

Munich 1972: Lessons of aviation security for Latin America

Munich 1972: Lecciones de seguridad de aviación para mega eventos deportivos en Latino América

Munique 1972: lições de segurança de voo para megaeventos esportivos na América Latina

Martin Fernando Zorrilla Rodriguez¹

ABSTRACT

Aviation security has become a global concern for the international community, especially for authorities, airlines, and passengers. Any catastrophic event due to a security breach could produce unimaginable consequences worldwide. Besides the potential risks comprised of natural hazards, technological devices, and human error, aviation security experts must deal with criminal incidents, war, and terrorism. In the latter case, perpetrators know that the impact of terrorist attacks becomes larger at crowded facilities or means of transportation. This paper intends to describe the event of Munich massacre in 1972 from the perspective of the aviation security, and then, to establish the applicability of its lessons learned to a highly-attended scenarios like the sport mega events (SME), so popular in Latin America.

Keywords: Aviation security. Terrorism. Sport mega events. 1972 Olympics.

RESUMEN

La seguridad de la aviación se ha convertido en una preocupación mundial para la comunidad internacional, especialmente para las autoridades, las aerolíneas y los pasajeros. Cualquier evento catastrófico debido a una violación de la seguridad podría producir consecuencias inimaginables en todo el mundo. Además de los riesgos potenciales que comprenden peligros naturales, dispositivos tecnológicos y errores humanos, los expertos en seguridad de la aviación deben hacer frente a los incidentes criminales, la guerra y el terrorismo; en este caso, los perpetradores saben que el impacto de los ataques terroristas se hace más notorio en

instalaciones o medios de transporte con asistencia masiva de público. Este artículo pretende abordar el evento de la masacre de Múnich en 1972 desde la perspectiva de la seguridad de la aviación, y luego, establecer la aplicabilidad de sus lecciones aprendidas en escenarios muy concurridos como los mega eventos deportivos (SME), tan populares en América Latina.

Palabras clave: Seguridad de aviación. Terrorismo. Mega eventos deportivos. Juegos Olímpicos 1972.

RESUMO

A segurança de voo se converteu em uma preocupação mundial para a comunidade internacional, especialmente para as autoridades, as aeronaves e os passageiros. Qualquer evento catastrófico causado por uma violação da segurança poderia produzir conseqüências inimagináveis em todo o mundo. Além dos riscos potenciais que incluem perigos naturais, dispositivos tecnológicos e falhas humanos, os especialistas em segurança de vôo devem se confrontar com incidentes criminosos, guerra e terrorismo; nesse caso, os autores sabem que o impacto dos ataques terroristas ganha mais notoriedade em instalações lotadas ou em meios de transporte. Este artigo pretende abordar o evento do massacre de Munique em 1972, na perspectiva da segurança da aviação, e assim, estabelecer a aplicabilidade das lições aprendidas em cenários muito concorridos como os grandes eventos esportivos (SME), tão populares na América Latina.

Palavras-chave: Segurança de voo. Terrorismo. Megaeventos desportivos. Jogos Olímpicos de 1972.

I. Força Aérea Colombiana (FAC) – Bogotá/DC – Colômbia. Mestrado em Aerospace and Aviation Technology pela Escuela De Posgrados de la Fuerza Aerea Colombiana. E-mail: martin.zorrilla@epfac.edu.co

Received: 09/30/2019

Accepted: 10/03/2019

1 BACKGROUND

Since the early days of commercial aviation, terrorists have seen the vulnerabilities of the air transportation system, to turn it into a primary objective for their demands. The unpredictability of terrorist attacks, their unthinkable consequences for the international society, along with the weakness of the traditional security measures in commercial aviation, prevent the security providers and stakeholders, to go “one step forward” from these occurrences. However, states and security experts make formidable efforts to avoid terrorist attacks in the air transportation system, or, in the worst-case scenario, to delay, deter, and mitigate their impact. Therefore, it is necessary to understand the nature of terrorist attacks to preventing the modern nightmare that this terrorism phenomenon represents.

Even though there are many definitions regarding its complex inception, the common denominator for terrorism is the use of ‘violence’ and the ‘threat of violence’ to “spread fear and panic among individuals and societies”, and hence, to achieve a defined objective (KIBAROGLU; ERSEN, 2011). Tilly (2004), for instance, explained that terror in a sociological approach as a

political strategy which involves the asymmetrical deployment of threats and violence against enemies using means that fall outside the forms of political struggle routinely operating within some current regime. (TILLY, 2004, p. 7).

Surrounded by different explanations, terrorism has a basis on the religion, economic reasons, political objectives, socio-structural changes, and almost any motivation inspired by human behavior.

