

Jetstream

2020 AND BEYOND



GLOBAL AEROSPACE



INSURE WITH CONFIDENCE

Letter from the CEO

A question I have asked a few customers this year is, “Where was pandemic on your company risk matrix?” The normal answer: “It was on there—but not very high up.” The same was true at Global, and it just goes to show how easy it is to underestimate risk.

The airline industry, and those businesses that serve it, have been particularly badly hit, but the crisis has also shown just how much the world depends on this critical part of our infrastructure. Healthcare, for example, desperately needed massive quantities of PPE that could only have been delivered by air, and aviation will play a crucial role in distributing the vaccines that will hopefully bring the pandemic to an end.

What the airlines really need right now, of course, is the return of travellers, and especially business travellers. In this issue of Jetstream, we take a lighthearted look at the pent-up demand we believe exists in this sector.

One thing the virus has not been able to lock down is the spirit of innovation and progress in aerospace. You will find articles in this issue about the exciting project to develop a supersonic business jet and the rush to create a proper framework for the commercialisation of space.

This year has not been a good one for the insurance industry either, particularly as a result of widespread losses from business interruption and event cancellation. These losses have not affected our particular sector of the market. However, the inevitable revenue reduction we have seen as a result of the crisis could not have come at a worse time, following, as it does, a prolonged period of unprofitable results for aviation insurance.

We have faced new risks, too, such as the unprecedented accumulation of aircraft on the ground in certain locations. A highly active hurricane season made underwriters understandably nervous, but weather-related losses are a regular feature of our business and we have included a review of this year’s events and their context.

The events of 2020 have forced all of us to re-evaluate our business models and to assess our resilience in the face of the unexpected. We are used to partnering with our clients through good times and bad, but after the experience of this year, I very much hope 2021 will be in the “good” category for us all. ▼



NICK BROWN
CEO, Group Chief Executive



New York to London in 2 Hours? Yes, Supersonic Passenger Aircraft Are Coming

The original Concorde supersonic passenger jet may have been retired in 2003, but the desire to dramatically reduce the travel time on treks like New York to Paris and Sydney to San Francisco lives on. Today, a number of companies are seeking to make supersonic travel safe, reliable and affordable.

One of the more well-known names among them is Richard Branson's Virgin Galactic. Also a company that is leading the way in space tourism, Virgin hopes to have similar success in developing an aircraft that it says will be a Mach 3-certified delta-wing vehicle that can cruise at 60,000 feet and carry up to 19 people from London to New York in two hours rather than the 7.5 hours required for the trip today—or perhaps more impressively, from Sydney to London in four hours rather than 19.

Partnering With a Propulsion Leader

Branson's company is working with Rolls-Royce to develop the engine propulsion technology for its supersonic jet. More widely recognised for its luxury cars, Rolls-Royce has extensive experience in advanced propulsion systems.

"We are excited to partner with Virgin Galactic and The Spaceship Company (TSC) to explore the future of sustainable high-speed flight," said Rolls-Royce North America Chairman & CEO Tom Bell. "Rolls-Royce brings a unique history in high-speed propulsion, going back to the Concorde, and offers world-class technical

capabilities to develop and field the advanced propulsion systems needed to power commercially available high-Mach travel."

Virgin has announced the completion of Mission Concept Review and unveiled the initial design concept for its jet. The company is also working with NASA and the FAA on its designs as it seeks to make high-speed air travel a viable option for consumers.

ITS GOAL IS TO DEVELOP AN AIRCRAFT that is compatible with existing airport infrastructure and services, and that can take off and land like any other jet. One unique characteristic, however, is that Virgin is planning to use a new form of sustainable fuel.

Time will tell if supersonic travel, and later hypersonic travel, will be safe for consumers and profitable for airlines.

While the company says it is making significant progress on the project, it has not given estimated dates for the jet to be operational or transporting passengers.

Other Companies Pursuing Supersonic Passenger Travel

VIRGIN GALACTIC IS NOT ALONE in looking to enable supersonic travel, of course. Other companies are working toward that same goal. They include Boom Supersonic, Aerion Supersonic, Spike Aerospace and Boeing.

Boeing's goal of a cruising speed of Mach 5 (3,836 miles per hour) is especially intriguing. That speed would make it the first "hypersonic" passenger jet—a term not as clear-cut as "supersonic" but that is commonly applied to objects traveling Mach 5 or faster.

