

## Professional Services

*S4 Inc. offers expertise in EMSO, Program Management, Engineering and Intelligence/ISR*

### ELECTROMAGNETIC SPECTRUM OPERATIONS

**Planning – Readiness Evaluations.** S4 Inc. supports Joint Center for Electromagnetic Readiness (JCER) mission requirements to accomplish Joint Electromagnetic Spectrum Operations (JEMSO) readiness evaluations and Integrated Cyber Electromagnetic Warfare (ICEW) vulnerability assessments to accredit each Service and the United States Special Operations Command (USSOCOM). We work with Service and CCMD to advance and improve Blue Forces survivability capabilities. S4 supports planning activities, and attends and participates in exercise planning events including the Initial, Mid, and Final Planning Conferences. During these conferences, S4 EMSO experts share information regarding the JCER mission, essential evaluation requirements for targeted essential/joint tasks, including external data collection requirements, and internal JCER data collection system placement requirements. We conduct analysis, research, and studies to identify Service and Combatant Command (CCMD) JEMSO capability requirements, vulnerabilities, and key concerns to determine JCER evaluation objectives. S4 EMSO experts develop detailed data collection and data analysis plans to explicitly state how JCER will collect, manage, store, control, and analyze data for each evaluation. We prepare evaluation plans prior to each JEMSO evaluation, and we advocate for CCMD and Service prioritization of JEMSO related activities during exercises. S4 participates in forums and community events to discuss and analyze new and emerging JEMSO threats and presents findings, conclusions, and recommendations. Finally, S4 EMSO experts prepare detailed project schedules, resource allocation plans, critical milestones, and associated risk.

**Conducting Readiness Evaluations.** S4 supports the conduct of JEMSO readiness evaluations and ICEW vulnerability assessments through day-to-day home-station activities including security administration, secured facility procedures, daily and weekly battle rhythm (meetings, taskers, etc.), and logistical activities. We facilitate effective and efficient shipment of equipment and supplies in support of JCER evaluations. S4 facilitates effective and efficient execution of evaluation activities and participates in daily battle rhythm events to ensure JCER objectives are met through planning, execution, and debrief activities. We support maintenance on JCER-owned or controlled evaluation resources, data collection capabilities, and other support equipment. S4 EMSO experts conduct and coordinate calibration and integration of all data collection systems to ensure instrumentation and communication equipment deployed to and used at evaluation locations operate properly. We conduct data collection and management in accordance with the approved data management plan.

**Analyzing and Reporting - Readiness Evaluations.** S4 EMSO experts support JCER analysis and reporting requirements for the results of JEMSO readiness evaluations and ICEW vulnerability assessments. We analyze collected evaluation data and report analysis results in various forms such as tables, graphs, and figures. All reporting documents and briefings are analytically based and peer reviewed. S4 conducts reconstruction of evaluated events with sufficient fidelity to identify and understand critical findings. Our EMSO experts author evaluation reports, accreditation reports, memorandums, message traffic, and briefings including Event Execution Summary, Preliminary Results Report, and Final Report. S4 EMSO experts meet JCER milestones and goals for report completion and out briefs. We coordinate for JCER and USSTRATCOM reports and briefing approval and formal release, and we conduct distribution and dissemination of JCER reports and briefings. Finally, we conduct archival and disposition of JCER reports and briefings in accordance with unit policy.

### PROGRAM MANAGEMENT

S4 Inc. provides leadership, facilitates and supports strategic planning and the implementation, coordination, integration and evaluation of programmatic activities.

**Strategic Planning.** S4 supported NORAD and USNORTHCOM (N&NC) by developing all levels of plans and associated supporting documents and briefings within the Homeland Defense Policy Branch for N&NC/J5. We provided critical review and analysis of capabilities documents and supported the Joint Capabilities Integration and Development System (JCIDS) process.