As well as motivations vary in nature, how terrorism manifests itself diverge in cruelty and imagination. Concerning commercial aviation, terrorist attacks range from hijacking aircraft, shooting passengers in airports, and bombing airplanes or crowded facilities. For that reason, the air transport system is considered as a prime target for perpetrators. In analyzing vulnerable security conditions of commercial aviation, Harrison (2009) found some reasons to look at aviation as a lucrative target for terrorists: a) It is a powerful symbolic target; b) It provides an international stage for the event; c) It provides global media exposure; d) It is relatively simple to access; e) The powerful consequences of breaching security are catastrophic for both the airline and the state (victim); f) It could be politically embarrassing for the state; g) It is a useful tool for revenge; h) It is an effective tool to achieve

demands. Likewise, Duchesneau & Langlois (2017) added other explanations about understanding why terrorist have targeted civil aviation like, i) It projects a global reach (an aircraft behaving as a guided-missile); j) It has a high lethal potential, and a high possibility of affecting nationals of several countries; and finally, k) Any attack impedes interconnectivity, disrupting global air transport.

The impact of terrorist attacks becomes larger at crowded facilities and systems of transportation, two inherent characteristics of commercial aviation. Perpetrators take advantage of factors such as a high concentration of people, “time-consuming” procedures employed in the aviation security measures, public access entrances and exits effectively easy at airports, and high mobility of potential perpetrators, which increase the vulnerability of this threat. Many security measures appear weak facing extremist actions due to the inability of detecting explosives, small weapons, and dangerous materials; with these conditions almost any place becomes an affordable target for a possible terrorist attack, being commercial aviation one of the most critical.

Although the commercial aviation activity is already difficult to protect and support for the security agencies and stakeholders, the context becomes more complex when there are highly-attended concentrations outside the air transport system like in sport megaevents (SME) such as Olympic Games, the World Cup, or crucial games within a regular season. The hosting of an SME brings about a growth in employment, tourism, spending, and media coverage, but also increases the risk of terrorist attacks as the event itself attract important amounts of media attention. Unfortunately, there is evidence that perceptions of increased hazard related to safety may affect tourists’ future decision making to attend or travel to an SME (KIM; CHALIP, 2004; GEORGE, 2012). This was the case at the 1972 Munich Games, where the international attention achieved by the attack escalated beyond the sporting scene. The outcomes demonstrated that terrorism could be an effective method in challenging governments, that hence, have had important repercussions in aviation security since then.

Aviation security systems, particularly those involved in protecting passengers either onboard or at airports, continue to strengthen their functional capacities, principally by developing cutting-edge technological advances and enhancing international cooperation. These steps towards a more robust security in the air transport system have mainly taken place in developed countries; nevertheless, little is known about the effects on the aviation security systems that the 1972 Olympics in brought about for aviation and its connotations for

a developing context like in Latin America, where these initiatives can be successfully replicated. The need to share the takeaways of events like in Munich 72, in the region of Latin-American where sporting events are lived with great fervor, could be a way to accelerate learning and rollout of proactive measures to make commercial aviation safer.

2 LITERATURE REVIEW

The relationship between aviation security and terrorism have fostered a wide variety of research across several contexts to understand their dynamics. Dempsey (1987) undertook an exhaustive review to the relationship between terrorism and commercial aviation since the dawn of the aerial activity, focusing on piracy and counter-measures to prevent it. Other authors (WELLS; YOUNG, 2004) have stated that, its early beginning, back in the 1930s, airplane hijackings became one of the options in pursuing political asylum by desperate individuals, which escalated to a huge threat with the media involvement by the early 1960s. Hijacking evolved to become the most prevailing terrorist behavior, even though its goal were focused on disseminating political propaganda, especially after de 9/11 incidents (SALTER, 2008). Likewise, airports have been considered as a “high-value objective “by terrorist groups. In the early 1970s, the suicide attacks at public airports in Munich and Tel Aviv confirmed how vulnerable the facilities are, facing this kind of threat. The period from 1970 to 2016 registered by Duchesneau and Langlois (2017) was characterized by several terrorist airport attacks which consistently fluctuated between 0 and 10 per year, with peaks in 1984-1986 (Rome and Vienna attacks), 2001- 2003 (Sri Lanka attack), and 2016 (Brussels an Istanbul attacks).

Also, the factors associated with terrorism have been widely researched in other spheres. In the psychological field, Gill et al. (2013) investigated the surrounding variables which generate “the inventiveness” in terrorist groups and cited elements such as the necessity of a sympathizing context, the ideological momentum, and ability to achieve their goals. The global community, not only since the mid-twentieth century but now, has faced airport security as an intricate system which demands adaptability, proactivity, and imagination to mitigate all possible effects of terrorism. Giulianotti and Klausler (2012) explored the interaction between sport and terrorism, concerning sport mega-events. Their discussion was centered on defining the epistemological and methodological problems in the concept of “terrorist” and hence, the ways in which states have designed counter-terrorism strategies. Jayawardhana (2016) studied the impacts of terrorist acts in sport mega

events and the required actions to ensure security, using the Munich 1972 attacks as a starting point. The research led him to conclude that organizers should use many strategies to diminish the treats of terrorist attacks such as introducing new technological equipment, establish new polices and legislations.