NOT AS FAST BUT LIKELY TO BE OPERATIONAL sooner, Boom Supersonic's XB-1 test aircraft will have a cruising speed of Mach 2.2. The company passed an important milestone in October 2020 when it completed the jet and began preparations for the vehicle's first flight, which is expected to take place over a Mojave Desert testing ground in summer 2021. The single-seat XB-1 will help the company test design elements that will ultimately be used in its Overture jet, which will have a 65-passenger capacity.

Aerion's aircraft at Mach 1.4 and Spike's at Mach 1.6 don't have proposed cruising speeds as high as the



Overture or Boeing's unnamed jet, but they will still get travellers to their destinations in a fraction of the time of conventional jets.

ANOTHER KEY TO THE SUCCESS of supersonic passenger jets is reducing or eliminating the sonic boom that the faster of these aircraft will produce. The anger and frustration of people living near airports who objected to the noise was problematic for the Concorde. The answer for some manufacturers may be that pilots won't accelerate to boom-producing speeds until the jet is at an altitude where the sound is reflected upward off a dense layer of atmosphere and is never heard on the ground.

“We are excited to partner with Virgin Galactic and TSC to explore the future of sustainable high speed flight.”



Anywhere in the World in 3 Hours

TIME WILL TELL IF SUPERSONIC TRAVEL, and later hypersonic travel, will be safe for consumers and profitable for airlines. But watching researchers and manufacturers pursue those objectives will certainly be interesting for aviation observers.

Aerion Chief Executive Officer Tom Vice has said that the company's vision is ultimately to enable people to travel between any two airports on the planet within three hours. Couple that with the goal of Virgin Galactic and others to take tourists into space, and clearly the next few decades will be a period of unrivaled aviation and aerospace innovation. ▼

Photos: Cover and page 2 Virgin Galactic; page 3 Aerion and Boom

Another key to the success of supersonic passenger jets is reducing or eliminating the sonic boom that the faster of these aircraft will produce.

Ground Crew Humour: Never Let It Be Said That Ground Crews Lack a Sense of Humour

Here are actual maintenance complaints submitted by pilots (“P”) and solutions (“S”) recorded by maintenance engineers:

P: Left inside main tire almost needs replacement.

S: Almost replaced left inside main tire.

P: Test flight OK, except auto-land very rough.

S: Auto-land not installed on this aircraft.

P: Something loose in cockpit.

S: Something tightened in cockpit.

P: Dead bugs on windshield.

S: Live bugs on backorder.

P: Autopilot in altitude-hold mode produces a 200-feet-per-minute descent.

S: Cannot reproduce problem on ground.

P: Evidence of leak on right main landing gear.

S: Evidence removed.

P: DME volume unbelievably loud.

S: DME volume set to more believable level.

P: Friction locks cause throttle levers to stick.

S: That's what friction locks are for.

P: IFF inoperative in OFF mode.

S: IFF always inoperative in OFF mode.

P: Suspected crack in windshield.

S: Suspect you're right.

P: Number 3 engine missing.

S: Engine found on right wing after brief search.

P: Aircraft handles funny.

S: Aircraft warned to: straighten up, fly right and be serious.

P: Target radar hums.

S: Reprogrammed target radar with lyrics.

P: Mouse in cockpit.

S: Cat installed. ▼



Space Update: The Changing Landscape of Space Missions

The global space economy is growing. Governments around the world are realising the potential the space industry could be bringing into their respective economies. An exceptional amount of capital is being invested both by governments and the private sector.

Political Interest

Fifty years ago, there were really only two nations that carried out space activities—the USSR and the USA. Today, over 65 countries have put satellites into space.

In order to be responsible, space-faring nations, many countries are recognising their obligations under the UN Outer Space Treaty and therefore enacting or re-examining their own space laws. While some of these nations are motivated by the fact that they are launching their own government-owned spacecraft, others are being driven by a desire to attract the new breed of space entrepreneurs to set up operations in their countries. The right legal and economic framework is seen as essential to achieving this.

Commercial Space Activities

Fifty years ago, all space missions were state activities. The first satellites that were put into orbit were state-owned and sponsored, as were all manned missions throughout the 1960s and 1970s. However, in 2020 there are more commercial space missions than we have ever seen. They vary from putting anything from tiny CubeSats to large satellites, or constellations of satellites, into orbit. Applications range from traditional communications to cutting-edge, in-orbit servicing.

Even U.S. manned missions have now become “commercial crew” missions and we witnessed the privately owned and operated SpaceX Falcon 9/Dragon 2 spacecraft carry two U.S. astronauts to the International Space Station (ISS) in early 2020. Rather than the government procuring the launch vehicle and spacecraft hardware to launch their astronauts into space, they are now buying the “taxi ride to space and back” service.

