

## **Guns & Pilots & Interceptors A Professional System**

### Synopsis

Shooting any commercial aircraft down should, and hopefully would, be a very last choice. We should be developing, planning, budgeting, installing and implementing a comprehensive set of systems and conditions where it will be highly unlikely that we will ever have to take this extraordinary egregious action. We need to install a number of systems on our U.S. commercial fleet to avoid having to live the nightmare scenario of shooting down a commercial airliner with a couple of hundred innocent passengers and crew onboard. These preventive systems and procedures would involve people and procedures, specialized equipment of all transport-category aircraft and guns and pilots.

Speak of guns on airplanes and most people become concerned, nervous, agitated or combative. Most pilots of commercial airliners used to have the same reaction - that was before September 11. Actually, guns on commercial airlines are nothing new. FBI Agents have carried their handguns on U.S. domestic airline flights for several years on the basis that they will need them immediately on arrival at their destination airport. U.S. Federal Air Marshals (and their predecessors) have carried guns on selected U.S. domestic and international airline flights since the early 1960s. To date there have been no serious incidents resulting from this policy.

Mention guns on airplanes in the international scene and the reaction is generally even more negative than the U.S. - depending on the country represented<sup>1</sup>. Jordan and Israel are notable exceptions having used Air Marshals for over three decades. Both countries' air marshals have successfully used their weapons on their State Airlines to kill hijackers. Israel did so in 1970 to kill hijacker Patrick Arguello, a Nicaraguan, but one Air Marshal hesitated to shoot the other hijacker Leila Khaled<sup>2</sup>, who had two grenades in her hands with the pins pulled. This air marshal has forever been roundly condemned in Israel for his failure. Lihai Khaled is alive today.

Eight Jordanian Air Marshals failed in their duties in June 11, 1985 while in a stopover at the Beirut International Airport. The eight were surprised by five hijackers who carried military assault rifles, ammunition bandoleers and hand grenades. This egregious failure allowed hijackers to take command of the aircraft while the Air Marshals were beneath the aircraft on the tarmac. The eight reportedly spent time in a Jordanian prison for their failure to properly discharge their duties.

This was undoubtedly remembered by the Jordanian Air Marshal on July 5, 2000 on a flight from Amman to Damascus when a deranged individual attempted to hijack the aircraft to Germany. The would-be hijacker had smuggled his handgun and grenade onboard using his two children's toys. He evaded detection of the weapons by objecting to the Amman Airport screener's attempts to examine the children's toys. The Amman

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<sup>1</sup> The UK is one of the countries most adamantly opposed to guns on aircraft given their long history of the control of guns within the UK.

<sup>2</sup> *UK Confidential*, Monday 1 January 2001, Transcripts: The guerrilla's story

Airport security screeners passed the would-be hijacker, his two children and his brother, who knew nothing of this brother's intent, through the screening point. Shortly after departure the hijacker stood and then pulled the "pin" from the grenade and with the grenade in one hand and the handgun in the other announced his hijacking of the aircraft. The Jordanian Air Marshal responded by shooting the hijacker dead. The grenade exploded injuring 15 people but did not rupture the pressure hull of the aircraft which subsequently returned safely to the Queen Alia International Airport in Amman. The screeners are now reportedly spending time in a Jordanian jail for their failures.

Unfortunately when guns in airplanes are mentioned, most people seem to visualize a horrendous scenario of weapons discharging inside a passenger cabin and numerous passengers being injured, pilots killed, or an explosive decompression of the aircraft. As noted in the two cases cited earlier an explosive decompression is an unlikely reality if proper precautions are taken. The facts are that a bullet hole through the skin of an aircraft is just that, a small hole that allows a small amount of the pressurized air to escape. The pressurization system of the aircraft is capable of maintaining cabin pressurization with a number of handgun bullet holes in the skin of the aircraft. The danger is hitting a vital component of the aircraft such as the engines, main control cables, shattering a window, killing the pilot(s), etc. To minimize this possibility, the persons allowed to carry guns in the cabin of an aircraft are supposedly trained on what not to do as well as what they can do. As an added safety feature the ammunition used by U.S. Air Marshals<sup>3</sup> will do maximum damage to soft tissue and minimum damage to metal structures.

