

## Back Door at Airports

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### Abstract

The security at the commercial side of airports have had an insurmountable amount of attention but the private side of these airports needs additional attention for security of aircraft and people. Terrorists have shown great interests in the use of general aviation as weapons delivery vehicles. A need for security managers to address the elements of people, processes, and facilities at the private institutions that control these types of aircraft exists.

**Keywords:** Aviation corporate aviation; General aviation; Private aircraft; Airport security

### The Back Door at Airports

The traumatic events of September 11, 2001 (9-11) had a major effect on the commercial air carrier service and created the need for the Aviation and Transportation Security Act (ATSA) in November of 2001 (ATSA, 2001). The Transportation Security Administration (TSA) was created concurrently to ensure the freedom of movement of people and commerce about different modes of transit, but the specific transportation system of aviation has received the most attention because this was the specific target of the terrorist acts of 9-11. Although this system has been incorporated in-depth into our commercial side of airports, vulnerability of the private side of these same airports remains a concern. Larger aircraft, such as business midsize and large aircraft could be used in the same manner as commercial aircraft [1]. Access to private aircraft provides little resistance in terms of security.

### Background of Problem

Although the TSA does have a presence at the private Fixed Base Operators (FBO) and private facilities at the airports, it seems to be just that of a presence. The access to a private aircraft is easy to obtain and with little planning. Terrorists can get a license to fly an aircraft in as little as three months and have full access to these types of assets. An examination into the licensing program is warranted with an in-depth background investigation not unequal to a security clearance.

Furthermore, the danger of ground personnel having open access to the aircraft poses a real threat to the integrity of the system. As mentioned above, it is easy to obtain a private pilot license and take an aircraft for a flight, but it is even less tasking to obtain access to the flight line and all of these types of aircraft as a maintenance person or representative from an FBO. A real concern exists since access is easily obtainable to the private small aircraft at airports. Implementations of procedures and policies need to be put into place to mitigate the risk of another attack on our nation using these types of transportation.

The TSA is a necessary measure at airports and aviation facilities in light of the terror attacks of 9-11. Although the presence of this agency is well embedded in the commercial side of our air transportation system, the vulnerability at the private side of our airports remain. Access to the flight line and more importantly private aircraft need more restrictions to prevent a future attack using small corporate type aircraft.

### Statement of the Problem

The aircraft resources available at FBO's and private facilities are significant. These aircraft and equipment can be used to initiate another

attack on our nation and its economy, these issues should be addressed. Although security at the general aviation side of airports have had significant improvements, it still leaves a lot to be desired [2]. The new technology of weapons of mass destruction can easily be brought onto a small jet and delivered anywhere in the United States. A systematic process needs to be put in place to mitigate these risks. They should include an in depth background check similar to a security clearance. The need to eliminate this threat is real and steps need to be taken to prevent the access to private aircraft with intensions of causing terror need to be addressed.

### Significance of the Problem

The driving factor behind the heightened security at airports and other types of transportation systems stem from the events of 9-11. The terrorist attacks that were completed that day opened the eyes of the nation to its vulnerabilities and called for immediate action for the safety of the nation. Security at the airports was the number one concern because it was the instrument used to launch attacks by terrorist. The development of the Aviation and Transportation Security Act (ATSA) was created in November of 2001 (ATSA, 2001). This document laid the groundwork for the TSA and other agencies to protect the nation from future attacks incorporating state-of-the-art technologies and thousands of personnel. Airports are secure on the commercial side, but the vulnerability at private facilities and FBO's still have a long way to go and could lend itself to grave security gaps [1].

### Review of Relevant Literature

Since the birth of the TSA in 2001, the security at our airports has dramatically increased. The presence of TSA agents and the utilization of new equipment and technology have made additional attacks on commercial aircraft halt. The government has incorporated state-of-the-art equipment to thwart attacks on the nation using commercial aircraft, but a loop hole to the airports remain on the private side. A great concern should exist from government officials; the security at these private facilities especially with past attempts to deploy these types of aircraft with chemicals and explosives.

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The private side of an airport presents General Aviation (GA) aircraft. These aircraft consist of light, medium, and heavy types. Most of these aircraft are small and used for leisure, but the most concerning types of aircraft at the private access airports are those of FBO's and Corporate jets such as the Gulfstream V that could pose a real threat in the hands of terrorist. This security vulnerability has been realized by the National Business Aviation Association's (NBAA) which has inspired them to address these all the elements involved. In 2003, Sheehan's book [3], Business and Corporation Aviation Management lists the NBAA suggested best security practices for business aviation. Only the People and processes as well as facilities are listed below.

### People and processes

- Require an accurate and accessible passenger manifest for all trip legs.
- Only company personnel and authorized guests, identified in advance, are allowed to board a company aircraft.
- Passengers or flight department members must maintain positive control of luggage.
- Positively identify all luggage and match luggage to specific passengers (color-coded bag tags can be helpful).
- Crew members must display photo IDs.
- Establish a security champion role.
- Have a security plan specific to your location and operation.
- Develop, maintain, and exercise an emergency response plan and its associated resources.