Risk, Liabilities and Insurance

Of course, no commercial company can operate unless they are comfortable with the risks they are taking on. In order for most companies to carry out commercial space activities, a clear legal framework would be desirable. In many countries, however, there is still relatively little clarity or consistency on the subject.

A required insurance limit set by the government as well as a public-private risk sharing regime may also determine whether that country is an attractive place to carry out space activities or not.

This illustrates the need for early engagement between the government, the space industry and the insurance industry when setting up a state liability framework and insurance requirements. This will allow stakeholders to iron out the intricacies of the space industry risk exposures and the applicability and availability of insurance.

Current Activity Examples

U.K. SPACE INDUSTRY ACT 2018 AND SPACE INDUSTRY REGULATIONS 2020. The U.K. government enacted The Space Industry Act 2018 for all spaceflight activities to be carried out from the U.K. With much interest in launching rockets carrying small spacecraft from Scotland and Cornwall, the key focus has been on involving potential launch, spaceport and range operators. Lack of understanding of how insurance works became apparent early on in the discussions with the government, and the insurers have been engaging with them throughout the process.

NASA PRIVATE ASTRONAUT MISSIONS. As part of the “NASA Plan for Commercial LEO Development,” which was published in 2019, NASA is planning to allow short-duration private astronaut missions to the International Space Station (ISS). These missions will be privately funded, dedicated commercial spaceflights using U.S. vehicles. They will enable private astronauts

to conduct approved commercial and marketing activities on the ISS, where “seats” will be procured through a Private Astronaut Mission (PAM) provider.

This clearly presents new risks and exposures for insurers to examine. Aside from the conventional third-party liability, insurers may need to consider potential liability for injury to astronauts as well as liability for damage or injury caused by the astronauts.

Then comes the question of who will procure what coverage. Will the astronauts have to have their own policy or will the PAM entities provide a policy? Alternatively, a single policy could be provided with NASA/U.S. Government as a policyholder that has a full set of pre-defined coverages and acts as a facility to allow each PAM provider or astronaut to make a declaration for their particular risk. This structure ensures the coverage terms and conditions given are the same for all parties and may streamline any government indemnity provisions around the insurance limits.

Fifty years ago, there were really only two nations that carried out space activities—the USSR and the USA. Today, over 65 countries have put satellites into space.

Partnering to Promote Growth

Insurance should never be an afterthought for any space project. The increasing commercialisation of space and the changing relationship between public and private stakeholders make it more vital than ever for all parties—governments, insurers and space industry players—to engage in meaningful dialogue in order to develop the right solutions to support the future investment and growth in this complex sector. ▾

Weather Events: Impact of Natural Catastrophe Events on Aviation Insurers

Aviators and insurance professionals both keep a keen eye on weather, although often for very different reasons. During 2020, almost everyone was paying particular attention to what was ultimately record-breaking Atlantic hurricane activity.

THE OBVIOUS. At the time of this writing, there have been 29 named tropical or subtropical cyclones, 12 hurricanes and five major hurricanes. Of the 29 named storms, 12 of them made landfall in the contiguous United States, breaking the record of nine set in 1916. The strongest of these was Laura, which clocked maximum sustained winds of 150 mph. Total seasonal damage estimates from these storms are in the neighborhood of \$40 billion USD.

THE NOT SO OBVIOUS. Hurricanes are widely covered events for two very good reasons. The first is they do tremendous damage and cost lives. Tragically, over 300 lives were lost during the 2020 Atlantic hurricane season. The second reason is they are reasonably predictable, which also explains why they end up being relatively low-impact events for aviation insurers, at least when compared to other weather-related events.

