CALNET’s technical and management approach employs the best practices from ITIL v3, HDI, and CMMI to deliver services that benefit our customers with a greater ROI and a significantly higher level of service. We are experts and industry leaders in establishing and maturing Enterprise-wide Service Desk solutions which operate 24x7x365 working from multiple, secured sites ensuring continuity of operations. We support a multiple Tier structure servicing both basic and difficult issues from desktop, network, to custom application-related requests. Our solution strategy takes a proactive approach by following continuous improvement processes by NOT just meeting Service Level Agreements (SLAs) or Objectives, but continually improving upon current SLA thresholds with the goal of “tightening” our performance further. At the same time, we thrive in offering our customers with innovative approaches for proactive problem prevention assisting our customers with additional self-help solutions and determining methods to prevent incident disruptions altogether whenever possible.

We had the opportunity to service the Federal Aviation Administration (FAA) Aviation Safety (AVS) line of business for over 6 years from 2009 thru 2015 by providing:

- An Enterprise-wide 24x7x365 Service Desk supporting 8,500 FAA AVS internal users and over 1 million external customers providing IT support from desktop issues, custom application support, network/server support, how-to-training, to user provisioning
- Providing onsite desk-side support to 1,000 FAA AVS internal customers in DC Metropolitan area and 500 FAA AVS internal customers in Oklahoma City, OK
- Tier 3 level support with our Desktop Engineering and Network Engineering teams working on more challenging and specialized IT support problem requests requiring working with manufacturers (i.e. DELL, Fujitsu)
- A Robust Quality Assurance and Control process with continuous auditing of tickets, customer survey responses, and change control management
- Hosted Remedy ITSM solution made available to all FAA AVS internal customers with the capabilities of being able to initiate and track their own incidents with the Requestor Console. In addition, we provided all access to the Knowledge Base system which we developed over time to over 2,000 self-help articles used by both FAA AVS customers and our own staff grouped in different permission levels
Development and maintenance of the custom Yurbi Business Intelligence (BI) product assisting FAA management with reporting of metric trends via web-based Dashboards tying in call statistics from the ACD Phone switch, ticketing incident details from Remedy ITSM, and survey responses from Kinetics tool.

Through the life of the program, we were able to meet and exceed all of our SLAs and maintain a combined Customer Satisfaction Rating of over 97%. We were successful in growing our program by winning additional contract extensions and bridges past the initial 5 year term. In the below sections we describe the unique challenges we encountered and solutions we constructed to set up the first completely outsourced and consolidated service desk for the FAA.

THE CHALLENGE

In 2009, CALNET was contracted to construct the first Enterprise-wide Service Desk 24x7x365 servicing 8,500 FAA AVS internal customers within 150 different locations around the globe. The FAA AVS support model at the time was based completely on a local support model relying on onsite computer specialists with customers performing routine “shoulder-tapping” to get the support they need. There were no formal processes in place that all FAA computer specialists were expected to follow at all sites. We faced these specific challenges:
■ **No Standardized policies and processes** – there were no formalized policies or processes in place for typical IT-related requests (i.e. user password resets, user account provisioning, service catalogs for ordering of hardware/software, how to identify users remotely). We were dealing with a situation of what processes is our support staff expected to follow and what is expected to be understood by customers?

■ **No actual call volume history** – with only estimated call volume thresholds provided by the FAA, we were dealing with a situation of coming up with a staffing model for a new service desk without any factual call volume history. What is expected to be the actual monthly call volume? When are the highs and lows of call volumes expected throughout the different times and days of the week?

■ **How to Transition different sites** – we had to determine how we were going to transition-in calls from different FAA sites and in which order. What was our phased transition-in plan?

■ **Consolidation of Ticketing Systems** – Multiple Local Help Desk Ticketing Systems (i.e. Service Desk Express - Magic) were being used by specific Computer Specialists and Tier 2-based Custom Application Support groups that had to be consolidated into our own hosted Remedy ITSM solution

And finally, the **biggest challenge** we faced was with the FAA culture of utilizing local support onsite only and now having to call an outsourced Service Desk for all IT support needs – many were opposed to such a model. In the next section, we describe our solution and approach to address these challenges.