### Facilities

- Ensure home facility perimeter security with effective fencing, lighting, security patrols (as appropriate), gates, and limited-access areas.
- Ensure that external gates and doors are closed and locked at all times.
- Require positive access control for all external gates and doors.
- Close hangar doors when that area is unattended.
- Secure all key storage areas.
- Have an access control management system for keys and passes.
- Confirm the identity and authority of each passenger, vendor, and visitor prior to allowing access to facilities and aircraft.
- Accompany all visitors away from secure areas.
- Require a picture ID of any unfamiliar or unaccompanied visitor or vendor.
- Post emergency numbers prominently around facility.
- Ensure easy access to phones or "panic buttons" in various facility locations.
- Confirm security of destination facilities-showing preference for those meeting or exceeding National Air Transportation Association (NATA) guidelines.

The most important elements at the private facilities and GA are people, processes, and facilities. Ensuring the personnel coming and

going from the GA airport have good intentions with their presence can be a difficult task. The fact that people with access to these types of facilities do not always have the best intentions makes the elements of processes and facilities key factors in security. The elements of the best practice list are recommendations by the NBAA to best secure the private aircraft and facilities.

The best practices for security are great procedures to follow, but require a governing force such as the TSA to incorporate security equipment and standard procedures such as screening used in the commercial side of the airports. The process recommended by the NBAA is similar to the TSA's procedures for commercial aviation; the government is just not enforcing it to the extent that it is on the commercial side. The TSA is concerned, primarily with the commercial side of transportation systems, although their mission is to ensure the freedom of movement of people and commerce, it seems commerce is taking a high priority.

GA aircraft have been of great interest in the past by known terrorist. A crop duster pilot in Florida identified Mohammad Atta, the suicide hijacker from 9-11, as a person who had approached him inquiring about the purchase and operation of crop duster aircraft. Zacharia Moussaoui had been arrested prior to 9-11 because of his suspicious activities of training in large aircraft simulators and had also inquired about general aircraft while living in Norman, Oklahoma. Furthermore, Moussaoui pleaded guilty to conspiring with the suicide hijackers of 9-11 [4]. These instances are a few of many examples relating to terrorists showing interest in ways they can use chemicals and explosives in general aviation aircraft for their next terror attack.

The Central Intelligence Agency (CIA) reported that one of the terrorists who masterminded the 9-11 attacks originally propose a plan to use GA aircraft loaded with explosives to carry out the attacks. In 2003, DHS reported that Al Qaeda terrorists were in the late stages of planning to use GA aircraft to carry out an attack on the US consulate in Karachi, Pakistan and further use these types of aircraft to initiate attacks on US warships in the Persian Gulf [5]. An obvious need for GA safeguarding is required, especially with the enhanced security at the commercial side of airports. The security at commercial aviation airports deter terrorists from trying to use the commercial aircraft as a weapon, but make GA an even higher priority for the terrorists since this may be the most likely means to deliver such catastrophe.

The TSA has made leaps and bounds in the GA side of airports, but wide gaps in security lends opportunity for terrorists to capitalize on these available assets. For the most part general aviation security has not been upgraded substantially. Pilots, luggage, passengers, and most cargo are not subject to any security screening procedures at GA facilities [6]. In 2010 Department of Homeland Security (DHS) Secretary Janet Napolitano and TSA Administrator John S. Pistole launched a campaign with two enhancements. The 'If You See Something, Say Something' campaign and a system that streamlines passengers entering and exiting the US through a single process [7]. This campaign is one that will take action on informing the public signs of suspicion and how to react and report them. This will include law enforcement authorities as well as civilians.

### Conclusion

The GA system has been, is, and will be an interest for terrorist in the future. Instances in history have shown us, this is a real threat and needs real attention. The Government agencies are showing some concern for GA facilities, but still lack the understanding of the GA system

to make them work. The TSA procedures used at the commercial airports can lend great insight for security practices at the GA side, but alterations need to take place to make them a success. The Government shows concern for the security at these facilities and the implementations apparently show some signs of success in the fact that GA has not had a catastrophic incident involving terrorists to date. Although this is true, it seems the efforts are half hearted and not really taken seriously as a threat to national security and therefore the implementers are just going through the motions.

### Recommendations

An extensive concentration and oversight needs to take place at the GA facilities, perhaps a branch of the TSA. This branch would be solely responsible for the security of GA territories to incorporate a robust screening and detection security system. With the over population of the TSA this would be a great opportunity to spread some resources around similar to the TSA screening other forms of transportation. The TSA needs its mission to be revisited; its mission is not the commercial aviation transportation administration, it is responsible for all transportation of commerce as well as people. Lawmakers need to work with a proactive and predictive framework when it comes to incorporating

security measures at GA facilities. The TSA needs to incorporate security with the exuberance it did with commercial aviation after 9-11. The assumption that if it could happen, it will happen is a successful approach when it comes to security and safety.

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