National Aeronautics and Space Administration

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F/A-18 Chase Aircraft



Five F-18 Hornet aircraft are being flown by NASA's Dryden Flight Research Center, Edwards, Calif., for research support and pilot proficiency.

The aircraft were obtained from the U.S. Navy between 1984 and 1991. Two have a two-seat cockpit while the others are single-seat aircraft.

NASA research support aircraft are commonly called chase planes and fill the role of escort aircraft during research missions.

Chase pilots are in constant radio contact with research pilots and serve as an "extra set of eyes" to help maintain total flight safety during specific tests and maneuvers. They monitor certain events for the research pilot and are an important safety feature on all research missions.

Chase aircraft also are used as camera platforms for research missions that must be photographed or videotaped. Pictorial coverage — photos, motion pictures and videotape — is used extensively by aeronautical engineers to monitor and verify various aspects of the research project.

The two-seat F-18 support aircraft are normally used for photo or video chase. They are configured to transmit live video pictures from the air back to Dryden so engineers can visually monitor the mission as it is being flown. This feature greatly enhances flight safety.

The F-18 fleet also is used by Dryden research pilots for routine flight training required by all NASA pilots.

Aircraft Specifications

- o The formal designation of the aircraft is F/A-18, corresponding to the dual fighter-attack role of the Hornets in the U.S. Navy and U.S. Marine Corps.
- The aircraft are powered by two General Electric F404 turbofan engines, each producing 17,700 pounds (8028.58 kg) of thrust. Top speed is more than Mach 1.7 (1190 mph).
- Wing span of the F-18 is 40 feet 4 inches (12.29 m), while the length is 56 feet (17.06 m). Typical gross weight of the aircraft is about 40,000 pounds.
- ° The aircraft were built by McDonnell Douglas, now the Boeing Company, St. Louis, Mo.

