

# Engineering, Production & Support Services



  
**SUNHILLO**  
Mission-Critical Data Interoperability

# Engineering, Production & Support Services

**Sunhillo** has a well-earned reputation for designing, developing, deploying and sustaining leading-edge mission-critical data interoperability platforms around the world. Our background in software and hardware development and leadership in the communication, navigation and surveillance technologies strongly positions us as a systems integrator providing government agencies and major aerospace companies around the globe with cost-effective, innovative products and technical solutions plus quality-oriented engineering services.

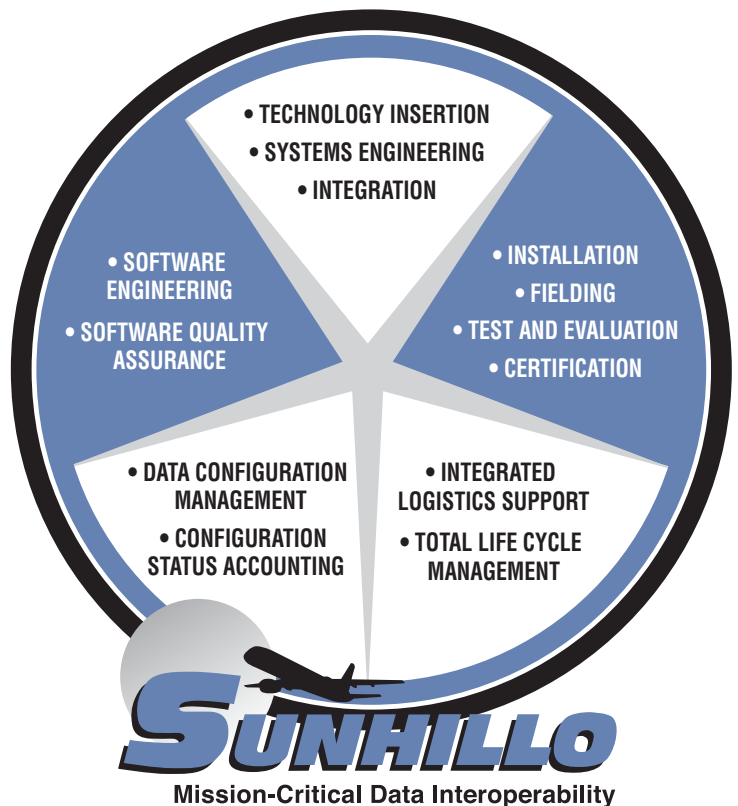


Our design for sustainment processes lower manufacturing costs, improve engineering development cycle times, reduce logistics and support challenges and decrease the total ownership cost of a system over its product lifecycle. Our engineering best practices, highly personalized services and state-of-the-art ISO 9001:2000 certified production and assembly facilities deliver what you need, when you need it.

## Technology Insertion, Integration & Systems Engineering

**Sunhillo has experience and a proven track record in helping our customers maximize their investments by:**

- Successfully migrating legacy applications into open architecture solutions that provide a substantial Return-On-Investment and a flexible environment for customizations and improvements that consistently work for the users and sustainers.
- Leveraging state-of-the-art technologies and our data interoperability expertise in the development of new systems, conversion of legacy systems, or integration into existing systems. In all cases, the focus is on platform portability, scalability, and affordability.
- Providing COTS and open source solutions that minimize Total Ownership Costs and prevent proprietary solutions that limit flexibility in the future. Our goal, of course, is to provide a level of service that ensures a continued healthy business partnership.
- Strengthening the systems engineering process for technology insertion by developing and using generic sets of systems modeling and simulation enabling tools. The tools are particularly needed to address human factors engineering and system interoperability issues.



These factors enable and promote "best practices" and "end-to-end" strategies that translate to system management efficiencies and lifecycle cost-effectiveness for our customers.

Sunhillo is currently involved with several 'tech refresh' programs and is currently deploying our products and integrated sub-system rack integrations into the FAA service delivery points (SDP) infrastructure in Air Route Traffic Control Centers (ARTCCs), Terminal Radar Approach Control (TRACON) and air traffic control towers throughout North America. Our equipment is also installed throughout Asia, Europe and the Middle East.

## Software Engineering and Software Quality Assurance

Sunhillo's software process improvement program is modeled after the Software Engineering Institute's Capability Maturity Model. To assure the quality, efficiency, reliability, and maintainability of its products, Sunhillo uses an engineering methodology for software development that incorporates detailed cost and schedule management and a comprehensive quality assurance program.

Sunhillo's Organizational Standard Software Process (OSSP) incorporates software policies, process standards, and product standards to satisfy the highest industry standards.

