ACS International LLC

Aviation Consulting Services

Our/Company

Aviation Consulting Services International LLC (ACS) is an independent consulting and engineering services company specialized in systems for civil and military aviation. Our capabilities include:

- → Development of air navigation and air traffic management studies
- → Planning and design of airspace, air traffic control facilities, and runway layouts
- → Air traffic facilities and airspace operational requirements definition
- → Design of approach procedures and Obstacles Limitation Studies
- → System specifications development
- → Siting and requirements studies for radars, ATC communication systems, ATC weather systems, ground-based radio navigation aids, and airfield lighting systems
- → NextGen ATC systems
- → Installation and maintenance of radars,

ATC communication systems, ATC weather systems, ground-based radio navigation aids, and airfield lighting systems

→ Field Services related to core activities

In cooperation with industry partners, ACS also offers turnkey solutions for:

- → Air Terminal design and construction
- → Mobile ATC and Airfield systems
- → Flight calibration services

CAPABILITIES

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pabilities

- AirNav and ATM
 Studies
- Airspace and Air Facilities Design
- Aviation Requirements Definition
- ✓ Procedures Design
- ✓ Obstacles Limitations Studies
- ✓ System Definition
- System Specification
- ✓ System Siting
- System Performance
 Modeling
- ✓ System Installation
- ☑ System Maintenance
- ✓ System Training

Our Team

ACS has drawn together engineers with different backgrounds and with experience in over 50 countries. Their various backgrounds include civil aviation organizations, commercial ATC service companies, military aviation, airlines and industry.

The permanent management team has extensive experience in the civilian and military air traffic control fields and includes specialists in air traffic management, air traffic control communications, and ground-based navigational aids.

ACS offers a broad range of expertise attuned to the client's needs and provides a full spectrum of development services from first conception to operational implementation.

Our team has a comprehensive and unique background based on years in the ATC Industry. This allows the optimum matching of siting criteria to specific performance parameters of currently available equipment on the market. This eliminates the subjective evaluations typically provided by the manufacturers to only fit their equipment and provides for an independent, unbiased result.



EXCELLENCE THROUGH QUALITY

Quality performance is the trademark of our operation. Our Team exemplifies our commitment to quality.

ACS holds Superior supplier ratings from our customers.

ACS

Aviation Consulting Services

System Definition, Specification, and Siting

ACS has expertise in conducting thorough site surveys based on years of experience and hundreds of completed site surveys. This includes ground based NAVAIDS such as VOR, DME, TACAN, ILS, NDB, DGPS/DGNSS, and Approach Lighting. ACS also surveys communications systems such as VHF/UHF, microwave, HF, VCCS, and remote control and fiber optic networks. Radar expertise includes primary, secondary, precision approach, and surface surveillance systems.

Our approach to site surveys includes a complete evaluation of the site, how existing equipment is performing and how they comply with the applicable siting requirements, future implications of facility expansion or planned buildings, affect of one system on the others, and finally modeling of the proposed system to confirm the on-site findings.

ACS also carries out area surveys and Equipment precision location services using WGS-84 certified personnel and state-of-the-art equipment. This service can be offered at the time of the preliminary site survey, or at the initial stages of installation of equipment.

A comprehensive report with all needed backup information and references is then generated with an executive summary of the findings. The report also contains recommendations as well as a detailed technical assessment of the site.

All of our site survey reports come with comprehensive validated computer modeling to ensure the accuracy of the equipment placement and the required system performance.

System Installation and Commissioning

ACS has an experienced team capable of integrating, installing, and commissioning complex systems and managing turnkey projects for Air Traffic Control communication, ground-based NAVAIDS, and airfield lighting systems. ACS has implemented projects worldwide, including:

- → ATC Tower systems comprising VHF/UHF communication, VCCS systems, Recorders, No Break Power Supplies
- → Ground-based Navigation Systems including ILS/DME, VOR/DME
- → HF communication centers comprising High-power transmitters, receivers, Rotatable Log-periodic antennas, Omni-directional antennas, integrated remote control system.

System Maintenance and Support

ACS provides a wide range of maintenance and support services to end users both on systems installed by ACS as well as existing systems.

ACS provides specialists to maintain and support systems by offering the following:

- → Scheduled maintenance activities such as periodic maintenance interventions, periodic flight checks, and planned upgrades of hardware and software.
- → Fault diagnostics and repair
- → Technical and operational help in times of high demand for an operational facility.
- → Logistics support system development and implementation



ACS holds a Platinum Supplier rating from L3 Communications for quality of technical work and ontime deliveries on projects with the United States Department of Defense DoD.