Approximately 60% of U.S. commercial airline pilots have extensive military flying experience. Some of the ex-military pilots have been aircraft commanders on bombers that carry nuclear weapons, fighter pilots that have engaged enemies in combat with sophisticated weapons systems, etc. Most of the remaining non-military trained and experienced airline pilots acquired their status by a substantial amount of flying time in General Aviation aircraft including small private airplanes, air taxis, corporate jets, etc. Because of the extent of physiological and psychological medical requirements, and the annual and semi-annual physical exams, commercial pilots are also a very stable group of people.

During medical exams, pilots of commercial aircraft have to report speeding tickets, any charges of driving while under the influence of alcohol or prohibited substances, etc. Pilots have to sign sworn statements attesting to the accuracy of the data they submit for their annual or semi-annual physicals. Subsequent discovery of a false statement is basis for suspension or revocation of an individual's pilot's license. As this constitutes economic suicide for a commercial pilot the accurate reporting of required life events is not something that is taken lightly.

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<sup>3</sup> This was previously the standard – some reports indicate that this is no longer the standard in use.

Some airlines reportedly<sup>4</sup> have asked the FAA for approval to install Tasers, a standoff stun gun in their cockpits. Tasers are one-shot weapons, and stun guns do not always work as intended as they do not always immobilize the adversary. Consider the probable scenario on September 11 if the pilots had had non-lethal stun guns. Visualize one pilot of the two pilot cockpits standing in the cockpit door of the aircraft and trying to immobilize four or five hijackers rushing him/her at once. Let's assume that the defending pilot was able to disable the first attacker using a stun gun. A stun gun is usually an arm-length weapon (18" & 20" Batons are also available) and the defending pilot would undoubtedly have been injured, possibly seriously, or completely disabled by the first hijacker using a box cutter or knife.

It is very unlikely that the defending pilot using a handheld stun gun, or even a 20" baton stun gun, would have been able to disable the second, third, fourth or fifth hijacker. Tasers, like all other so called non-lethal weapons have operational limitations on their use. The two prongs from a stand-off Taser must hit the intended victim at least twelve inches apart and not more than 36 inches apart to be effective. As the defending pilot is disabling the first hijacker the second is reaching over the first to slash the defender with the box-cutter or knife. Multiple adversaries, as in the 9-11 attacks, would multiply this deadly scenario and the defending pilot is a certain fatality – and the hijacker(s) that have been temporarily disabled by the stun gun will simply join their comrades to continue control of the aircraft. However, if there happened to be an Air Marshal team onboard the aircraft, which is highly unlikely (more on this later); any would-be hijackers armed with edged weapons would probably be killed or seriously injured.

A check with the FBI Academy at Quantico, Virginia will reveal that when teaching "Surviving Edged Weapons Attacks" the defending officer needs to take defensive action whenever an attacker with a knife/cutting blade gets within 7 yards. In this scenario it is still possible, if the attacker gets within 7 yards, for the attacker to still kill the defending officer under some circumstances even if the officer shoots the adversary. At best, the TSA's approval for Korean Air to use Tasers while in U.S. airspace appears to have been a bit hasty. One wonders how much coordination was effected with the FBI Academy, the Secret Service and other Federal Law Enforcement Agencies, as well as major U.S. City Law Enforcement Agencies as to what their experience and policies are with regard to attackers with edged weapons prior to the TSA's approval? This query should include these agencies's experience with stun guns vis-à-vis attackers with edged as well as other lethal weapons.

Additionally, when considering the possible use of stun guns by pilots on commercial aircraft the TSA must take into consideration that even if it is determined that stun guns are effective against edged weapons they are not effective vis-à-vis firearms. In other words, neither the TSA, nor anyone else can determine with certainty what the hijacker/attacker will choose to use as a weapon.