3 MUNICH 1972: WHEN TERROR OVERCAME SECURITY

Many terrorist attacks along the XXI century have served to generate academic debate around the terrorism management concept; however, the 1972 Munich massacre could be an inflection point for the security assessment and the counter- terrorist prevention. Other than sport, the Munich Games were the focal point of many forces where many interests were at stake: an infamous wall divided Germany itself; the United States-Soviet Union political tensions merged with athletic competitions due to the Cold War. The African nations rejeted Rhodesia so they threatened to boycott if this nation had participated. The escalating situation in Southeast Asia and the subsequent disappearance of South Vietnam, and finally, the rising phenomenon of hijacking aimed at commercial aviation as a vulnerable target, which forced to negotiate with antagonist countries (ELZEY, 2004).

Despite the conflictive context, West Germany, the host country, envisioned the Munich Games in such a way that they were considered as “the Olympics of brotherhood”, but the terrorist threat was neglected. Determined to change the image of Nazism and the Jewish Holocaust, Willi Daume, president of the German Olympic Committee, planned and designed the Olympic Village as a “relaxed and friendly space, open and sociable community, tolerant and open-minded environment” (ELZEY, 2004). However, to the frustration of international delegations, security and the Games’ protection funds were less than \$2 million, deploying a” security force of a few thousand, most of them were unarmed (MACDONALD, 1999).

On September 5, 1972 eight terrorists of the Palestine Liberation Organization (PLO) broke into the Olympic village and kidnapped eleven Israeli athletes, executing two immediately and taking nine others as hostages. The terrorist group, who called themselves ‘Black September’, demanded the release of 236 Palestinians detained in Israeli jails and their safe and imminent transfer to any Arab country. Their demands forced to kill a hostage every two hours until they were met (FULLER, 2003).

After 15 hours of agitated negotiation, the Germans arranged the air transportation of the terrorists and

their hostages on two helicopters to a near airbase, for subsequent transfer to Egypt, where the release of hostages would occur. Without knowing the refusal of Egypt to allow the landing (FULLER, 2003), the West German police, had set up an ambush. In an improvised military operation at the helicopters' arrival, their snipers killed three terrorists in the open, but some of them still with the Israeli hostages, began to kill the athletes in retaliation. The outcome of the hostage-release operation was as unacceptable as it was deplorable: notwithstanding the neutralization of five terrorists and the capture of the other three, all nine Israeli athletes were assassinated.

Politically, the effects of this event were devastating. Beyond the competitive spirit was shattered and sportsmanship was undermined, there were other major consequences. The fact emboldened terrorists to the point that hijacking turned into a "showcase" to raise their demands. The immediate Israeli response was the airstrike over Palestinian camps and a selective execution to the OLP's leaders across Europe (ELZEY, 2004). The Games heated up the Cold War between the United States and the Soviet Union, agitating geopolitical scenarios such as Southeast Asia, Africa, and South America. According to Elzey (2004), in Western countries an anti-Arab sentiment emerged, by linking Muslims as "supporters of killing hostages", meanwhile some media in these nations qualified the perpetrators as "martyrs".

In retrospect, several analyses have stated that major causes of this tragedy could be found from strategic to operational reasons. Some of them argue that the major strategic failure was to put the security at the second level. The 1972 Olympics always were seen by their organizers as an opportunity to wipe out the image of 1936 Berlin's Games where Hitler misused them for political propaganda. Given that the West German Army was not allowed to take part in the security of the Games due to numerous and complex political restrictions, probably the organizers set a relaxed security scheme, giving greater relevance to a "peaceful comradeship" (MACDONALD, 1999). West Germany was not prepared for such a threat, and when it took place, there was a disastrous response.

On the other hand, operational reasons were related to decisions taken in the own conflictive scenario alongside other conditions which propitiated the outcome. Without a centralized command, other factors such as the absence of a prepared an equipped counter-terrorism squad, an improvised rescue operation with volunteers, the lack of control of media broadcasting, and poor communication between authorities undoubtedly affected the mission (ELZEY, 2004).

