

Publication: The Straits Times Date: 20 Feb 2024 Headline: Improve the odds of survival in a plane emergency

Experts give eight tips on how to save your life, from keeping your shoes on to securing children properly

Sarah Stanley

From the Japan Airlines (JAL) runway collision that killed five people to the door plug that blew out of a Boeing aircraft on an Alaska Airlines flight, it has not been a good start to 2024 in terms of airline safety.

And in 2023, close calls involving commercial airlines happened multiple times a week, according to a New York Times analysis of internal Federal Aviation Administration (FAA) records, federal reports and interviews. These incidents included planes in the United States narrowly avoiding collisions, sometimes by seconds.

One major factor, the analysis found, was a chronic nationwide shortage of air traffic controllers (ATC). They had been working overtime to manage a surge of flights, making them more susceptible to human error.

In Asia, the JAL incident brought to light a similar ATC staffing shortage issue, exacerbated by the increase in flights post-pandemic. Even so, the odds of being in a

plane crash are low.

Passengers in 2022 had a mere 0.16 in a million chance of dying in a than the year before, where they

plane crash – slightly better odds the emergency exits are and how safety equipment work can help

PHOTO: AFP



While pilots can try to estimate

where and when it might happen,

CAT is virtually impossible to

detect in real time until it strikes.

Mr Frank Jackman, director of

communications and research at

Flight Safety Foundation, says CAT

is one of the primary reasons

passengers should keep their seat

Singaporean former cabin crew

Natasha H., 32, who spent seven

years in her role, says some passen-

gers are sceptical about the seat belt

sign as it is sometimes activated

multiple times for short durations

Pilots control the seat belt sign

from the cockpit, often to warn

those in the cabin about oncoming

turbulence. However, passengers

belts secured at all times.

during a flight.

Bags and other items that are not properly

stowed can

passengers

in an emergency.

Keep your seat upright to better

withstand the

PHOTO: ST FILE

of a crash.

potential impact

obstruct

ST PHOTO:

LIM YAOHUI

Visibility is also why cabin lights are dimmed during flights at dawn,

plane emergency

Improve the odds

of survival in a

6 Keep your shoes on Apart from being an eyesore,

had a 0.27 in a million chance of such a fatality, based on numbers from the International Air Transport Association's (Iata) 2023 report.

"There were five fatal accidents among 32.2 million flights in 2022. That tells us flying is among the safest activities in which a person can engage. But even though the risk of flying is exceptionally low, it is not risk-free," says Mr Willie Walsh, Iata's director-general.

Singaporeans, a nation of frequent fliers with a national carrier known for high safety standards, may have grown complacent over time, says Mr John Tan, lead professional officer teaching the Air Transport Management degree programme at the Singapore Institute of Technology (SIT).

"Some passengers may feel that air mishaps are rare, so they do not take safety protocols seriously," he says. "Lack of under-

passengers may not comprehend the importance of such protocols."

The Straits Times speaks to aviation experts and former cabin crew, who dole out tips that may improve your odds of survival in the unlikely event of an aeroplane emergency.

1 Develop situational awareness **L**This is particularly important during what is known in aviation as critical phases of flight - taxiing, taking off and landing - where pilots have to be precise and manoeuvre the aircraft through varying environmental conditions. It is here that accidents have the

highest likelihood of occurring. A Boeing study found that

between 2012 and 2021, 67 per cent of fatal accidents involving its aircraft happened in these phases.

Mr Tan says passengers should strive to be "cognisant of their surroundings and the safety procedures explained by the cabin crew". In an emergency, knowing where

keep you calm. Reading the safety instructions also helps.

He adds: "Exhibiting patience in high-stress situations is key, as rushing can lead to mishaps or accidents. Staying calm in emergency situations can help passengers think clearly and follow safety procedures accurately."

Neep your seat area neat

 \angle Planning to toss the plastic wrapper of your blanket or an empty cup on the aircraft floor? Think again.

Strewn rubbish or a bulky bag protruding into the aisle are tripping hazards that will slow down the evacuation process during an emergency.

Tuck loose items into the seat pocket, and keep large bags in the

overhead compartment so that aisles and walkways are clear. Check airline restrictions if you are taking along

standing is another factor, as some an accessory such as an inflatable footrest or seat extender for kids. Some items may not be allowed as they pose an obstruction.

