

CEN23MA034

OPERATIONAL FACTORS/HUMAN PERFORMANCE

Attachment 5

Interview Summaries with EAA and Sun-N-Fun Personnel

November 22, 2023

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Sun-N-Fun Interview Summary

Interviewees: John "Lites" Leenhouts, Greg Gibson

Representative: N/A

Date, Time: 31 May, 2023, 1430 EST; Location: virtual

Interviewers: Jim VanDerKamp¹, NTSB; Sabrina Woods, NTSB

To better understand how different airshow operators produced their shows, the operational factors and human performance investigators had a meeting with two of Sun 'n Fun's airshow executives. Greg Gibson had been a promoter for ten years and he had been the Sun 'n Fun air show coordinator for 5-6 years. At the time of the interview, he was building airshows on his own and did contract promotion for airshows. He was also the Deputy for the Association of Professional Operators of Warbirds. John "Lites" Leenhouts had worked airshows since the 1980s and was the former CEO and President of Sun 'n Fun Aerospace Expo and the Aerospace Center for Excellence. He had been an airshow performer for static displays and flights, and had been responsible for the Sun 'n Fun airshow for 11 years.

When asked who was ultimately responsible for the airshow production, the execs said that in the early days of the airshow, the air boss was their primary source for acquiring acts and aligning those acts in a schedule. Promoters would put in a "wish list" of who they would like, however the air boss created the airshow with the approval of the promoter. They said that times have changed so that now the producer acquires those acts and the air boss is responsible for organizing those acts in the show.

When asked if they knew the air boss hired to run Wings over Dallas, the execs said they knew his name but had not worked directly with him before. They said they were very familiar with that air boss's father (and partner in their air bossing company). The execs stated the father's style of air bossing was no longer something they believed was appropriate. They were concerned that because the father had a direct role in training the son, the son's style would be similar to that of his father which is why they never sought the him out.

The execs mentioned several different air bosses whose styles they found no longer compatible with how they wanted the Sun 'n Fun airshow to be executed. They likened those air boss styles to the "wild west" and gave various examples. The air boss would: switch out from what was briefed (in the morning prebrief); bring trainees to the platform and walk away leaving the trainee unattended; wait until the last minute to apply for the airshow waiver from the Flight Standards District Office; fail to run the show in accordance with the schedule; and wouldn't verify paperwork pertinent to the safe

¹ The Operational Factors Investigator that took part in this interview left the agency shortly thereafter and was replaced by another on June 27, 2023.

conduction of an airshow (e.g. SAC² or FAST³ cards). The execs stated they would not be made aware of the issues until after the airshow concluded. They said their expectation was for the air boss to execute and stick to the plan with deviations for maintenance issues only. Acts were to be deconflicted by altitude, airspeed and aircraft performance, and it was made very clear in the prebrief what was to happen during the show. The 7711.2 (airshow waiver) would be in no later than 90 days prior to the airshow. The air boss would have a copy and sign off on any emergency actions that would be developed and while he or she would not likely be there for initial tabletop exercises, he or she would be there for the table top exercise prior to the airshow practice day. The producer was the person responsible for getting the exercise information to the performers. The execs said they currently use an air boss they feel meets their expectations.

When asked about the airshow prebrief, the execs said that some air bosses were “old school” and that their briefs were “ok” but left room for questions. Specifically citing the accident air boss’s father as an example, the execs said that performers would walk out of that brief not knowing what the plan was. They said [the father] would allow for a lot of “joking around” during the briefs. When asked if the meetings were mandatory, both men stated if the performers don’t attend the brief, they don’t fly but at times there were issues with getting teams (consisting of two individuals or more) to come to the brief as a group.

Mr. Leenhouts believed the industry needed to have a procedural book on how to conduct an airshow “that everyone can follow so we have consistency across air boss performance”. He said there needed to be a standardized methodology for the prebrief and for flying what was briefed. He felt some air bosses treated airshows with a “circus” mentality meaning if “one ring wasn’t performing, then they would just switch to another”.

When asked about what safety measures were built into the airshow choreography, the execs said the Sun ‘n Fun organization was working on a procedural book they hoped would be ready for the International Council of Air Show for their 2023 annual conference (typically takes place in December). In the procedures, items like airspeeds, altitudes, aircraft timing, the briefing checklist and a minimum separation of 500 feet would be required for all non approved-maneuvers packages performances.

When asked about what Sun ‘n Fun expected from their air boss in terms of behavior, they said that he or she should be professional and have knowledge about the capabilities of the aircraft and their pilots. Mr. Leenhouts said the air boss was responsible for bridging the gap between aircraft/pilot capabilities and entertainment. He stated there should not be “a lot of chatter” on the air boss frequency.

