

**Testimony of Joseph R. Cipriano,
President, Lockheed Martin Business Process Solutions
and
Monte Belger,
Vice President, Transportation Systems Solutions,
Lockheed Martin Transportation and Security Solutions
Before
The House Committee on Transportation & Infrastructure
Subcommittee on Aviation
On
The Transition From FAA to Contractor-Operated Flight Service
Stations: Lessons Learned**

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Chairman Costello, Ranking Member Petri and Members of the Subcommittee:

Thank you for the opportunity to discuss “The Transition from FAA to Contractor-Operated Flight Service Stations: Lessons Learned.” I look forward to sharing the progress we have achieved on this unprecedented competitively-sourced program. This testimony will provide a background on the AFSS contract and transition from the legacy FAA systems to the new Lockheed Martin-operated and FS-21-based system. I will then discuss our lessons learned during implementation of this program.

The AFSS program represents the largest non-defense outsourcing of services in the federal government where industry and government competed to develop and implement a solution that met both the constraints and performance objectives of the program. The constraints took the form of annual spending caps and a fixed date for vacating facilities and releasing obligations for government owned or leased equipment. The performance objectives were specified in terms of Acceptable Performance Levels (APLs) which the competitors were allowed to propose for measurement and accomplishment of performance objectives subject to FAA approval. Lockheed Martin’s proposal was deemed by the FAA to have the best approach for meeting the outsourcing objectives within program constraints.

While most of the services provided are optional for pilots’ use, most General Aviation pilots rely on the knowledge and skills of flight service personnel who work diligently to provide services to the overall transportation system. These personnel provide general aviation pilots with information such as pre-and in-flight weather briefings, flight planning assistance, and aeronautical notices. They can also provide in-flight support to pilots who are lost or in need of assistance. The Lockheed Martin-operated AFSS network is helping pilots fly safely by using a state-of-the-art information system (FS-21) that facilitates pilot weather briefings, en route communications, and search and rescue services. Features of the FS21 system include:

- Redundant data centers geographically separated;
- Dynamic call routing capability to respond to geographic surges;
- Common data base allowing nationwide retrieval of flight plans;
- Common procedures across all sites; and,
- Dynamic prioritization of calls such as medical emergency flights.

Lockheed Martin is proud to have been awarded this program to develop and implement the best value solution for the future of Automated Flight Service Stations (AFSS).

The Automated Flight Service Stations (AFSS) Contract Background

On February 1, 2005, FAA awarded Lockheed Martin the contract to consolidate 58 sites in the continental United States, Puerto Rico and Hawaii into 18 upgraded Automated Flight Service Stations, including three large Hub facilities, with estimated savings to the taxpayer of \$1.7B over 10 years. This was the result of a fair and open competition, based on competency and price. In October of 2005, Lockheed Martin took over the operation of the 58 flight service stations, which suffered from outmoded technologies and deteriorating facilities, and began the process of modernization.

During a seven-month transition Lockheed Martin developed and installed state-of-the-art automated communications and data processing systems, closed 41 facilities across the country, opened three new main operational Hub facilities, relocated over 400 flight service personnel, trained and certified over 1,000 flight specialists, and introduced new services to the pilot community. This was accomplished during the peak flying season while enhancing and keeping the system safely operating. With the exception of two facilities which will close in November and December of this year, the facility transition phase was completed on September 24, 2007. Since February of 2007, LM Flight Services has handled over 3 million phone calls, and provided approximately 6 million flight services. In addition, Lockheed Martin proposed an innovative FS-21 web service that supports General Aviation Pilots and AFSS specialists allowing them to view a common weather picture during briefings. This web portal will be tested by a small group of GA pilots this December, and will then be available to the GA community once testing and necessary changes are complete.

Challenges/Issues

During the peak of the transition period between April and June, 2007, as we fully implemented the new FS-21 system, we experienced unacceptable service problems. These problems resulted in briefing times and call waiting times that were too long, and flight plans that were lost in the automated system. We also received an unacceptable number of complaints that flight service personnel were not sufficiently familiar with the local areas they were briefing.

Lockheed Martin Response

We have given high priority to successfully addressing and correcting those major issues, resulting in continuous improvement. Seven months after the start of transition, all of the FAA legacy sites have been refurbished with modern flight support systems and three new hub facilities have been opened. For the first time ever, flight service performance can be monitored in real time across the entire nation.

Today, pilot complaints are decreasing to sustained daily levels of less than 0.1%. Each complaint is analyzed and the pilot filing the complaint is contacted within 72 hours. Systemic problems are addressed through equipment upgrades, procedure changes, and training. A few statistics demonstrate improvements:

- In the last two months we averaged over 80,000 calls per week with wait times averaging less than 40 seconds.
- Our “caller abandon” rate over the past two months has averaged approximately 4% against a contract requirement of 7%.
- Over the same period, 60% of our calls have been answered in less than 20 seconds.
- In the last week we only received 40 complaints, related to the nearly 200,000 flight services provided.