This provides:

- Validated processes that match the mission-critical need.
- Faster, more accurate, repeatable processes which reveal bottlenecks and engineering challenges and identify cost savings and efficiencies.
- A lower-risk, more-predictable development environment.



Sunhillo complies and performs at SEI CMMI Level 3 standards. The company's OSSP process elements are grouped into four basic categories or areas:

- Process Management
- Project Management
- Support
- Engineering

## Installation/Hardware/Test and Evaluation/Certification

Today's net-centric systems require seamless integration of hardware and software engineering, system support engineering and program management staff. In turn, this requires a customer-centric focus to determine evolving needs:

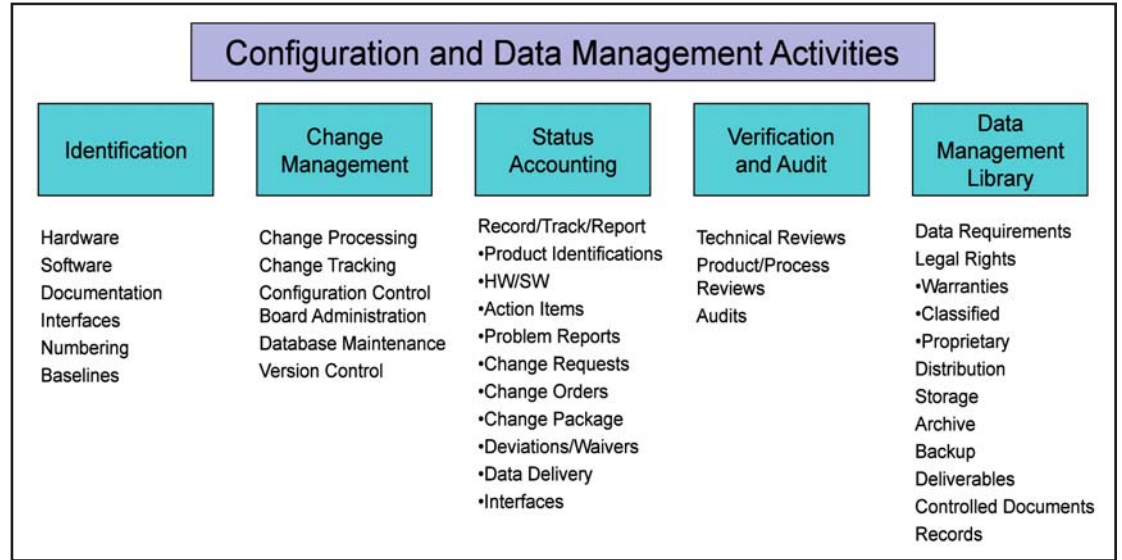
- Generating the highest level of hardware requirements, based on user needs, as well as cost and scheduling constraints.
- Ensuring consistent, complete, correct, and operationally defined requirements.
- Performing cost-benefit analyses to determine the best methods or approaches for meeting the hardware requirements, including use of commercial, off-the-shelf or previously-developed components.
- Partitioning large hardware systems into subsystems and components each of which can be handled by a single hardware engineer or team of engineers.
- Ensuring development of a robust, secure and optimally-designed hardware architecture.
- Generating acceptance test requirements, together with integration and test specialists and system support engineers, and the user, to determine that all of the high level hardware requirements have been met.



## Technical Product Data Management/Configuration Management

Sunhillo's software and hardware engineering culture, its ISO 9001:2000 certification and rigorous CM/DM capability provides:

- Management of engineering design data specifying and detailing engineering requirements.
- Configuration disciplines and practices in accordance with government and industry standards.
- Configurations comprising the functional and physical characteristics of hardware, firmware, software, and/or a combination thereof.



## Integrated Logistics Support/Total Life Cycle Systems Management



At Sunhillo, we ensure that all stakeholders and elements of the integrated logistics support plan are in lockstep. We incorporate tradeoff analysis to make sure the system is: affordable (lowest life cycle cost), operable, supportable, sustainable, transportable, and aligned with available resources. By influencing the design at early stages prior to the Critical Design Review, we can provide the best results for total life cycle system management.

Sunhillo understands the DoD 5000 series standards and has instituted numerous ILS programs in support of our system implementations and fieldings.

Our PLM and programmatic support delivers real-time and documented benefits, incorporating supply-chain management (SCM) principles, including:

- Increased readiness and operational availability ( $A_0$ ) for mission-critical systems
- Reduced system or network downtime
- Savings through the re-use of data and software
- A framework for product optimization
- Reduced waste and continual improvement processes
- Savings through the complete integration of engineering workflows
- Improved asset visibility
- 24/7 training services and, where appropriate, on-site personnel support