When asked how Sun ‘n Fun expected their performers to behave, they said that if performers waived from the proposed flight plan or displayed a bad attitude, they would not be invited back to fly for the airshow. The execs also stated the first line of

² Statement of Aerobatic Competency Card

³ Formation and Safety Team Card

defense was other performers. Those other performers had to be willing to call people out and they had to have an air boss who was willing to call people out.

When asked what recourse a performer had if he or she had a complaint or concern, the execs said those performers could go to their peers, the air boss, the airshow producer or even ICAS, depending on the issue. Mr. Leenhouts said “rank has no privileges” but acknowledged that not everyone might be comfortable bringing up their concerns.

When asked what after actions they take post-performance and at what interval, the execs said they get together about a week after the airshow and debrief how they feel the show went. They actively engage the FAA in this lookback and try and validate what they believe occurred. They use that time to address any concerns and build strategies for how they intend to fix what was wrong.

When asked if Sun ‘n Fun allows for for-revenue flights during the airshow, the execs said they once did however (before the time of the interview) have stopped. Before, they would launch a bomber flight prior to the airshow that would come back and land during the airshow. At the time of the interview, Sun ‘n Fun practice was to launch before the airshow and recover after the airshow concluded.

Interview concluded at 1540 EST

Experimental Aircraft Association Inc (EAA) Interview Summary

Interviewees: Sean Elliot, Rick Larsen, Tim Fitzgerald, Boyd Martin and other senior leadership

Representative: N/A

Date, Time: 17 May 2023, 1400 EST; Location: virtual

Interviewers: Jim VanDerKamp⁴, NTSB; Sabrina Woods, NTSB

EAA's AirVenture is a multi-day event that showcases both certificated and experimental aircraft. The event features a multi-day airshow that consists of varying acts to include warbirds, aerobatics, modern military aircraft demonstrations, parachutists, and pyrotechnics. On May 17, 2023 the operational factors and human performance investigators met with Sean Elliot, EAA's Vice President of Advocacy and Safety, and several other members of EAA's senior leadership team to learn more about how EAA conducts the airshow portion of AirVenture.

The team said that several months prior to the event, the lead air boss would talk to the warbird community and with EAA's airshow managers to determine what their plan would be and how they wanted to choreograph their performances. The final choreography would be shared with each performer in the briefing just prior to the show. When asked about what safety measures were built into the choreography, the team stated they deconflicted acts laterally with a minimum vertical separation of 200 ft. Different flights would operate at different altitudes and the goal was to not have varying speed aircraft together. The air boss would put faster aircraft at a higher altitude and on a predetermined flight path.

The team said they use eight air bosses for the entirety of the airshow week. The air boss chairman would recommend a list of potential air bosses for the Oshkosh Advisory Team – a team of airshow experts that vet, recommend, and mentor the process – to discuss and then pick from. For AirVenture, EAA uses a minimum of three air bosses (one lead and two “mini” bosses) to be on the stand at any one time. For the lead bosses, two different individuals would control the warbirds versus the other acts. The Oshkosh Advisory Team was also the group responsible for vetting and picking what performers were to perform at AirVenture.

When asked about air boss experience, the VP and his team stated that most of their preferred air bosses have air traffic control (ATC) experience, although some might have a control tower operator certificate from ATC. They said all their air bosses met the requirements of the FAA Letter of Authorization to be a recognized air boss.

⁴ The Operational Factors Investigator that took part in this interview left the agency shortly thereafter and was replaced by another on June 27, 2023.

The team said on each day of AirVenture there was a 0730 ground operations meeting where all the chairmen from various areas met to go over the plan and discuss whatever concerns they might have. At 1130 a performer safety brief conducted was by the air boss(es) with at least one representative from each performance in attendance. At the end of the day there was a debrief to talk about the event and how things went. The Oshkosh Advisory Team would discuss anything that went wrong and decide mitigations or a way to improve. After the entire event was over, the Team would meet to discuss how successful the event was overall, create after-actions, and identify potential fixes. They VP said they would often discuss the issues they had with other airshow providers at the National Convention hosted by the International Council of Airshows (typically held in December).

When asked about EAA's relationship with the International Council of Airshows (ICAS), the VP said EAA was a member and would use ICAS as a resource to go to if they had questions about the regulatory requirements for air bosses and airshows. This would be in addition to going to their own FAA resource for those questions. They said ICAS would provide insight and guidance to anyone who might be new to an airshow or for issuance of the air boss letter of authorization.