4 THE ATTACK AND THE BREACH OF AVIATION SECURITY

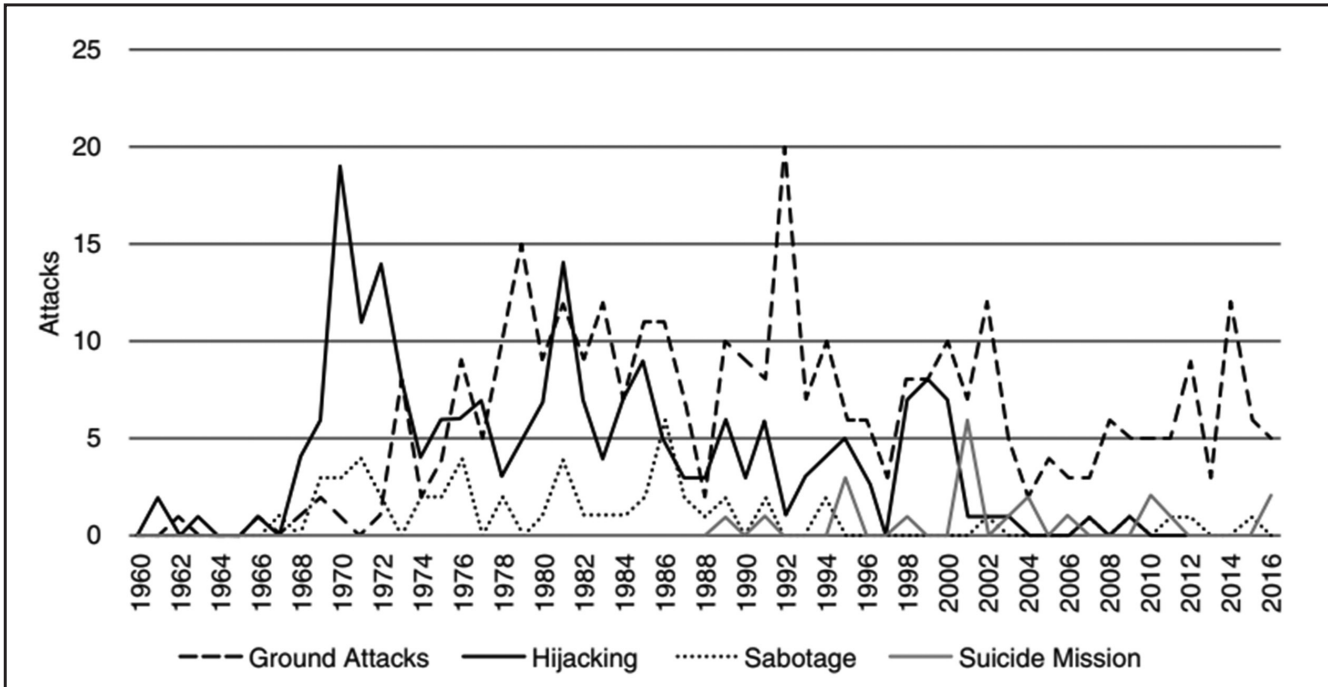
It is not a coincidence that the Munich massacre had had its tragic ending at an airport. From its very beginning, the Palestinian terrorists knew that their escape route would be by air, thus despite their casualties in the rescue operation, the extremists did not contemplate a suicide mission. Even though three of them surrendered, six weeks later were released and exchange by German passengers made hostages by members of the same faction (MACDONALD, 1999). In other words, for the terrorist's perspective, aviation facilities and related assets were so strategic that their utilization would become a strength, depending on the scenario.

Indeed, the Munich massacre occurred during a global security crisis, especially for commercial aviation. In those days, the terrorist menace exploited the system's weaknesses and the incompetence of governments worldwide to deal with hostage-taking scenarios and their questionable way to demand political statements (air piracy). As shown in Figure 1, the early 1970s represented an unfortunate peak in aircraft hijacking, even though cases were less frequent at the end of the decade.

From the terrorists' perspective, civil aviation was considered a perfect battlefield where they may have the advantage, thus several reasons sustained this claim, ranging from strategic to operational aspects. Among the strategic considerations, Jenkins (1989) argued that Israeli commercial airlines contributed to transport spare parts and munitions during the Six-day War, becoming a legitimate target for Palestinian perpetrators. In other cases, airlines were seen as the real representation of nations like embassies or diplomats, so their control was critical in the ideological struggle. On the other hand, commercial aviation provided some operational leverage to terrorists: aircraft may be seized and controlled by few people, and therefore lead to almost anywhere; likewise, airports and airlines are "centers of anonymity where groups of strangers assemble and reassemble" (MARTIN, 2013).

Although no precise statistics exist, this series of events brought devastating effects for the tourism and commercial aviation in general. Passengers' decisions were vulnerable to sudden shifts in international destinations and travel patterns caused by fear of terrorist attacks. A significant reduction of the aviation market and a serious downturn in the travel business made airlines painfully aware that they were part of a major security system and therefore, they cannot afford to be the weakest component in the chain (MARTIN, 2013).

Figure 1 - Evolution of the aviation attacks: 1960-2016.



Source: Duchesneau, 2017.

NOTE: The figure shows that ground attacks and hijackings have been the modus operandi selected for aviation terrorists. It also illustrates that the hijackings, sabotage and suicide missions have abruptly declined to negligible levels since the 9/11 attacks. Retrieved from Duchesneau, J. & Langlois, M. (2017). Airport attacks: the critical role airports can play in combatting terrorism, also available at <https://www.henrystewartpublications.com/sites/default/files/JAMLanglois.pdf>.

5 THE BEGINNING OF THE MODERN SECURITY CONCEPT

The current concept of security concerning the commercial aviation environment has drastically evolved, particularly since the 1972 Munich events. Even though some measures have been implemented after catastrophic attacks (reactive philosophy), nowadays global security is driven towards more preventive actions. One characteristic of the terrorist threat is its dynamics combined with the surprise to exploit minimum failures within the aviation system, which were evident since the terrorist suicide attacks on 9/11. Therefore, today's global efforts are designed to enhance security practices by States and corporations toward every single element in the system, which includes the aircraft, the crew members, airports and the legal framework. As many of the aviation security measures began 40 years ago, it is worth to present the situation at that time, along with the follow-up context in every aspect nowadays.

