9.11
Fact Sheet

On September 11, 2001, the world changed forever. Those of us old enough to understand what was happening at the time still remember where we were when we heard the horrific news. Indeed, for many, it probably still feels like yesterday. At a time when the world's attention is focused on emerging from COVID-19 and the devastation it has caused, commemorating the tragic events of 9.11 is crucially important. We must continue to give the families and loved ones of the victims, and the victims themselves, the recognition and acknowledgement they deserve, while drawing inspiration from the heroes that day, the first responders who made the ultimate sacrifice and the passengers and crew of United Airlines flight 93 who disrupted the final attack with little hope for their own survival.

The terrorist attacks on the World Trade Center and the Pentagon were not only assaults on the United States of America, they also were aimed at the global air transportation system—a facilitator of peace and freedom.

Two decades later, we are still living with their consequences, including a vastly expanded security and intelligence apparatus that overlays air travel. This is most visible at airport security checkpoints, although arguably the most intrusive post-9.11 changes—removing shoes at checkpoints, taking laptops and liquids out of carry-on bags and strict limits on liquids and gels in carry-on bags—are the result of subsequent, compounding terrorist plots against civil aviation.

From an economic perspective, 9.11 unleashed a tidal wave of financial devastation on the industry. US airlines bore the brunt of this in the immediate aftermath, but the aftershocks and then the 2003 SARS outbreak, combined with the renewed concerns over terrorism during and after the US-led invasion of Iraq that year, extended the crisis for many airlines. After a few years of recovery, the Global Financial Crisis arrived in 2008-09 to wreak further havoc.

Of course, the damage done by both these crises is but a drop in the bucket compared to the impact of COVID-19. Government-enacted border closures and travel restrictions in attempts to slow the spread of the disease, brought the industry to a near standstill in April 2020. And 18 months later, international traffic remains at a quarter of pre-crisis levels. As we look back on these previous crises, what have we learned?

An important lesson is to move beyond the one-size-fits-all, rules-based model that still, with some notable exceptions, such as TSA Pre-check, governs passenger security screening. We also learned that efficiency is improved by establishing trust with a known community of travelers and by applying security measures based on the low risk presented by the majority of travelers. And a further lesson is to establish firm deadlines at which these extraordinary measures expire and require regulators to take formal action to extend them. This ensures that what we are doing is relevant.

There are some timely parallels in these lessons to the challenges aviation faces today with COVID-19. Translated to the current environment this could mean things such as exempting vaccinated travelers from testing and quarantine requirements, and opening borders based on risk measurements. If the risk of transmission is higher in Country A than in Country B, there is really no reason for Country A to bar vaccinated travelers from Country B from visiting. And we must make sure that the COVID-19 measures are in place no longer than they are necessary.

The story of the next 20 years ought to be about governments' and industry's ability to share and respond to new risks that are inherently integrated by nature or design. Sadly, that lesson has not been learned in terms of governments' response to COVID-19 and the way health measures are being imposed upon civil aviation without considered consultation.

--Willie Walsh, Director General, International Air Transport Association

Operational & Financial Impacts

The greatest operational impacts of 9.11 were on the US airline industry[i]:

- **Airspace Closed:** On September 10, 2001, US airports handled 38,047 flights. On September 12, they handled 252 commercial flights. One week later (September 18) there were 34,743 flights.
- **US passenger airline revenues** declined from $105.3 billion in 2000 to $92.0 billion in 2001. Revenues did not exceed 2000 figures until 2004 ($106.7 billion).
- **US passenger airlines** posted a net loss of $8.0 billion in 2001 after earning $2.2 billion in 2000. Losses continued through 2005. Total net losses 2001-2005 were $60.6 billion, however, this included Chapter 11 bankruptcy-related adjustments. At the operating level (EBIT) losses over the period totaled $28.3 billion
- **US passenger traffic**, measured by revenue passenger miles or RPMs, fell 5.9% in 2001 compared to 2000 and a further 1.4% in 2002 compared to 2001. Traffic did not exceed 2000 levels until 2004.
- **US passenger airline employment** peaked in 2000 at 520,000 and reached a low of 378,600 in 2010 before rising to a post 9.11 peak of 448,400 in 2019. Owing to pandemic impacts, it currently stands at 391,300.

Global Impacts

- **Globally**, airline operating revenues declined from $328.5 billion in 2000 to $307.5 billion in 2001 and $306 billion in 2002. Revenues did not exceed 2000 levels until 2004 ($378.8 billion).
- **Globally**, airlines lost $13 billion in 2001 after earning $3.7 billion in 2000. Losses continued through 2005. Total net losses 2001-2005 were $41.5 billion. At the operating level (EBIT) losses for the 2001-2003 period totaled $18.1 billion.
- **Global passenger traffic** (RPKs) declined 2.9% in 2001 compared to 2000. Traffic began growing again in 2002 but did not exceed 2000 levels until 2004.

9.11 compared to the Global Financial Crisis and COVID-19 Pandemic

	2000-2001	2008-2009	2019-2020
RPKs	-2.9%	-1.2%	-65.9%
Revenues	-6.4%	-16.5%	-55.6%
Flights	1.1%	-2.3%	-39.9%
Profit swing	-$12.2bn	-$40.8bn**	-$152.8bn

*Excluding exceptionals **Profit swing is 2007-2008

Note: Although it is difficult to quantify the impact, the 2003 SARS outbreak and the US-led invasion of Iraq that year played a role in slowing down the recovery both for US and international airlines.