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<sup>4</sup> Korean Air has received TSA approval and United Airlines previously applied but subsequently withdrew their requests.

A number of our commercial pilots are continuing their military service in the Air National Guard and Air Force Reserve. Some of these pilots flew “fighter cap” over Washington, D.C., New York and Chicago in the weeks and months immediately following the 9/11 terrorist attacks. When they are off-duty from their time as commercial pilots, these pilots fly fighters, e.g. F-16s, prepared to shoot-down a commercial airliner full of innocent passengers and crew. The irony of all ironies is that one of these off-duty commercial pilots (whom the DOT and the TSA initially opposed having guns in the cockpit), as a pilot of a fighter aircraft, ends up shooting down one of his colleagues in a commercial airliner.

So, if F-16 fighters and stun guns are not the answer, then what is? I believe that the Federal Air Marshal (FAM) Program is a vital element of the overall U.S. aviation security system. It must be viewed as one element of a multi-element interdependent security system. But, it is impossible to put a FAM, or a team of FAMs on every U.S. commercial airline flight. The U.S. commercial aviation system currently has approximately 30,000 flights each day. We eliminate one-third of these because each team of two FAMs can cover a number of these short multi-segment flights. To cover 20,000 flights per day with two FAMs per flight would require a force of 56,000 air marshals ( $2 \times 20^5K = 40K/5 = 16K \times 7 = 56K$ ).

I will readily concede that 56,000 Federal Air Marshals, or anything approaching this number, is an unrealistic figure. Even one-third that number is ludicrous, but we don't need to really approach these numbers to see the economic unreality of this course of action. Simply building a force of 1,000 FAMs is prohibitive in terms of costs (a minimum of \$100 million annually) and would only provide a fraction of the level of protection needed. The alternative is to maintain a small cadre of FAMs, assign them to selective flights as necessary and take three other complementary actions. These complementary actions are: 1) provide a means that enable pilots to protect themselves and the integrity of the cockpit, 2) take advantage of law enforcement officers traveling on U.S. airliners, and 3) put the Federal Air Marshals in charge of the pilot air marshal program, i.e. the Federal Flight Deck Officer (FFDO).

Looking back to the nightmare happenings of September 11, 2001 why did it take so long to initiate the Federal Flight Deck Officer (FFDO) program and why did the Bush Administration fight the program? Pilots with guns in the cockpit of commercial airliners are necessary to prevent the nightmare scenario of having to shoot down a commercial airliner. All these factors emphasize the need to accelerate the Federal Flight Deck Officer (FFDO) program. Several things need to happen in order to make this a reality:

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<sup>5</sup> While we have 30K+ flights per-day a number are short flights and the 20K number is based on the premise that approximately 10K flights will be covered by FAM teams flying multiple flights. This assumes that 10,000 flights are short-hops (one FAM could cover several segments) this still leaves 20,000 flights. Assigning two FAMs to each of the remaining 20,000 flights requires 40,000 FAMs for 5/7 of the required workforce to cover the 20,000 flights each day of the week. The added 2/7, or 16,000 FAMs would bring the total FAM staffing to 56,000 persons.

1. Enact legislation authorizing commercial airline pilots, in the course of their duties as pilots, to detain, arrest and take lethal action as necessary to protect the integrity of U.S. aviation against unlawful seizure.
2. The functions of FFDOs should be to guard the integrity of the cockpit while they land the aircraft at the nearest suitable airport.
3. The expanded Federal Air Marshal Program should be given the responsibility for implementing the FFDO Program.
4. FFDOs should be issued the same standard weapons and associated ammunition used by Federal Air Marshals.
5. Establish multiple FFDO training centers around the U.S., particularly at airline headquarters and major hub locations.
6. Install ballistics materials to protect vital aircraft components.
7. Authorize any appropriately trained Federal law enforcement officer, and selected state, municipal and local law enforcement officers to carry their concealed weapon on airplanes – provided that they have undergone a minimum level of training involving the use of firearms in aircraft.
8. Authorizing pilots to carry guns will require separate crewmember screening at all medium and larger airports (see section on Trusted Traveler Program).
9. FFDOs should be authorized to carry their weapons from their primary residence to/from their primary duty airport. They would be required to surrender their weapons for safe/secure storage at over-night and international stations and reclaim them when resuming their flight(s).
10. Enact legislation that would “hold harmless” any pilot or law enforcement officer operating within their legal authority while on U.S. airplanes for actions to prevent or counter unlawful interference with aviation.
11. Enact legislation that would “hold harmless” airlines for any action taken by any pilot or law enforcement officer operating within their legal authority while on U.S. airplanes to prevent or counter unlawful interference with aviation.