Because of the tragic events in Munich's Olympics, many States called to the aviation community to close ranks in support of recovering the damaged security situation. In response to the tendency of hijackings

and airline bombings which happened in the late 1960s and early 1970s, aircraft and airport security measures were improved. Governments' answers to terrorism in the 1970s predominantly included legislative measures and a restructuring process of the security services accountable for counter-terrorism. The major outcome was an important expansion and modernization of the aviation security services which comprised aspects such as transnational cooperation, law enforcement measures, and active procedures at aircraft and airports.

During 1972 and 1973, West Germany designed a security program with legislative and organizational adjustments, where the Federal Criminal Police Office (BKA) was the investigative authority to address all forms of terrorism. Hunting for suspected terrorists, the BKA established a cutting-edge computerized search method called *Rasterfahndung*, which cross checked a profile generated from characteristics of known cases with information retrieved from numerous origins (VAN LEEUWEN, 2003). Even with the enormous resources, its efficiency was questionable (VAN LEEUWEN, 2003). Likewise in the US, only a few weeks after the tragedy, President Nixon sanctioned the creation of the Cabinet Committee to Combat Terrorism (CCCT), an extraordinary inter-

agency instrument designed to assemble some state agencies, to fully address the terrorist threat. Despite its short duration, the CCCT was considered the predecessor of the Department of Homeland Security (ELZEY, 2004).

Intelligence sharing was still very weak in the 1970s. Even though several countries suffered terrorist attacks on their territories/or against their citizens abroad, their experiences diverged in aspects such as motivations inspiring acts of terrorism, the nationality of the attackers, the selection of the targets, and the impact of terrorism on public and political life (VAN LEEUWEN, 2003). These factors affected the international interest in preventing terrorism as a common enemy.

Concerning the law enforcement after the massacre, many countries decided to create an anti-terrorist squad as an adequate response to future threats. West Germany implemented a unit called GSG-9 (*Grenzschutzgruppe Neun*), which was successfully tested five years later in Mogadishu, Somalia. There, thanks to its training and operational 86 hostages were rescued from a hijacked Lufthansa flight. Likewise, in France, the *Gendarmerie Nationale* put in service a *Groupe d'Intervention* (GIGN) to perform counterterrorism missions, Meanwhile in Britain, the Special Air Services Regiment (SAS) deployed counterrevolutionary warfare units (FULLER, 2003).

Regarding security at airports and on aircraft, technology became a strategic partner to prevent the threat. In the 1970s, London's Heathrow Airport and New Orleans International Airport in Louisiana were two of the first airports to announce security measures. Heathrow incorporated anti-hijacking measures by installing metal detectors to check passengers and baggage (FAA, 1991). Meanwhile in the U.S, the FEDERAL AVIATION ADMINISTRATION (FAA) authorized an emergency rule making an inspection of carry-on baggage and scanning mandatory for all passengers which were put in service in 1973. X-ray machines and metal detectors became standard devices at airports worldwide, to mitigate possible hijacking and hostage taking events, by detecting weapons such as knives and handguns (FAA, 1991). On the other hand, U.S. Customs Service establishes a greatly expanded sky marshal program with 1,784 agents, whose overarching goal was to infiltrate highly trained officers along with other passengers on board aircraft and to protect the flying public through their especial training. In 1974, the Federal Aviation Administration took over the air marshal program,

giving way to the Federal Air Marshal Service (FAMS) (GRABELL, 2008).

The current outlook, particularly after 9/11, sees international intelligence as powerful tool to identify those individuals engaged in terrorism at all levels of involvement and reveal their safe havens, sources of recruitment, weapons, channels of supply, funding methods, as well as to share key information to disrupt terrorist organizations (CIA, 2003). Even though some problems such as the excessive bureaucracy and professional jealousy remain, international cooperation of intelligence is the only effective tool to fight international terrorist networks.

Commercial aviation security attracted the attention right away after the 9/11 that lingers in the second decade of the 21st century. Airports became the main ports of entry and exit of passengers, and for that reason, strategies such as the screening of documents, and the biometric implementation characteristics are mandatory and essential requirements around the world, even though there are many more.

Nowadays, the aviation security system relies on some technological and procedural layers, some of them complementary, while some are "standalone" measures, but every single layer affects each other (DHS, 2015). The importance of understanding this system relies on the early detection and apprehension of terrorists. Although terrorist attacks may occur at any place and time, the best way to confront it is prevention. Undoubtedly, a successful aviation counter-terrorist strategy does not rely on specific legal measures or technological advances, but on the consideration makes no distinction of nationality.