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**THE SOLUTION**

During our first year servicing FAA, we had to address all these challenges as follows:

■ **Standardizing Processes** – Right from the beginning of transition, we developed a transition-in organization made up of our key personnel as well as some of our highly skilled technical support staff (from Tier 2-3 levels). We specifically developed a Process Administration team whose sole function was to develop standardized processes to be followed by the Tier 1-3 teams when supporting FAA AVS customers. Our Process Administration team developed the base set of standardized processes by:

1. Developing a survey which we used to gather feedback from FAA AVS customers and computer specialists to determine high frequency types of incidents or service requests

2. Conducting focus group interviews in both FAA DC Headquarters and Mike Monrowe Aeronautical Center (focusing on the largest sites primarily) with both FAA AVS customers and computer specialists to gather feedback
3. Coordinating meetings with the FAA Client Management and Enterprise Architecture teams to discuss and gather FAA requirements on most utilized type of service requests from identity verification, resetting user account passwords, new user provisioning, account transfers, and basic troubleshooting steps to be followed by the different Tiers.

4. Extracting information from existing Knowledge Base being utilized by the different localized Ticketing Systems (i.e. Service Desk Express) to review relevancy and anything that we could utilize for supporting customers.

5. Once we had gathered initial set of broad data from many sources, we began developing new Service Desk procedures starting from Tier 1 level and then moving up to our higher level Tiers. These procedures included processes for user provisioning and how we would perform troubleshooting and which approved remote tools we would utilize (i.e. SMS, RemoteAssistance).

6. In parallel, we also worked with FAA management developing a Service and Product Catalog that would be broadcasted to customers for being able to request specific available services and products through the Service Desk. FAA management would broadcast both the Service and Product Catalogs on their FAA AVS National IT Service Desk website ensuring all information available to customers on our services.

Our newly developed processes and standard operating procedures underwent numerous reviews and revisions as necessary to ensure all applicable FAA policies were being met and all FAA management stakeholders were in agreement. Certain processes had to be developed on industry best practices with newly proposed tools which required certification from FAA enterprise architecture groups and then final accreditation from FAA management. In addition, all of our support staff had to get the proper level of access for FAA’s Active Directory structures, the Lotus Notes Database-Mail system, and also various components of their current standard client images being utilized. In some cases, our support staff had to complete required training per FAA policy to gain the proper level of access (i.e. Lotus Notes).

- **Staffing for estimated call volume** – to safeguard the risk of unexpected call volumes, we gathered ticket history information available from the larger sites such as FAA DC Headquarters and Mike Monroney Aeronautical Center. We then performed interviews of local computer specialists in all the branch FAA offices to understand their typical volume of workload and average length of time they spent for each incident or service request. Once we gathered an acceptable sample set
of data for estimated potential call volume, we began coming up with our Staffing model using the *HDI Gross Formula* where we made certain assumptions such as:

- Our SLA thresholds we had to meet with Speed to Answer being less than 1 minute and Call Abandonment Rate under 5%
- Our hours of operations – 24x7x365
- How many sites we would operate from – 2 sites (Primary and Secondary)
- Tier 1 would not typically spend more than 15 minutes on each call (based on industry best practices)
- Understanding the type of workload expected for the Tier 2 and 3 groups and how they could assist Tier 1 during a need of surges

With our primary Service Desk operating from Melbourne, FL and our secondary site operating from Englewood, CO, we split staffing 50% at both sites giving enough evenly distributed coverage in the situation of a disaster in one of our particular geographic locations. To lower the risk of the unknown of true call volumes, we built a surge support capacity of up to 20% over average estimated call volumes within Tier 1 itself. In addition, we created emergency response procedures with our Enterprise Service Desk which would initiate certain key members of the Tier 2-3 groups to come in and assist Tier 1 support team in the need of a very high surge situation. Prior to full go live, we also built capabilities into our ACD Phone switch allowing us to broadcast custom messages quickly (i.e. informing customers of an application outage or surge situation). At the same time, our FAA management stakeholders were in agreement that due to estimated call volumes being our only source of data, we were given 6 months to establish a true call volume baseline.
• Transitioning In Different Sites – in order to determine, the phased sequence of sites to transition-in, we considered the following factors:

  • The Schedule – we were expected to transition-in all sites from September 2009 thru February 2010 giving us roughly 6 months. The timing consideration was a large factor as our goal was to transition-in some of the larger sites before Thanksgiving and Christmas holidays in 2009, which we accomplished taking in approximately 40% of the FAA AVS user base within the first 2 months by end of October 2009 which included Mike Monroney Aeronautical Center, Seattle, and Atlanta regional offices. We would then phase in some of the smaller sites thru the holidays with the final major sites to be phased in during end of January thru February 2010.

