

Rotorcraft and V/STOL Expertise



ANSER has the background and expertise to support development and modernization programs for vertical and/or short take-off and landing (V/STOL) aircraft, including advanced rotorcraft and jet-borne air vehicles.

ANSER (Analytic Services, Inc.) is a not-for-profit public service research institute founded in 1958. We provide government decision makers with objective, responsive research on issues affecting the strength and security of the nation. We have a broad background in assisting with the development of advanced weapons systems, including rotorcraft and V/STOL aircraft.

ANSER is a key player in Joint Staff and Air Force mission area and modernization planning. We have been instrumental in the development and refinement of the foundational Air Force Mission Area Plan strategy-to-task framework. Our ability to deliver unbiased, timely analysis and support to program managers is unequalled in the professional services arena. The foundation to our success is to bring early and complete identification of the underlying fundamental needs to the attention of management, then comprehensively define and document the requirements behind our client's mission. We deliver solid results and viable solutions on time and within budget to our clients.

Joint Advanced Strike Technology/Joint Strike Fighter (JAST/JSF): ANSER has provided technical and program management support to the JAST/JSF program since its inception in 1993. JSF is developing the next generation strike fighter for the U.S. military services and our allies, including short take-off and vertical landing (STOVL) variants. As the primary program office support contractor, we have provided the full spectrum of acquisition support including requirements analysis and validation, modeling and simulation, systems engineering support, technology assessments, systems security engineering and programmatic expertise. We have also conducted a number of specially requested studies on



relevant V/STOL development efforts and technology. ANSER has also compiled an extensive V/STOL

ANSER provides a broad spectrum of programmatic and technical analyses

- Concept Development/Assessment
- Analyses of Alternatives (AoAs)
- Requirements Analysis And Validation
- Joint Mission Analyses (JMAs)
- Modeling and Simulation
- Weapons System Effectiveness
- Reliability, Maintainability, Availability
- Technology Assessments
- Defense Acquisition Management

Archive consisting of thousands of documents regarding the development and testing of hundreds of V/STOL aircraft configurations relevant to future concepts.

United States Special Operations Command (USSOCOM): ANSER was instrumental in developing the USSOCOM Joint Mission Analysis (JMA) from 1990 to 1997, which provided a comprehensive, CINC-validated

framework for development and modernization of Special Operations Forces (SOF), including fixed- and rotary-wing aircraft. ANSER analyzed and validated requirements for the MH-47E, MH-47D (AWC), MH-60K, MH-53J and MH-60G. In addition, we used the Air Force Mission Support System (AFMSS) and the Special Operations Forces Planning and Rehearsal System (SOPARS) to conduct threat planning and routing for the CV-22, MH-47E, MH-47D, MH-60G, MH-60L, MH-60K and the MH-53J. Based on this expe-



rience, USSOCOM selected ANSER to conduct the Cost and Operational Effectiveness Analysis (COEA) for the Advanced Multi-Mission Vertical Lift Aircraft (MV-X). We also participated in an Advanced Avionics Requirements Study for USSOCOM that compared alternative advanced avionics capability levels for various SOF helicopters and fixed-wing aircraft.

Air Force Air Combat Command (ACC): ANSER is currently assisting the ACC Combat Search and Rescue Mission (CSAR) Area Team with the Analysis of Alternatives (AoA) for the USAF CSAR capability. The AoA uses an ANSER-developed computer model to help compare operational-level effectiveness of alternatives for replacing the aging HH-60G helicopter fleet.



Air Force Special Operations Command (AFSOC): ANSER currently provides analytical support to AFSOC in developing the readiness spares package for the CV-22 program. We have also provided logistics support analyses for the CV-22 and assisted with the AFSOC MH-53J Pave Low III Transition Plan and Life Span Study.



Air Force Space Command (AFSPC): ANSER provides analytic support in the areas of helicopter requirements and operations for AFSPC, the lead command for all USAF H-1 helicopters. We recently conducted the UH-1N Replacement/Upgrade AoA, the UH-1N Cost and Options Analysis, and the UH-1N Reliability, Maintainability, Availability (RMA) Study, as well as helped to define the AFSPC ICBM Helicopter Support Mission Needs Statement (MNS) and Operational Requirements Document (ORD). We also support the ACC/AFSPC Helicopter Vision Working Group, which is looking at USAF helicopter operations and examining areas for potential inter-command cooperation and efficiencies. We assist in developing, publishing and maintaining Air Force instructions/guidance related



to USAF H-1 helicopter flying operations, including support of ICBM, space-launch, and range operations. ANSER was also selected to analyze and document the feasibility, cost, and benefits of transferring AFSPC helicopter operations to other organizations or platforms, for example the National Guard or Reserve operations, contracted services, or fixed wing aircraft.

Naval Air Warfare Center Aircraft Division Patuxent River, MD (NAWCAD Pax): ANSER is currently providing subject matter expertise for the Joint Shipboard Helicopter Interoperability Program (JSHIP). The purpose of JSHIP is to have non-Navy helicopters go through the same rigorous shipboard compatibility certification process as the Navy aircraft. For the JSHIP program, ANSER developed a dendritic linkage from initial shipboard helicopter interface requirements to actual flight tests developed to measure or demonstrate the capability of the aircraft to be shipboard compatible.



Other Relevant Experience: There are many other examples of ANSER's experience in V/STOL systems and technologies. We have over 15 years of experience related to the V-22 program, beginning with the Joint Services Advanced Vertical Lift Aircraft (JVX) Milestone II COEA, in 1983. Since that time, we have conducted V-22 and helicopter requirements analysis, performance modeling, cost-effectiveness studies, and programmatic analyses for the Assistant Secretary of the Air Force for Acquisition (SAF/AQ) and the Deputy Chief of Staff for Air and Space Operations (AF/XO). ANSER also participated in an international helicopter technology delegation to Russia and Poland in 1992. In 1997, we conducted a comparative analysis of V-22 / H-60 effectiveness in the CSAR mission for the United Kingdom Defence Evaluation and Research Agency (DERA), with the participation of the DoD personnel rescue community.

Professional Commitment: ANSER is actively engaged in the dialog to develop solutions to current V/STOL issues in both the military and industry. We are a corporate member of the American Institute of Aeronautics and Astronautics (AIAA) and are active on its V/STOL Technical Committee. ANSER is also a corporate member of the American Helicopter Society (AHS) and assists the editorial staff in preparation of its publication *Vertiflite*.