In parallel, efforts have been taken to focus on legal actions and technological resources on strengthening the counter-terrorism security measures in sport megaevents worldwide. For instance, at the following Olympic Games (Montreal 1976), a temporary immigration security act (Bill C-85) was approved by the Canadian government after the demand by Montreal Olympic Organizing Committee to deport any non-Canadian citizens and who might be suspicious of violent activities (MONTREAL OLYMPIC ORGANIZING COMMITTEE, 1978). Similar programs focused on risk-based security measures by identifying high-risk passengers were designed in Europe, especially at airports and ports of entry. Likewise, aviation in more sophisticated forms, has evolved from a context to be protected, to become an active instrument in the fight against terrorism. Nowadays, most sport megaevents use surveillance helicopters or unmanned aircraft for the

surveillance of the public in stadiums and around the host cities (HASSAN, 2012), as a clear demonstration of the strong relationship among aviation, security, and counter-terrorism measures.

6 THE 1972 OLYMPICS AND ITS LEGACY FOR LATIN AMERICA

Contemporary aviation security concerns may address different parts of the global context, one of which is related to sport megaevents. Although most countries share the same position of strengthening measures to prevent terrorism, areas like Latin America exhibit socio-cultural factors that contribute in the way that violence and terrorism are perceived, and therefore addressed. For example, George (2012) conducted a series of surveys during the 2010 FIFA World Cup where he found that individual factors such nationality can affect the crime-risk perceptions of respondents. Notoriously in this research, soccer tourist from South America and Western Europe felt least safe regarding the social environment around the tournament. In effect, some authors argued that the context in which sports like soccer takes place in Latin America, is strongly linked to such diverse themes as national identity, collective behavior, intellectualism, and war.

This phenomenon can be illustrated back in 2001, when Colombia organized the America Cup, a soccer tournament involving the countries of the region. During the most critical stage of its internal conflict, several aviation security issues negatively affected the perception of the country as a safe place. The most infamous event took place in 1999, when the hijacking of flight 9463 and the subsequent kidnapping of all its 41 passengers and five crew members provoked outrage and fear (BORKAN, 2010). Likewise, a few months before the America Cup, September 8, 2000, a member of the guerrilla groups (Arnobio Ramos) who was being transported to a prison, intimidated the crew with a gun and ended up diverting the aircraft to a remote zone, where he finally fled (KOTLER, 2000). Another incident occurred on January 30, 2001, when Carlos Salazar or “Cristian” according to his alias, disappointed, and bored of being in the guerrilla, decided to desert from the subversive group, for which he went to the hijacking of the aircraft with 26 passengers and four crew on board. The critical and conflictive moment for Colombia, with terrorist attacks, kidnappings and car bombs every day, brought about severe consequences for the competition: two of the invited countries canceled

their participation, and those attendees did it with more fear than enthusiasm; the world cautiously waited for the development of competition in a mantle of enormous doubts.

Latin American countries experience sports intensively; talking about soccer, for instance, one author stated that it “offers the people an opportunity to have fun, to enjoy themselves, to get excited, work up, to feel intense emotions that daily routine rarely offers them” (MANGAN; DACOSTA, 2001). The challenge for Latin America is to be aware of potential hazards for this asset, and the aviation security system among its country members poses many of them.

Just like the passion for sports, social elements in Latin America such as history, language, and culture are binding factors which can improve the aviation security systems in every country and the region. Quite apart from implementing cutting-edge technological advances or strengthening law enforcement measures, the challenge of dealing with aviation security demands an integral approach and layered systems to protect people, aircraft, and facilities, always in constant movement. As a rule, state and security experts have recurrently responded to acts of terrorism, employing new countermeasures, strategies, devices, and procedures to anticipate evolving threats; in opposition, perpetrators have incessantly designed new and innovative ways to overcome those novel security actions with determination. The highly cyclical nature of this context should take advantage of common cultural elements in Latin America to protect society.

As discussed, important technological considerations play a crucial role in preventing threats. Latin-American airports as main entry ports should be provided with adequate surveillance devices, focusing on the screening of passengers and their baggage (carry-on bags and hold luggage), the screening of employees, aircrew, and non-passenger visitors, the control access of restricted areas and surrounding vicinities and the supply chain for cargo and fuel. As well, this provision of technology should not exclusively address on purchasing sophisticated devices from developed countries, but on encouraging the development of hardware, software, and procedures from their researchers, private companies and state agencies. In the same vein, open-access facilities (stadiums, arenas, public areas) should have at their disposal multilayered security systems, that make it possible to identify vulnerabilities and to monitor the social and individual behavior to avoid security breaches instantaneously.

Another substantial issue in aviation security involves training, not only of aircrew, managers or law enforcement authorities, but the general population. Counter-terrorism training becomes one of the tools developed by the state agencies, private companies, and airlines for transferring the knowledge and expertise needed to deal with threats, put actions against terrorism into practice, and once occurred, to overcome the catastrophic event as soon as possible. Practice drills and associated exercises must raise awareness of the critical players in the air transport system and improve their incident handling and response. Likewise, it is necessary to increase the level of contribution of the community regarding these preventive strategies. For example, campaigns like “if you see something, say something” of the Department of Homeland Security in the U.S., aim to involve the community in the adoption of public safety and security measures, through reporting suspicious activities and monitoring potential hazards at public areas.

