Case Study: NASA

Summary
- NASA’s SOFIA program needed an efficient way to communicate with a large staff across 3 facilities.
- The implementation included 5 media players powered by the Mvix digital signage software.
- The display signage network displays flight and maintenance schedules, and day-of and post-flight activities.
- Maintenance and operations teams for the Flying Telescope now know where to find information without having to log in to email or other systems.

Introduction
The Stratospheric Observatory for Infrared Astronomy (SOFIA) program, a project of NASA, has implemented a digital signage network in their Ames Research Center located in Mountain View, California. Powered by the Mvix platform, their digital signage network consists of 5 screens across 3 of their facilities.

The digital signage solution allows SOFIA program personnel to communicate easily, displaying flight and maintenance schedules, and day-of and post-flight activities.

| NASA Ames Research Center |

SOFIA is a Boeing 747SP aircraft modified to carry a 2.7-meter reflecting telescope, allowing astronomers to study the solar system and beyond. It is essentially a Flying Telescope.

The airborne observatory is an 80/20 joint project of NASA and the German Aerospace Center (DLR) respectively.

The successor to the Kuiper Airborne Observatory, SOFIA’s telescope saw first light on May 26, 2010. The aircraft flies in the stratosphere at 38,000-45,000 feet, above 99% of Earth’s infrared-blocking atmosphere. This allows astronomers to study the solar system in more ways than ground-based telescopes. The aircraft’s mobility also allows personnel to observe from almost anywhere in the world and “enables studies of transient events that often take place over oceans where there are no telescopes.”

SOFIA is operated and maintained by NASA’s Armstrong Flight Research Center and it’s program, science, and mission operations are managed by NASA’s Ames Research Center and the German SOFIA Institute.
The Challenge

NASA’s SOFIA Program needed a user-friendly way to communicate across different locations.

SOFIA goes on 10-hour flights, observing the infrared universe and gathering data for researchers to study. The growing program has created a large program personnel across different locations. In order to operate efficiently and easily, NASA needed an effective communication strategy.

Prior to their digital signage implementation, NASA team members relied on their email and other systems to find information regarding the SOFIA program operations. This communication method took personnel away from their core job tasks in order for them to gain vital information on flight schedules, flight activities, and other functions.

NASA needed a dynamic solution to display important information across its SOFIA operating locations. Their goal was to ensure a one-stoplight and maintenance tool for all their program personnel. Their previous email-only communication method lacked efficiency, taking away time from other important tasks.

Digital signage was needed to provide an information hub for SOFIA program personnel to quickly find important information regarding SOFIA operations.

What needed to be done:

- Improve communication across SOFIA facilities
- Display flight and maintenance schedules and flight activities
- Deploy information easily and promptly

The Solution:

NASA’s SOFIA Program implemented a digital signage network of 5 screens across 3 facilities, all powered by the Mvix Digital Signage Platform.

The Mvix solution offered a robust platform for NASA personnel to manage the displays and upload content remotely. This helped with efficiency as they did not need to be at each facility physically in order to update the displays. Their screen could be updated with the most up-to-date information from anywhere.

The SOFIA program personnel needed a platform with advanced content scheduling. Advanced content scheduling allowed NASA personnel to schedule their maintenance and flight schedules in advance. It can be customized to show different content for different times of the day and different days of the week, allowing NASA personnel to display schedules based on the SOFIA aircraft needs.

The Mvix digital signage platform also provided streamlined content management. With this, SOFIA program personnel can easily upload, update and manage schedules as well as other useful information such as weather, time, NASA RSS feeds, and more.
Mvix’s content-rich digital signage software includes over 200 content apps and data integrations, giving NASA a library of content to choose from.

**Components used:**

- **Content management software - XhibitSignage**
- **5 Xhibit digital signage players**
- **Content integrations - announcements, calendars, weather, RSS feeds, scrolling text, video, web URLs, and more**
- **Professional services - education & training, implementation assistance**

### The Results

The digital signage network helped SOFIA program personnel communicate more efficiently across their facilities, relaying important information about flight and maintenance schedules.

As a result of the digital signage implementation, SOFIA program personnel noted more effective communication across their facilities. Team members know where they can find information quickly without having to log into their emails or any other systems. The easy-to-read screens quickly became their “go-to information hubs” for their maintenance and operation teams.

In fact, because of the effectiveness of their digital signage network, NASA will be adding another system in the German Aerospace Center (DLR) headquarters in Germany to further their communications regarding the SOFIA program.

The flexibility of uploading and managing content was another win for NASA. This allowed the user administrators to make real-time updates to their content via the cloud-based software and have it automatically start playing on their screens.

Implementing digital signage also gave their facilities a more modern feel. NASA is already noted as a tech-savvy organization, in which digital signage conforms, allowing their communication method to be tech-savvy as well.

Overall, digital signage has become an effective communication method for NASA facilities. It has provided an easy to use, easy to deploy, easy to maintain solution to help achieve the goals of the SOFIA program.

"**Being able to share mission timelines, weather and other critical information to all of NASA SOFIA’s worldwide locations, Mvix Digital Signage solutions has become an integral part of our program operations.**"

Edward Harmon, NASA Mission Manager
About the Companies

About Mvix

At Mvix, our love for technology drives who we are and what we do. For over a decade, we have been a leading provider of content-rich digital signage solutions that create memorable digital experiences in corporate offices, healthcare facilities, school campuses, restaurants and more.

Our focus is on cost-effective, feature-rich, cloud-hosted solutions that, coupled with our engineers and creative team, build digital signage networks that turn browsers into customers and employees into brand ambassadors, all while enhancing brand awareness. Our software, XhibitSignage, recently won the InfoComm 2017 Best of Show Award - Digital Signage.

About NASA’s Ames Research Center

NASA’s Ames Research Center, one of ten NASA field centers, is located in the heart of California’s Silicon Valley. For more than 75 years, Ames has led NASA in conducting world-class research and development in aeronautics, exploration technology and science aligned with the center’s core capabilities.