Concurrent with the acceleration of the FFDO program the Administration and Congress should immediately design and implement a program to accomplish the following:

12. Install covert CCTV cameras in the passenger cabins of all commercial airliners.

13. Install CCTV cameras on the exterior of all transport category commercial aircraft that provides the cockpit crew with views of:
  - a) Empennage
  - b) Upper & lower surfaces of the wings
  - c) Underside and undercarriage of the aircraft, and
  - d) Full views of the fuselage
14. Install CCTV cameras in all commercial aircraft cockpits so that the flight crews and their environment are always visible.
15. Record all CCTV on digital systems and establish time frames for their retention under normal and abnormal conditions,
16. Strengthen cockpit door and install ballistics materials on the cockpit bulkheads (and floor of the B-747).
17. Capability of automatically and/or manually activating a communications transmission system to send CCTV data to ground stations. External communications ports should also be installed on all aircraft equipped with these CCTV systems to allow ground personnel to “tap” into the CCTV system.

The purpose of items 12, 13 and 14 is to create a situation where the cockpit crews have full views of the passenger cabin and the exterior of the aircraft. The intent of these systems is to provide the cockpit crew with as much intelligence as possible about events in the interior of the aircraft without having to leave the cockpit. Likewise, the ability to view the external areas of the aircraft would provide a valuable safety assist to the cockpit crew in the event of a failure or damage to a part, or parts of the aircraft structure. These failures may or may not occur as a result of an hijacking and could occur as a result of a missile attack on the aircraft. In any event, the intelligence on what is happening with the aircraft structure is vital in responding appropriately to any airworthy emergency, regardless of its origin.

The purpose of the capability to tap into the CCTV system from the ground is to provide the U.S. Hostage Rescue Teams with data from inside a hijacked/hostage aircraft. Under the current situation the Hostage Rescue Teams have to operate with a dearth of information on what is happening inside the airplane. Having this capability would certainly result in an increase in the probability of successfully terminating a hostage/hijacking situation on-the-ground with a minimum of injuries to passengers.

The purpose of recording all CCTV systems is to have a capability to conduct a post incident review and assessment of happenings during emergency situations. Including the capability of communicating this information outside the aircraft will aid in identifying hostage takers, determining what action to take if it is suspected that hijackers have control of the aircraft. An example of the capability to view events in the cockpit of the aircraft is to determine if a hijacker is flying the aircraft – this could be a factor in

whether the U.S. Air Defense Command would give the last-resort command to shoot the aircraft down.

And what of foreign air carriers flying in the U.S. airspace and having few, if any, of the foregoing systems? As noted earlier shooting any commercial aircraft down should, and hopefully would, be a very last choice. We now have the situation where none of the foregoing aids are installed on our U.S. commercial fleet – and certainly not on the vast majority of the world’s international fleet of aircraft. As the shoot-down of a commercial aircraft is an absolute last-choice decision we should be developing, planning, budgeting, installing and implementing a comprehensive set of conditions where it will be highly unlikely that we will ever have to take this extraordinary egregious action.

**Billie H. Vincent**

President & CEO

Aerospace Services International, Inc.

14101 Parke Long Court, Suite V

Chantilly, VA 20151-1645

Telephone: (703) 322-1900

Facsimile: (703) 322-1911

E-mail: [bhv@asiwebsite.com](mailto:bhv@asiwebsite.com)

[www.asiwebsite.com](http://www.asiwebsite.com)