

**PETER B. FIELD**  
**AVIATION CONSULTANT**  
**17619 BRIDGEWAY CIRCLE DRIVE**  
**CHESTERFIELD, MO 63005**  
**636-248-0552**  
**anpfield@sbcglobal.net**

## **EDUCATIONAL AND PROFESSIONAL BACKGROUND**

1962	B.S. Mathematics, The Citadel, Charleston, S.C.
1963 to 1989	Officer, United States Marine Corps
1963	Designated Naval Aviator
1971	Graduate, U.S. Naval Test Pilot School
1986	Graduate, Industrial College of the Armed Forces
1989-2005	Research Program Manager, Phantom Works, Mc Donnell Douglas/Boeing
2003-Present	Aviation Consulting, Expert Witness Practice

## **AREAS OF EXPERTISE**

**Accident reconstruction, aeronautical judgment, aircraft system subsystem failure analysis, avionics, aircraft maintenance and product liability, control flight into terrain, flight dynamics, cockpit display automation, airmanship, airworthiness, aviation codes and standards, flight-testing, digital and mechanical flight controls, electronic (glass) cockpits, pilot or crew training, pilot or crew performance, FAA regulations, flight plan reconstruction, air traffic control procedures, general aviation airport development, homebuilt aircraft flight-testing and test plans, human factors engineering, military accidents and mishaps, piloted spacecraft engineering, test engineering, weather factors.**

## **ASSOCIATE AREAS OF EXPERTISE**

Economic evaluation of the loss of life, helicopter accidents or mishaps, rotary wing flight test

## **RELATED EXPERIENCE**

Aircraft Maintenance Officer	Marine Air / Ground Task Force Commanding Officer
Carrier Qualifications Flight Instructor	Manager / Engineer Research Programs - Boeing
Director, U.S. Naval Test Pilot School	Nuclear Weapons Delivery Pilot
Experimental Test Pilot	Out of Control Recovery (Spins) Flight Instructor
Flight Instructor	Squadron Commanding Officer
Flight Test Program Manager	Test Pilot Flight Instructor
Landing Signal Officer	

## **AIRCRAFT ACCIDENT AND MISHAP INVESTIGATION EXPERIENCE**

During three tours at the Naval Air Test Center as member of the center's Safety Panel, investigated numerous accidents / incidents involving Naval aircraft testing programs during 1971 through 1975, 1978 through 1982, and 1983 through 1986. Assisted in developing the initial version of the Naval Air Test Center's "Flight Testing Lessons Learned" document. Over the past 6 years investigated 24 accident cases involving general aviation and military aircraft as either expert witness or consultant.

## **AVIATION PROGRAM MANAGEMENT**

Served as senior military test pilot and military test program manager for the F/A-18 Full Scale Development (FSD) Program. Supervised employment of six test pilots and 35 engineers and technicians operating a 20 million dollar annual budget. Responsible for all aspects of the government and contractor flight test program. Constructively worked with the contractor to resolve approximately 1000 aircraft deficiencies of all varieties over the course of the development program. Developed post-production flight test procedures for new F/A-18 aircraft, still in use. Guided resolution of all F/A-18 development program deficiencies with NAVAIR and the Contractor to field one of the most successful fighter aircraft, exceeding all previous Navy records for

performance, reliability, maintainability, and safety in a carrier based aircraft. In over 4000 flight test hours sustained an accident free record for all 10 FSD aircraft. Commanded the first operational F/A-18 squadron (selected assignment), accident free. Led squadron to first training air combat engagements against USAF F-15 and F-16 squadrons, fully demonstrating the F/A-18 in Air-to-Air (A/A) and Air-to-Ground (A/G) operational scenarios. Conducted first F/A-18 live missile shoot and first squadron carrier qualifications. As U.S. Navy Test Pilot School Director, supervised 60 military flight and civilian academic instructors plus administrative personnel and a contractor maintenance staff of over 300, operating on an annual budget of 18 million dollars. Responsible for the execution of daily flight scheduling of 35 aircraft of 13 different types (helicopters to supersonic jets). Acquired and introduced F/A-18B and UH-60A aircraft to the Test Pilot School syllabus. Monitored the progress of an average of 50 student test pilots and flight test engineers through the one-year course. Served as a test pilot flight instructor in all aspects of flight syllabus with specialization in Out of Control (spin recovery) flight, advanced weapons systems, and digital flight controls evaluations.

## **PROFESSIONAL FLIGHT EXPERIENCE**

Over 6,500 total flight hours, Special Instrument Rating, Experimental Test Pilot Rating, Qualified Shipboard Landing Signal Officer, FAA Commercial/Instrument Airplane Single Engine / Multi Engine Land Ratings, Transport Aircraft Commander Rating (US-2 / C-1A), Air Combat Tactics Instructor, Marine Air Group Strike Leader, Mission Commander, Instrument Check Pilot, Design NATOPS Instructor (A-4, F-4, F-9, T-38, F/A-18), Functional Check Pilot (A-4, F-4, F-9, F/A-18). 225 Combat Missions, Republic of Viet Nam. 300 carrier landings. Currently flying part time corporate aircraft for Drury Inns and Control Technology and Solutions Group, Inc. Part owner in a Bonanza G-36 airplane. Served as a Civil Air Patrol, Search and Rescue Mission Commander 1997 through 2005. I have completed construction and have flown first flight of a Lancair 360 Experimental Aircraft for which I now hold an FAA Repairman's Certificate.

