* at the Fun Fly-In Expo: Air & Space Magazine, <https://www.airspacemag.com/flight-today/chased-by-flfi-180959130/>.

Dye, PF, 2015 - present, Kneeboard Notes: An experimental aviation blog site, https://newsline.kitplanes.com/category/kneeboard_notes/

Dye, PF, 2014, Flight Reports – Sling Goes Big: Four-seat homebuilt crosses the Atlantic to show its stuff: Kitplanes, http://www.kitplanes.com/issues/31_6/flight_reports/sling_four_21006-1.html (One example of the scores of articles that Mr. Dye has written for Kitplanes Magazine.)

Dye, PF, 2013-present, Kneeboard Notes: Editorial blog, https://newsline.kitplanes.com/category/kneeboard_notes/

Dye, PF, 2011, Free Flight: The soul of the machine: Kitplanes, http://www.kitplanes.com/magazine/fixedwing/Free_Flight_Soul_of_the_Machine_9575-1.html (Another example of the scores of articles that Mr. Dye has written for Kitplanes Magazine.)

Dye, PF, 2010, The Heavy Glider: An intimate look at the Shuttle Orbiter: Plane and Pilot, <https://www.planeandpilotmag.com/article/the-heavy-glider/#.WdfOfmhSyUI>

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WWW.IRONFLIGHT.COM