> For example, Singapore Airlines allows certain "inflatable flight cushions and convertible gadgets", but not seat extenders and foot hammocks for safety reasons.

Don't hate on **O** the seat belt sign

The Flight Safety Foundation belts fastened as much as possible reported that in 2022, turbulenceduring a flight, even when the sign related accidents were the most to fasten your seat belt is switched frequent among flight safety incioff. dents.

In particular, clear air turbulence (CAT), an increasingly prevalent phenomenon exacerbated by climate change, is hitting planes hard and without warning.

This typically occurs at high altitudes where there are clearer skies. Unlike turbulence from cloudy weather or thunderstorms, CAT often occurs unexpectedly and is invisible on the weather radar pilots use.

▲ Keep your window shades unblocked

In the early 1960s, research and tests conducted by the FAA found that a structurally sound cabin consumed by flames would be habitable for around two minutes. After further research, it concluded that in an emergency, it is crucial that passengers evacuate within 90 seconds.

During this critical window, it is imperative that passengers can spot evacuation hazards from inside the plane, such as fires blocking unusable exits.

This is why passengers are reminded to raise their window shades during the critical phases of taking off and landing. This allows them to spot and report anomalies quickly, and helps to make the evacuation process more efficient. It also allows emergency services on the ground to gauge the situation

are still advised to keep their seat in the aircraft and react accordingly.

dusk or at night – to allow passengers' eyes to adjust to low-light conditions, so they can spot the paths illuminated by emergency exit lights.

Secure children with

O the right seats or seat belts The Boeing aircraft door plug blowout led many to wonder - if passengers near that door had been holding children on their laps, would they have been able to prevent their children from being sucked out of the plane?

Experts say that in that scenario, anyone not wearing a seat belt could have easily fallen out of the aircraft. Mr Jackman adds: "Your arms may not be capable of holding your in-lap child securely, especially during unexpected turbulence, which is the No. 1 cause of paediatric injuries on an aeroplane."

The Civil Aviation Authority of Singapore (CAAS) states that children under age two must be securely restrained with a seated adult, while those above two must be secured in their own seats by the seat belt provided.

Alternatively, children can occupy a seat with an approved child restraint system, such as child car seats that can be secured to the passenger seat. Check with your airline the sort of seats that are approved.

Singapore Airlines, for instance, indicates maximum child car seat specifications by aircraft type and class of travel on its website.

In the economy class on a Boeing 787 aircraft, a seat can measure a maximum of 16.5 inches in width and 17 inches in depth, or 41.9cm and 43.2cm.

For parents using bassinets, take note of the seat belt sign as infants must be secured on an adult's lap when it is switched on - even if your child has just gone down for a nap. This is because bassinets are not certified for taxiing, taking off, landing and turbulent weather conditions, and will not be able to protect infants from impact caused by sudden plane movements.

removing your shoes during the flight risks slowing down your evacuation process.

In an emergency, you do not want to be scrambling to find a shoe and wasting precious seconds putting it back on.

During an impact landing, there will likely be broken parts strewn on paths leading out of the aircraft. Without proper footwear, passengers are more susceptible to injuring themselves.

Avoid flying in high-heeled shoes. You will have to remove them before an emergency evacuation, as they can damage the emergency slide.

Keep your earphones off

Remove your headphones or earphones during critical phases of flight, so you can hear safety announcements. This also prevents wired audio devices from obstructing evacuation.

Cabin crew will remind passengers to remove these devices, but Ms H. says it is a difficult rule to enforce.

"Passengers tend to put their earphones back on after we walk away. I think it's because they feel like they can still hear everything with them on," she says.

Seat upright, please Putting your seat upright maximises space for people in the row behind you to evacuate. It also locks your seat in place, which allows it to better withstand the impact of a crash.

Due to the lack of structural support from a reclined seat, any violent movement could send passengers flying forward or slamming back in their seats. Inertia could also cause the angle of the seat to change and injure passengers seated nearby.

"If all passengers abide by safety instructions - such as keeping aisles and other escape paths clear of obstruction - it greatly increases the likelihood of all passengers getting off the plane safely," says Mr Jackman.

sarahrs@sph.com.sg

Source: The Straits Times © SPH Media Limited. Reproduced with permission.

This document is intended for internal research purposes only. Copyright remains the property of the content creator.



STREETWISE