S4 conducted research and analysis that developed awareness of partner nation social, economic, military and Governmental situations and provided Theater Security Cooperation Governmental decision makers with baseline information. This information was needed to develop course of action options to make decisions that increase U.S. influence and enable the success of partner nation current and future operations against transnational criminal organizations.

**Project Management.** S4 provides Project Management Services by applying industry best business practices in project management in conjunction with the Project Management Body of Knowledge (PMBOK) process methodology. We support project planning activities such as: Project Scheduling, Work Breakdown Structure, Task Break Down, and Project Maintenance/ Sustainment; Project Cost Estimating; Cost and Resource Management; Change and/or Version Control; Project Change Control; Project Issue Tracking; Problem Tracking; and Risk/Issue Assessment, Risk Management and Risk Tracking. S4 uses in-depth analysis to determine the impact of various schedule/resource changes to successfully deliver each project. We also analyze critical path, and constraints to determine impact of changes and recommend work-arounds to remain on schedule and on budget. S4 ensures the credibility of the information contained in the schedule and verifies schedule integrity.

S4 utilizes knowledge of Microsoft Project to develop, maintain, and publish government approved schedules of complex projects. We work alongside a team of managers, operation leaders, and government clients to define scope of work to identify tasks and activities, load resources, coordinate assignments, and forecast cost estimate. S4 provides a weekly report of project health and performance to stakeholders. This report includes technical performance, schedule progress, resources and personnel performance, cost projections, and key schedule events and milestones. We also utilize Atlassian Jira to manage and monitor the project risk register.

**Knowledge Management.** S4 Inc. provides support services for Air Combat Command (ACC)/Cybersecurity Support Squadron (CYSS) roles in support of the following objectives:

- Gap analysis (existing Knowledge Management (KM) services) and strategic roadmap development of KM services
- Development of policy, doctrine, and training to enterprise KM capabilities
- Provision of technical research, analysis, and studies to support enterprise decisions
- Management of enterprise-service change requests while ensuring traceability to warfighter needs/objectives
- Prioritization of warfighter functional needs to ensure systems meet strategic objectives

S4 updates and sustains SharePoint/Collaborative environments in support of AF and CYSS Knowledge Management mission requirements. This support includes capabilities to validate system requirements and objectives as designated by Government POC(s), design, configure, execute testing, migrate environments, maintain layouts, modify site layouts, update and/or add content, create/edit web parts, manage user access and permissions based on program requirements. S4 experts evaluate SharePoint/Collaborative Knowledge Management environments and provide recommended capability and functional enhancements. S4 develops and provides environment training to customers via government requested methods and responds to customer feedback with government approval. S4 personnel recommend changes to SharePoint/Collaborative Knowledge Management environments to Government POC(s) for approval prior to implementation.

**Infrastructure Planning Support.** S4 Inc. provided infrastructure planning support for facility furnishing efforts, space management, Building Information Modeling (BIM), and other facility projects for the fit out and transition to the new USSTRATCOM Command and Control Facility (C2F). S4 used AutoCAD to prepare graphics and reports representing space management and furnishings to communicate transition execution status with STRATCOM leaders, facility managers, and occupants. We utilized Revit software to support construction of a BIM to reflect a change in facility data or construction efforts caused by a Military Construction (MILCON) change-order. S4 helped with the collection of organizational requirements, recommended information items to collect, and met with occupants to collect and examine data. S4 established the impact (cost, time, second-order effects, etc.) of the desired change; assembled findings; and provided support with presenting requested changes and each respective solution to the Floor Space Management Board (FSMB). S4 helped configure the type, layout, and

quantity of furnishings to meet occupant requirements and provided support in the analysis and development and execution of an asset transition plan from existing facilities to the C2F.

## ENGINEERING SERVICES

S4 Inc. provides engineering services such as systems engineering, analyses of requirements, gap analysis, solution development, testing, and implementation. We apply specialized knowledge and engineering principles when evaluating, planning and designing hardware, software and services.