Significant Security Changes since 9.11[ii]

- Locked and armored Cockpit Doors: Following 9.11 regulators directed all airlines to retrofit their fleets with locked and fortified cockpit doors. In addition, all new aircraft were required to be delivered with locked and armored cockpit doors.
- Restrictions were placed on the carriage of sharp objects in the cabin that had previously been allowed. Pen knives, box cutters, nail files and other pointy items previously permissible were now banned and collected at checkpoints.
- In the US, passenger screening was federalized, with airport screening provided by the newly-created Transportation Security Administration (TSA).
- 100% explosive detection screening for checked bags introduced in the US and elsewhere and applicable by ICAO Chicago Convention, Annex 17 in 2006. Additionally, Annex 17 since 2018, has applicable explosive detection requirements for passengers and cabin baggage as well.
- As a result of the December 2001 "shoe-bomber plot" shoes were required to be removed and screened separately. Similar measures were introduced in many countries, but the rules were not harmonized. Some states banned cigarette lighters and matches in aircraft cabins.
- As a result of the discovery of the August 2006 Transatlantic Bomb Plot, passengers were first banned from carrying gels and liquids in their cabin baggage. Subsequently, rules were adopted to allow passengers to carry liquids and gels in a 100 ml (3.4 oz) container and all liquids needed to fit into a transparent plastic bag (1 liter/1 quart size). All laptops and other electronic equipment had to be removed from bags and scanned separately. In addition the UK imposed a restriction of one piece of hand luggage per person, which remained in place until January 2008.
- The "Underwear bomber" attempted to detonate an improvised explosive device concealed in his underwear in December 2009. This led to widespread introduction of controversial "full body scanners" at airport security checkpoints.
- In November 2010 an attempt to ship explosives concealed in printer cartridges aboard two cargo aircraft was discovered. Air cargo shipments to the United States from Yemen were suspended indefinitely. Passengers were prohibited from having printer cartridges in carry-on baggage.
- The TSA Precheck known traveler program was introduced in 2011 in the US.
- In October 2015, the destruction of a Metrojet passenger flight enroute from Sharm El Sheikh to St. Petersburg, led to a new focus and international standards on insider threats.
- In March 2017, responding to intelligence, the US banned electronic devices larger than a cell phone from the passenger cabins of US-bound commercial flights from ten airports in the Middle East and North Africa. In June, the US introduced enhanced screening of electronic devices, more thorough passenger vetting, and new measures designed to mitigate the potential threat of insider attacks.
- In July 2017, there was a hold baggage security plot to blow up a Middle East destined aircraft. This event spawned the evolution of chemical and powders-based cabin baggage checks that remain in place today.

War risk insurance after 9.11

On 17 September 2011, all aviation insurers issued a seven-day notice of cancellation of the air transport industry's third-party war risk insurance. This action was unprecedented and threatened the shutdown of the entire aviation industry. Some nations took temporary measures to aid airlines during the initial period, foremost among them US FAA, which issued premium third-party liability war risk insurance to US air carriers. The private sector quickly returned to the market, but at a considerably greater cost to airlines—an additional $2 billion in premiums for far more limited coverage than that provided by some countries. The Homeland Security Act of 2002, Public Law 112-7, and subsequent legislation required continued provision of this insurance for US airlines and mandated the expansion of war risk insurance coverage to include hull loss and passenger liability. This requirement to provide coverage expired as of 11 December 2014.

Q and A with Willie Walsh

Is the industry more secure today?

Yes. Advances such as locked and armored cockpit doors, explosives detection screening of baggage and other less visible steps have certainly made aviation more secure. Through the International Civil Aviation Organization (ICAO) the baseline of security measures required of states has significantly progressed. We also see much stronger political will by some key governments to help raise the bar globally, including helping to fund other countries to enable them to meet their security obligations. Anything less than universal compliance with ICAO standards is not acceptable. We are more secure, but security is a constantly evolving challenge.

What can we do better on security?

We can always get more efficient. And the challenge is dynamic. We must stay ahead of emerging security threats. To do this effectively we need to take a more integrated approach on things like cyber risks, drones, and insider threats. We also need to have effective controls to ensure business continuity and resilience no matter the source and/or reasons for the interference.

Is there a better airport checkpoint in the offing?

Next-gen screening technology that could remove some of the checkpoint hassles certainly exists. In the current financial environment, it's difficult to see significant investment happening. What is missing and could be addressed today is the required policy adjustments to allow new levels of trusted traveler concepts and predictive risk screening to take place. Two decades after 9.11, it's only the US and Canada that have introduced trusted-traveler programs focused on security as opposed to border facilitation.

Has aviation become too hard a target for terrorists to focus on it?

There is likely to be continued interest on the part of terrorists to interfere with aviation. But the nature of counter measures, both physical and identity-based have and continue to successfully defend the industry against terrorism. The latest effort on insider threat has also ensured new vulnerabilities and risks have been proactively managed to acceptable levels.

The last security crisis (2017 PEDs) ban created chaos with unilateral and isolated actions by governments. Do you have any hope that the next crisis will be handed any better?

Governments have a responsibility to respond to threats as they appear. They won't always have time for full coordination during the very immediate crisis period. That was the case with the PED threat in 2017. However, coordination needs to happen as soon as it is practically possible. And we have seen in the intervening years since the PEDs ban, a recognition that these events can be handled better. We have observed a greater willingness on the parts of some key governments to engage with industry and seek industry expertise on how measures can be effectively applied with the minimum disruption to passengers and processes. It is also critical for governments to ensure counter measures are still relevant. The measures around liquids and gels were introduced in 2007. How many governments have gone back and looked at whether they are still relevant?

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[i] Financial and traffic figures from Airlines for America from US Bureau of Transportation Statistics and DOT.
[ii] **:** Transportation Security Timeline | Transportation Security Administration (tsa.gov) and other sources.