## **FLIGHT TEST, ENGINEERING, AND ENGINEERING MANAGEMENT**

Flight evaluated classified foreign military aircraft during project "Have Idea." Flight tested the High Resolution Multi Application Radar (HIMAR) on a specially modified A-6A airplane equipped with an optical tracker. Flight evaluated the engineering model Heads Up Display (HUD) for the A-4 aircraft, later approved for production. Flight evaluated engineering changes to convert the F-4B airframe to the F-4N model. Evaluated and recommended changes to the "glass cockpit" concepts in development as advanced by the contractor, McDonnell Douglas, for the F/A-18, which later became the genesis of electronic display of information in many military and commercial aircraft. Introduced the F/A-18 into the U.S. Navy Test Pilot School curriculum and revised standard hydro-mechanical flight control testing techniques to incorporate test techniques for highly augmented electronic flight controlled aircraft. At McDonnell Douglas, following the Sioux City DC-10 crash, worked on propulsion control concepts for use as back-up flight controls for airliners and tested the concept in simulation. Worked on other propulsion control concepts for the C-17 as both primary and back-up flight controls. Managed and assisted in the development of a series of digital flight control computers for use in safe experimentation on electronic flight control systems called the Production Support Flight Control Computer (PSFCC). Managed the Active Aeroelastic Wing (AAW) program, essentially a leading edge aileron control surface concept designed to capture the flexibility of high aspect ratio wings for enhanced lateral control purposes. Managed the Space Shuttle Avionics Upgrade Program, an initiative which conceptually updated Orbiter avionics in order to improve cockpit displays, lower operating costs, reduce vehicle turn around times, and mitigate existing obsolescence.

## **CONGRESSIONAL TESTIMONY**

Sworn testimony before the House Armed Services Committee (HASC) on two occasions during 1980 regarding the performance of the F/A-18A aircraft and whether the aircraft would meet performance specifications. Testimony further elaborated on progress of the flight test program and estimates of the general value of the new aircraft to the U. S. Navy and Marine Corps. Sworn testimony before the Senate Armed Services Committee (SASC) during 1981 for the follow on progress of the F/A-18A. Committee recommendations in the appearances before the HASC and SASC resulted in recommendations to appropriate funds for full rate production of the aircraft.

## RECENT DEPOSITIONS:

Case: Shirley H. Ellis vs. Estate of Perley Andrew Thomas, et al. Superior Court of Pitt County, NC  
Case Number: 04-CVS-1649  
Date: 1 November 2006

Case: Cox et al vs. Sikorsky Aircraft et al. U.S. District Court, District of Connecticut  
Case Number: 3.05-CV-01126 (JBA)  
Dates: 16, 17, and 18 April 2007

Case: In Re Cessna 421B N421SD Litigation, State Court of Gwinnett County, State of Georgia  
Master File No. 05-C-15668-2  
Date: 9 September 2008

## AVIATION EDUCATION

Graduate, U.S. Navy Pilot Training. Graduate, U.S. Marine Corps Nuclear Weapons Delivery Training. Graduate, U.S. Navy Landing Signal Officer Training. Graduate, U.S. Navy Test Pilot School. Graduate, U.S. Navy Fighter Weapons School. Graduate, U.S. Navy Post Graduate School Aviation Safety Course for Commanding Officers. Flight Safety Wichita, Bonanza Course.

## AWARDS AND HONORS

Associate Fellow, The Society of Experimental Test Pilots  
Distinguished Flying Cross  
15 Strike Flight Air Medals  
Navy Marine Corps Commendation Medal with Combat "V"  
2 Meritorious Service Medals

## PUBLICATIONS

P. B. Field, PowerPoint presentation to the Missouri Flight Instructors Association, *Techniques For Performance Testing Your Homebuilt Airplane*, 20 January 2007.

P. B. Field, et al., *Active Aeroelastic Wing (AAW) Research Program Final Report*; Boeing-STL 2005P0054, 31 October 2005.

P. B. Field, et al., *Active Aeroelastic Wing Flight Research Program: Technical Program & Model Development*, American Institute of Aeronautics and Astronautics, Journal of Aircraft, Vol. 37, No. 4, p. 544, July-August 2000.

P. B. Field, *Navy Assessment of the Roll Performance and Handling Qualities of the F/A-18 Airplane with Differential Leading Edge Flaps Incorporated (Roll Mod II)*, Naval Air Test Center Report SA-69R-81, February 2, 1982.

P. B. Field, *NATOPS Flight Manual F/A18 A/B Aircraft, Section 4, Flight Characteristics*, December 1, 1981.

P. B. Field, *Navy Preliminary Evaluation (NPE-IVB) of the F/A-18 Airplane (U)*, Naval Air Test Center Report SA-C1R-81, January 27, 1981.

P. B. Field, *Navy Preliminary Evaluation (NPE-IIIB) of the F/A-18 Airplane (U)*, Naval Air Test Center Report SA-C5R-80, August 14, 1980.

P. B. Field, *Navy Preliminary Evaluation (NPE-IIB) of the F/A-18 Airplane (U)*, Naval Air Test Center Report SA-C1R-80, February 29, 1980.

P. B. Field, *Phase II Final Report, Navy Preliminary Assessment of the AN/APG-65 Radar and F/A-18 Avionics in the T-39 Airplane (U)*, Naval Air Test Center Report SA-C17R-79, September 13, 1979.

P. B. Field, *Navy Technical Evaluation of the Elliot Type 546 Head Up Display in the TA-4J Airplane (U)*, Naval Air Test Center Report WST-69R-74, July 25, 1974.

P. B. Field, *Phase Two Navy Technical Evaluation of the High Resolution Multiple Application Radar (HIMAR), Final Report (U)*, Naval Air Test Center Report WST-C41R-73, October 12, 1973.

P. B. Field, *Phase One Navy Technical Evaluation of the High Resolution Multiple Application Radar (HIMAR), Final Report (U)*, Naval Air Test Center Report WST-02R-81, January 27, 1973.