**Systems Engineering.** S4 provided systems engineering, requirements analysis, technical solution development and testing, and integration services to the US Strategic Command (USSTRATCOM) IT infrastructure. S4 engineers developed technical solutions and tested and integrated solutions for projects approved by the government engineering oversight organization and IT governing organizations. S4 was responsible for managing, engineering and implementing life-cycle replacement projects, including technical refresh, IAW the IT Roadmap, Integrated Master Schedule (IMS), and Integrated Master Plan (IMP). S4 engineers performed requirements analysis, functional analysis, and integration of hardware/software and network requirements. S4 transformed outputs from requirements analysis, functional analysis, and synthesis into technical solutions consistent and interoperable with current and future system baselines and architectures. For all applicable technical solutions, S4 personnel developed drawings and documentation for new systems and updated existing drawings (network, cable, etc.) and documentation for existing systems.

## ADVISORY & ASSISTANCE SERVICES

S4 Inc. offers a range of advisory and assistance services including analyses of technical, cost, and programmatic issues; support to improve policy development, management, and administration; and the application of various forms of technical expertise during all phases of planning, programming, acquisition, and implementation cycles of government systems and programs.

**Intelligence Analysis – Cyberspace.** S4 Inc. provides All-Source Intelligence Analysis - Cyberspace support for the USSTRATCOM/J2 and CDR USSTRATCOM through analysis on cyberspace threats and capabilities that support USSTRATCOM's Indications and Warning (I&W), Nuclear Command, Control, and Communications (NC3), Joint Intelligence Preparation of the Operational Environment (JIPOE) requirements, and situational awareness of cyberspace threats to U.S. NC3 capabilities and critical USSTRATCOM networks and infrastructure required to achieve its missions. S4 provides all-source intelligence support to the Headquarters Staff, Component Commands, the NC3 Enterprise Center (NEC) and the USSTRATCOM Joint Cyber Cell (JCC). We analyze and evaluate changes in adversary cyberspace doctrine, capability and intent, Tactics, Techniques, Procedures (TTPs), requirements as they relate to adversary intent, use in space and counterspace weapons systems, and threats to Intelligence Community (IC) and DoD space systems. S4 performs all aspects of collection and production requirements, and assists the government with writing collection and production requirements to address all command needs. We collaborate and coordinate all Community On-Line Intelligence System for End Users and Managers (COLISEUM) requirements with counterparts, including IC partners, collection managers, producers, and respective Cyber Mission Forces (CMFs). COLISEUM requirements are vetted for accuracy, including Planning and Environmental Linkages (PEL) to intelligence requirements, and we track their status to conclusion. S4 conducts extensive research and analysis of foreign use of cyberspace capabilities to conduct computer network attack or computer network exploitation of critical infrastructure and USSTRATCOM NC3 systems and the associated infrastructure USSTRATCOM NC3 systems depend upon. We provide direct intelligence support to the USSTRATCOM JCC and synchronize efforts and partner with USCYBERCOM, Combatant Command (CCMD) JCCs, CCMD J2s, military services, and members in DoD and the IC.

S4 provides intelligence support planning including Joint Planning Groups (JPG), Operations Planning Groups (OPT) and Crisis Analytic Team (CAT) activities, including conducting cyberspace portions of the JIPOE process, and producing System of System Analysis (SoSA), and all other directed products and deliverables. We provide



intelligence support for USSTRATCOM related CMFs, including Combat Mission Teams (CMT) and Cyber Protection Teams (CPTs) as required.