However, the most significant strategy to address aviation security concerns should be the interstate and interagency collaboration in Latin America. Protecting all the stakeholders in the air transport system lies precisely on the multiplicity of variables that transcend the State borders, especially during mega sport events; such condition must be designed to guarantee that efficient and effective aviation security is built on a system of joint responsibilities, generating many symbiotic, interlocking layers of security; technology and policies regarding collecting data and sharing information must be continuously improved among Latin American countries; the States in the region could replicate initiatives such as API (Advance Passenger Information), by which airlines provide information to the relevant country authorities before their passengers travel on these specific routes, make the air transport plans as secure as possible.

7 FINAL THOUGHTS

Commercial aviation is a constant development environment where new procedures and technologies are needed to guarantee security in aviation. If prevention is the most valuable strategy against terrorism, future technological tools such as biometric identification and data collection would be useful tools to achieve it at airports and aviation assets. Likewise, the Internet of Things and smart environments would enable critical facilities such as airports and check points of borders to share critical information with

international and national agencies. International cooperation should overcome bureaucratic issues to give way to cooperative counter-terrorist networks.

Undoubtedly, the Munich Massacre represented a milestone for understanding how terrorism should be confronted in the international arena. By relegating the security to a second place, West Germany provided to the Palestinian terrorists, the perfect scenario to use the Olympics as a “showcase” for disseminating political propaganda through violence. A combination of lax security measures, lack of counter-terrorist strategies, and a complex decision-making process to address the situation gave way to a disastrous outcome. Likewise, beyond the sports competition, this tragedy took place amid an antagonistic context, in which the Cold War, the Israel-Palestine conflict, even the Vietnam War fueled in some countries the animosity against other nationalities or political ideologies.

However, the Munich Olympics massacre was not an isolated event, but a link in a chain of weaknesses exploited by terrorists. This incident occurred in the rise of hijackings and hostage-takings where airplanes and airports were the most vulnerable targets. Because of those happenings, the aviation market and the air travel industry suffered a significant drop in its business. But maybe the most remarkable consequence was the fear of an unexpected attack and the sense of insecurity, which led to a global effort to address this problem. Likewise, the complexity of the context increased due to the lurking connection between sport and terrorism, and the subsequent terrorist strategy in exploiting the weakness of the security system of a mega sports event.

The package of measures taken by several Western countries comprised the internal reorganization of agencies accountable for counter-terrorist actions, international cooperation and transnational intelligence-sharing, and the inclusion of technological tools in detecting suspicious activities linked to terrorism. It was a joint effort where every single element of the system had to be reinforced to deny the terrorist’s advantage. In many ways, the 1970s decade was the starting point for the development of modern aviation security that 30 years later was strengthened due to the 9/11 attacks.

Finally, it is of enormous relevance that regions like Latin America rethink its conventional approach towards aviation security during sport mega events, taking the lessons learned from the 1972 Olympics in Munich. Because of the highly systemic nature of air transport, efforts made by a single State could become insufficient to address such a sensitive issue. Looking back could be advantageous for several reasons.