  • The Sequence – we developed the sequence of sites to be phased in based on readiness of the different FAA branch offices and ensuring we had been given all the remote access permissions necessary to support those customers remotely. We started transition-in with the larger remote offices (non-branch offices) allowing FAA AVS to truly test our support services with a proper back-out plan (given this was very new to the FAA). With the FAA executive management presence in DC metropolitan area, we transitioned this region last in February 2010 given it allowed us some time to transition-in majority of the FAA sites first and being able to gather any lessons learned and rectify any small issues.

  For each site to be transitioned-in to our Enterprise Service Desk support model, we developed a detailed checklist of test procedures for pre-and-post transition-in from attaining different access permissions to all the different tools, to testing performance working along with the different remote FAA computer specialists at the site, testing of the phone calling, identity verification steps being taken over the phone, and validating the back-out procedures. Our FAA COR would review our pre-transition checklist to ensure everything was tested which was considered as part of Pre-Operations Readiness Review (Pre ORR). 1 day after transition-in the site with us beginning formal support, our FAA COR would conduct the final Operations Readiness Review (ORR) for that site by validating our post transition-in checklist and also speaking with the site representatives.

• Consolidation of Ticketing Systems – given that we were setting up an enterprise-wide Ticketing system solution for FAA AVS with our Remedy ITSM hosted solution, we had to determine the best time to seize active use of the local Ticketing
systems and determining what open tickets had to be migrated over to our system. From analysis in beginning of transition-in, we identified 2 Service Desk Express – Magic Ticketing systems which we had to phase out with one being used in Mike Monroney Aeronautical Center and the other being used in FAA DC Headquarters. Here are the steps we followed to phase out these 2 ticketing systems within 9 months:

1. We gained access to these 2 local ticketing systems and extracted everything we needed (i.e. open tickets, customer profiles, queues, categories set up, Knowledge Base) in Excel-and-XML based formats. We took the time to understand the data structure and what fields were being used and how we could transform necessary data to our Remedy ITSM system.

2. We then collaborated with our FAA COR and customer management stakeholders to determine a cut-off time period and when to specifically migrate any open tickets and seize use of the legacy ticketing systems. We agreed to migrate any new tickets initiated after we started work for our program in June 2009.

3. We developed a transformation script to convert Service Desk Express tickets into tickets into our Remedy ITSM system. We performed full testing as needed with a subset of aged, open tickets for validity.

4. With all the testing completed, when going live with Mike Monroney Aeronautical Center in September 2009, we merged over all the open tickets opened after June 1st, 2009 from their Service Desk Express Ticketing System into our Remedy ITSM system. Our team seized immediate use of their legacy system and began use of our newly hosted Remedy ITSM onwards. The same process was followed for the FAA DC Headquarters site when we transitioned this site in end of February 2010.

While our team seized use of the legacy Service Desk Express systems, these systems remained active for a period of 1 year as we were receiving follow-up inquiries on older tickets (prior to June 2009) and we had to perform a lookup and generate a new incident in our Remedy ITSM system.

- Dealing with the Culture Change for customers – with this being our biggest challenge given all FAA AVS customers now having to use a new service desk support model and getting away from the “tap-shoulder” method of the local computer specialists onsite, we worked in partnership with our FAA management and
travelled to the different large regional FAA offices and branch offices to conduct seminars and educate FAA customers about the new Service Desk Model. While our transition-in organization was working heavily on establishing support processes, our key personnel staff worked at great lengths on marketing the Service Desk to the FAA AVS user community through various communication methods (through pamphlets flyer postings at all different sites, emails, all-hands meetings with large sub-set of users, and holding information booths set up at large sites to provide necessary information at walk-ins). We also worked with the FAA Deputy CIO to champion the FAA Service Desk model to the internal FAA computer specialists assuring them with more meaningful projects they could now focus on. In the first year of the program in conjunction with FAA management, we did everything possible to prepare the user community for the changes to come. As we started going live with different sites calling our Service Desk, we held daily calls with focus groups and computer specialists at these sites gaining their feedback and assuring to them of the improvements we are making every day. Over time, with customers adapting to the new culture, our call volumes started going up and customers became highly appreciative of our services – which led to a 50% reduction of onsite local support staff and FAA becoming a heavily telework-based organization after utilizing our Service Desk program.