Conclusion

Lockheed Martin has transitioned 58 loosely-integrated flight service stations into a fully integrated nationwide system of 18 operational facilities. Although the transition is nearing completion, we are not slowing down improvements in processes, training, or technology. We continually work with the FAA and stakeholders to improve service to general aviation pilots and we will apply best practices from lessons learned.

LESSONS LEARNED

I. The Legacy System:

A review of legacy system documentation should be accomplished prior to establishing program schedules for completing transition. As we moved forward on implementing the AFSS program, we realized that technical and schedule constraints limited the solution options to those that could be implemented quickly. These conditions led to a minimal development approach, i.e. use of commercial off-the-shelf (COTS) hardware and software and redeployment of the legacy FAA staff. The system development that was required was largely tied to integration of COTS with the legacy National Airspace System (NAS) infrastructure. One significant early challenge the program faced was acquiring documentation for existing legacy interfaces with the NAS. An assumption during program planning was that this documentation would be available at program start. Documentation was unavailable or inadequate to support the system engineering effort and ultimately had to be developed by the program team. The additional time that was spent during the development phase to complete the engineering and integration work decreased the remaining time available for system transition in order to meet the FAA's established schedule and shifted the transition period into a time of high demand for flight services.

II. Human Factors/Staffing:

A. The hiring of the legacy workforce went smoothly but despite offering hiring incentives and retention bonuses, the number of people that choose to transition from the FAA to Lockheed Martin was less than expected. The lower-than-expected number of trained legacy staff proved sufficient to operate the legacy infrastructure during the lower workload months due to innovative changes to operating procedures, but it was insufficient to support transition during a high workload period. To put things in perspective, we had 1260 flight service specialists when we went live with FS-21, compared to an estimated 1760 flight service specialists the FAA employed to handle a similar workload in 2005. By April 2007, flight service specialist attrition had reduced staffing to 1200.

B. Reduced Staffing resulted in long waits for service to pilots in some areas. The impact of the reduced staffing became painfully apparent in April 2007 when call volumes surged due to the start of peak flying season. At this same time, a segment of the workforce was in training, relocating to new work locations, and a new system was being operationally transitioned. Ultimately, accelerating training of new flight specialists, slowing transition, staffing with overtime, and rehiring of recently retired flight specialists as part time workers allowed staffing to catch up with the workload by the beginning of July. However, there were limited options on staffing with a certified, trained workforce because many people had made plans to re-locate or retire based on program schedules and there was limited ability to stretch the transition period without

increasing attrition and exacerbating the problem. We now know to overstaff during transition to account for unanticipated attrition and learning curves and design off-ramps so there are options to move transition schedules based on performance and environmental changes.

III. Stakeholders:

A. Regularly communicate with all stakeholders who might be affected by the changes. In retrospect, we could have developed a very proactive and over-inclusive outreach program including everyone impacted – general aviation pilots, helicopter operators, the FAA, the local communities, media, and Congress. The universe of interested people is large and we need to set appropriate expectations with each group as well as keep all parties advised of progress.

B. Ensure that effective outreach programs are in place to capture local area knowledge and local area-unique services provide by each facility. Our new system was architected as a national system and was integrated into the FAA’s loosely aligned regional system. A national system brings the benefits of improved services to pilots, enhanced ability to balance workloads across the country and substantially reduced operating costs. The challenge we faced was to achieve these benefits while being cognizant of the flight service specialists’ established relationships with local pilots whom they communicated with frequently. Now that we are over the critical transition hurdle, we have made and are continuing to make site specific improvements to respond to local requirements. For example, we have created dedicated direct phone services for pilots flying within the Washington DC restricted flight area, Gulf of Mexico helicopter pilots, and medical emergency flights. The ability to react quickly, to listen and to understand local needs and to be willing to implement creative solutions is critical. In short, we learned to “architect nationally but implement locally.”

C. Establish a process for the FAA and Lockheed Martin to continue to work together to refine and improve flight service operations. We have established weekly joint operations review meetings to ensure a smooth working interface between Lockheed Martin Flight Services and FAA Air Traffic Operations. Technical issues are identified and resolved through joint Technical Interchange Meetings. For example, a major pilot concern has been missing flight plans. A joint analysis of the problem discovered there were software problems both within the Lockheed Martin system and the FAA’s Host computers. By working together we have significantly reduced the number of missing flight plans.

IV. Metrics and Government Oversight:

Meaningful oversight by the Federal Government is vital, as is the need to develop appropriate objectives and performance measures. The Government must establish appropriate controls to monitor performance. Although operational performance

categories were established by the FAA, they were not baselined prior to contract award and they were not vetted by the user community, i.e. the pilots who are receiving the services. As a result, some of the established metrics focused our actions on lower priority areas and some were so unrealistic that flight specialists were discouraged from trying to meet them. We recommend for the future that performance metrics be initially established, monitored during the transition, and finalized following completion of transition. Performance goals should be used which encourage continuous improved performance.

Mr. Chairman, thank you for the opportunity to submit this testimony for the record.