REFERENCES

- BORKAN, B. Avianca plane hijackers gets 40 years jail. **Colombia reports**. Medellin, 24 jun 2010. Disponível em: <https://colombiareports.com/el-hijacker-of-avianca-flight-gets-40-years-in-jail/>. Acesso em: 24 jul. 2019.
- COLE, M. G. **Knowledge-based decision making in complex environments**: methodological aspects of proactive airport security management. Barberg: University of Bamberg, 2017. Disponível em: <http://d-nb.info/1079523952/34>. Acesso em: 12 out. 2018.
- DEMPSEY, P. Aerial piracy & terrorism: Unilateral and Multilateral Responses to Aircraft Hijacking. **Connecticut Journal of International Law**, Hartford, v. 2, n. 2, 1987. Disponível em: <https://ssrn.com/abstract=2229426>. Acesso em: 7 set. 2018.
- DUCHESNEAU, J.; LANGLOIS, M. Airport attacks: the critical role airports can play in combatting terrorism. **International journal of airport management**, Londres, v. 11, n. 4, 2017.
- ELZEY, C. C. **Munich 1972**: Sport, politics, and tragedy (Doctoral dissertation). Purdue University, 2004. Disponível em: <http://docs.lib.purdue.edu/dissertations/AAI3166617>. Acesso em: 22 abr. 2017.
- FEDERAL AVIATION ADMINISTRATION. Technical Report n. DOT/FAA/ACS- 89-1[3 1]. *In*: SEMIANNUAL REPORT TO CONGRESS ON THE EFFECTIVENESS OF THE CIVIL AVIATION SECURITY PROGRAM, 31., 1991, Washington, DC: National Technical Information Service (NTIS). **Proceedings** [...]. Washington, fev. 1991.
- FULLER, C. **The rise of the PLO**. *International Terrorism*: p. 25-33. January, 2003. Disponível em: <http://connection.ebscohost.com/c/book-chapters/9187857/rise-plo.pdf>. Acesso em: 13 jun. 2018.
- GEORGE, R. International tourists' perceptions of crime-risk and their future travel intentions during the 2010 FIFA World Cup in South Africa, **South African Journal of Business Management**, Cape Town, v. 44, n.1, 2013.
- GILL, P. et al. Malevolent Creativity in terrorist organizations. **The Journal of Creative Behavior**, Storrs, v. 47, n. 2, 2013.
- GIULIANOTTI, R.; KLAUSLER, F. Sport mega-events and "terrorism": a critical analysis. **International Review for the Sociology of Sport**, Brighton, v. 47, n. 3, 2012.
- GRABELL, M. History of the Federal Air Marshal Service. **Propublica**: Journalism in the public interest. Nova Iorque, 13 Nov 2008. Disponível em: <https://www.propublica.org/article/history-of-the-federal-air-marshall-service>. Acesso em: 1 abr. 2019.
- HARRISON, H. **International aviation and terrorism**: evolving threats, evolving security. New York: Routledge. 2009.
- HASSAN, D. Sport and terrorism: Two of the modern life's most prevalent themes. **The International Review of Sociology of Sport**, Brighton, v. 47, n. 3, 2012.
- JAYAWARDHANA, A. Ensuring security against threats of terrorist acts in Mega Sport Events. **International Journal of Sport Management, Recreation & Tourism**, v. 25, p.1-8, 2016.
- JENKINS, M. B. The terrorist threat to commercial aviation. *In*: **International Seminar on Aviation Security**, Herseliyya, 1989. Disponível em: <http://www.rand.org/content/dam/rand/pubs/papers/2008/P7540.pdf>. Acesso em: 19 abr. 2017.
- KIBAROGLU, M.; ERSEN, M.U. (Ed.). **Analysis and Strategies to Counter the Terrorism Threat**. Amsterdam: IOS Press. 2011. Disponível em: <http://ebookcentral.proquest.com.ezproxy.lib.purdue.edu/lib/purdue/reader.action?cld=836212>. Acesso em: 04 jul. 2018.
- KIM, N.; CHALIP, L. Why travel to the FIFA World Cup? Effects of motives, background, interest, and constraints. **Tourism Management**, v. 25, n. 6, 2004.
- KOTLER, J. Colombia passenger plane hijacked. **AP News**, Nova Iorque, 9 set 2000. Disponível em: <https://www.apnews.com/a1c33110b4a2fb8e435708718bd620e1>. Acesso em: 24 jun 2018.
- MACDONALD, K. One day in September. 1999. Disponível em: <https://www.youtube.com/watch?v=p8VHxcb8kFA>. Acesso em: 22 jan. 2019.
- MANGAN, J. A; DACOSTA, L. **Sport in Latin America society**: past and present. Londres: Routledge. 2001.
- MARTIN, G. **Understanding terrorism**: challenges, perspective, and issues. Los Angeles: SAGE, 2013.
- MONTREAL OLYMPIC ORGANIZING COMMITTEE. **Official Report**, vol. 1, 1978. Disponível em: https://stillmed.olympic.org/Documents/Reports/Official%20Past%20Games%20Reports/Summer/1976/ENG/1976-RO-S-Montreal-Vol_1_1.pdf. Acesso em: 22 set. 2018.
- SALTER, M. B. Imagining Numbers: Risk, Quantification, and Aviation Security. **Security**

Dialogue, v. 39, n. 2-3, 2008. Disponível em: <http://sdi.sagepub.com/content/39/2-3/243.full.pdf+html>. Acesso em: 22 nov. 2018.

TILLY, C. Terror, terrorism, terrorists. In: **Sociological Theory**, v. 22, n. 1, p.5-13, 2004.

UNITED STATES. Central Intelligence Agency. **National Strategy for Combating Terrorism**, 2003. Disponível em: https://www.cia.gov/news-information/cia-the-war-on-terrorism/Counter_Terrorism_Strategy.pdf. Acesso em: 12 jun. 2017.

UNITED STATES. Department of Homeland Security (DHS). **Final report of the Task Force on combating. Terrorism and foreign fighter travel**. September, 2015. Disponível em: <https://>

homeland.house.gov/wp-content/uploads/2015/09/TaskForceFinal_Report.pdf. Acesso em: 23 abr. 2018.

UNITED STATES. Department of Transportation. **Worldwide civil aviation hijackings 1970-2000**. 2001. Disponível em: http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/transportation_statistics_annual_report/2001/html/chapter_05_figure_01_114.html. Acesso em: 13 maio 2019.

VAN LEEUWEN, M. **Confronting Terrorism: european experiences, threat perceptions, and policies**. Zuidpoolsingel: Kluwer Law International, 2003.

WELLS, A. T; YOUNG, S. B. **Airport Planning & Management**. Nova Iorque: McGraw-Hill, 2004.