**Intelligence, Surveillance and Reconnaissance (ISR) Planning and Support.** S4 provides Intelligence, Surveillance, and Reconnaissance Operations (ISRO) support for the Joint ISRO Center (JISROC) - Chairman's Controlled Activity (CCA) and Director of the Joint Staff (DJS) Deputy Directorate for ISRO (J32) to oversee and manage the DoD ISR and Sensitive Reconnaissance Operations (SRO) associated Processing, Exploitation, and Dissemination (PED) enterprise. We support development and synchronization of global ISR plans and allocation strategies to satisfy CCMD and national requirements. S4 supports ISR Global Force Management (GFM) tasks including the development and staffing of the DoD's annual global ISR allocation plan and sourcing recommendations in response to emergent/short-notice requests for DoD ISR forces i.e. Requests for Forces, (RFFs). We support ISR Integration activities by interacting with the CCMDs, the Services, Joint Staff (JS), IC, and numerous other DoD and civilian agencies to respond to DoD taskings and Requests for Information (RFI) regarding ISR capabilities and processes. S4 supports all applicable GFM meetings and senior forums addressing ISR allocation, including the GFM Action Officer (AO) and General/Flag Officer (GOFO) Secure Video Teleconference (SVTC), the J-32 ISR GFM SVTC, quarterly GFM Boards (GFMB), and Operations Deputies or Joint Chiefs of Staff Tanks. S4 supports J-32 crisis/contingency/exercise manning, planning, conferences, and execution through the use of modeling and simulation tools. S4 supports the development of complete ISR allocation recommendations within the GFM process by identifying PED capability, capacity, planning factors, and/or limitations with proposed sourcing courses of action. We provide PED inputs (communications architecture, tasked exploitation crews/ nodes, etc.) into the planning and allocation of ISR, and we monitor and report on the status of all applicable DoD PED equipment, nodes, and units.

**ISR Assessments Tasking.** S4 supports ISR Assessments Tasking through interaction, coordination, and collaboration with CCMDs, Services, JS, IC, and other DoD and civilian agencies to support rigorous and repeatable data-driven analytic assessments for DoD ISR and SRO, including special and limited access program operations; Congressional reporting; National Technical Means (NTM) integration and employment; and deliberate and contingency GFM allocation plans and courses of actions. S4 personnel create tailored products ranging from detailed placemats to pithy, hard-hitting ISR recommendations by: (1) Synthesizing CCMD intelligence strategies/ plans, NTM capabilities, and global campaign plan objectives and requirements; (2) Evaluating operational and collection value tradeoffs as they relate to priority intelligence requirements coverage, Tasking, Collection, Processing, Exploitation, Dissemination (TCPED) alignment, and report satisfaction; (3) Identifying trends and performance factors (weather seasonality, maintenance, planning factors, etc.) to measure DoD Airborne ISR performance; and (4) Evaluating CCMD collection value and operational highlight inputs for SRO Book inclusion.

**ISR Assessments Methodology Development Support.** S4 Inc. supports ISR Assessments Methodology Development by: (1) Assisting with creating metrics and refining methods to evaluate ISR operational performance, efficiency, and effectiveness; (2) Refining JS Assessment Forms and RFIs; (3) Strategy-to-Task Concept of Operations (CONOPS) templates; (4) Consolidating assessment methodologies and best practices across the DoD; (5) Updating the J-32's Assessment Business Rules (as applicable); (6) Providing JS assessment methodology training and resources to facilitate a persistent, inclusive, and collaborative learning culture. S4 personnel support all applicable assessment meetings including CCMD Joint Collection Management Working Groups, co-hosting the Reconnaissance Operations Management Enterprise (ROME) Users' Groups, Measures of Effectiveness (MOE) Working Groups, Processing, Exploitation, and Dissemination (PED) working groups, GFM coordination meetings, and ISR future concept development and planning meetings.

**ISR Knowledge Management.** S4 supports ISR Knowledge Management by assisting in the design and maintenance of J-32 webpages on multiple networks to support information flow between internal and external organizations on ISR assets and issues. We establish and maintain J-32 internal GFM ISR and ISR capability databases and conduct data analytics using a variety of software (Microsoft Access/Excel, Tableau, etc.) in support of J-32 tasks. S4 applies and adapts new and improved approaches to the design, development, and implementation of data entry, review, and queries of ISR GFM information in other authoritative databases (Joint Capabilities Requirements Manager, ORION, ROME, etc.).