PAPI Calibration read-





ACS field engineer using state-ofthe-art PAPI Calibration equipment

ACS

Aviation Consulting Services

Computer Performance Modeling

Our Engineers have the theoretical and practical product background in surveillance, ground based NAVAIDS, and Communication that allows us to use highly advanced performance modeling software to predict the performance of equipment prior to installation.

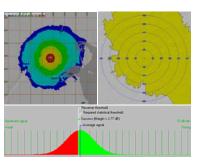
Typical outputs from this modeling will include options for siting of the equipment, proposed configurations, and any required modifications or enhancement to the proposed site.

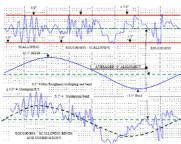
ACS has on-going contracts to offer our

services to manufacturers during the bidding or installation phase and to end customers during the tender preparation or requirements analysis phase.

Conclusions from the modeling are typically presented in graphical as well as narrative format to explain the results.

We have experience with a majority of the available equipment on the market and can best serve our customers by reducing costs typically incurred during installation related to equipment not being compatible with the proposed sites.



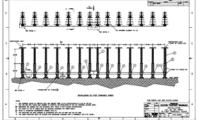


Engineering Design Services

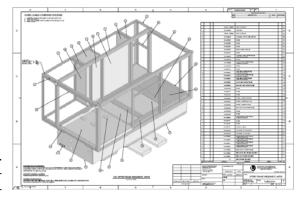
ACS International uses sophisticated computer modeling tools for design and performance modeling

ACS provides design and layout services as part of on-going projects as well as standalone design projects. Typical services include:

- → Structural analysis and design
- → Production prototypes
- → System layout and integration
- → Systems performance analysis
- → System design



ACS uses design production tools such as CATIA, Solidworks, and AutoCAD . All design work is performed in accordance with the latest industry standards for design as well as FAA, US Military, ICAO, and EUROCAE specifications.



Field Engineering Services

ACS International can provide at any time and in any environment, worldwide Field Engineering Services including:

- → System integration and test support
- → System installation and checkout
- → Acceptance testing
- → Operational and maintenance support
- → On-the-job training
- → Contract engineering and technical support
- → Sustaining engineering services
- → Field modifications and updates.

Our highly trained field engineering workforce is routinely involved in every phase of program development. Participation begins in design, then continues through test and integration to after-market support. This depth of involvement ensures an unsurpassed level of customer support.

When required, ACS also provides civil **ground** works services to supplement the **based** installation of systems. **NAVAII**



Civil works
are an integral part of
ground
based
NAVAIDS
projects



NextGen and SESAR Initiatives

ACS has a dedicated team involved in various initiatives related to NextGen and SESAR activities. ACS is part of Government / Industry / Academic work groups involved in implementation of technologies related to:

- Constant Descent studies
- Unmanned Aerial Vehicle Navigation and ATC systems and studies
- Vessel Traffic System integration
- MLAT/ADS-B/GBAS system integration into the wider ATC and Navigation Systems

Airspace and Procedures Design

ACS provides start-to-finish development support services, including survey management, feasibility studies, airspace designation, coordination with regulatory organizations, and an ongoing criteria/obstruction evaluation.

ACS provides services related to design and development of SIDs, STARs, and RNP-RNAV procedures for local, regional or national operations. Customers have solicited ACS assistance in providing the services for existing routes as well as modified or new routes.

ACS provides Obstruction Studies as well as Obstacle Limitations Studies to assist in location and siting of new equipment as well as to help with future planning for airport areas.

Our Customers

ACS provides services to a wide variety of customers including Civil Aviation Authorities, Military ATC, Prime Contractors, System Integrators, Equipment Manufacturers, and Services Providers.

- → Fort Campbell Army Air Field, USA
- → Fort Stewart Army Airfield, USA
- → Fort Lewis Army Airfield, USA
- → Fort Rucker Army Airfield, USA
- → Fort Knox Army Airfield, USA
- → Offutt Air Force Base, USA
- → Fort Belvoir Army Airfield, USA
- → Garrison Humphreys, Korea
- → Diavik Diamond Mine, Canada
- → SunCor Firebag Airport, Canada
- → Sharjah International Airport, UAE

- → Port Said Airport, Egypt
- → Abu Simbel Airport, Egypt
- → 6 October Airport Egypt
- > Saudia HF Center , Saudi Arabia
- → Agadir Airport, Morocco
- → Rabat Airport, Morocco
- → Tantan Airport, Morocco
- → Gelmim Airport, Morocco
- → Benguerir AFB, Morocco
- → Bluefields Airport, Nicaragua
- → Roatan Airport, Honduras

Our Associations







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