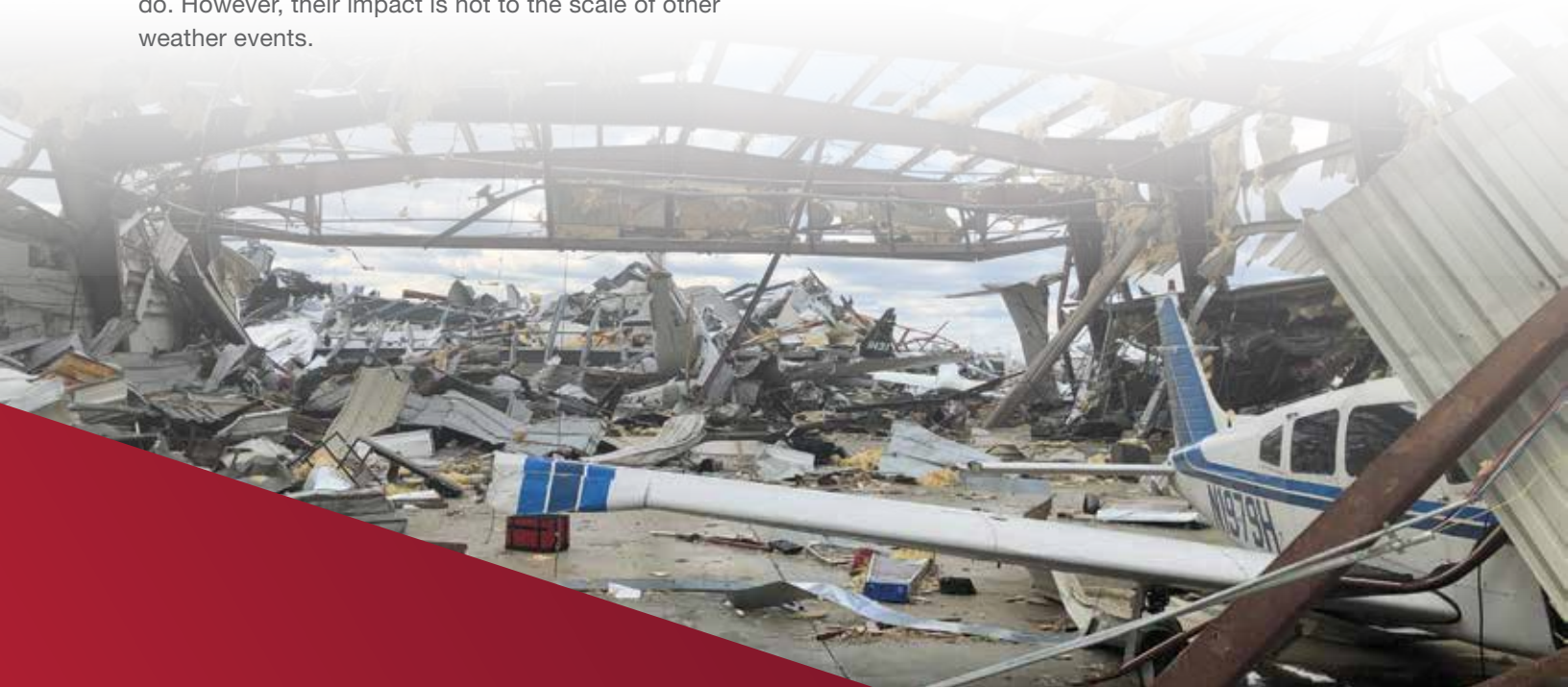
When a hurricane approaches, aviation clients are often able to evacuate equipment or, at the very least, take alternative action to mitigate damage. That's not to say hurricanes don't register—they most certainly do. However, their impact is not to the scale of other weather events.

A Case Study in Large-Scale Loss

On March 3, 2020, a tornado struck John C. Tune Airport in Nashville damaging many aircraft, most beyond repair. The EF2 tornado (with peak winds of 111 to 135 mph) struck at 1:00 a.m., a time at which most aircraft would probably be on the ground. It hit close to terminal buildings and destroyed a series of hangars.

MARKET ESTIMATES are 92 damaged or destroyed aircraft, with a total sum insured of \$110 million USD and damage estimates after salvage approaching \$100 million USD. The bulk of the damaged aircraft by number was piston powered with 74, plus 11 turboprop, 17 jet and three rotor wing aircraft affected. In terms of insured values, the jet aircraft made up 60% of total damage with another 28% stemming from the turboprops.

FAA data on the airport¹ would suggest that 154 general aviation (GA) aircraft are based at this airport. By that measure, 60% of the aircraft based at the airport were impacted by the strong winds.



The event affected 13 GA insurers, with numbers of insured aircraft ranging between one and 18. It, thus, was a true market event. Clearly the high-value jets are driving up losses for individual insurers, but overall, we would assume this event will cost between 5% to 10% of most insurers' gross written premium, so it does make a dent in the annual result when this comes on top of "regular" losses.

The Surprising Numbers

As this event illustrates, our data indicates that hurricanes, while highly publicized, make up the smallest portion of *ground* weather-related hull loss events for aviation insurers. Approximately 40% of ground hull loss activity due to weather perils arises out of tornados, while almost 50% arises out of hail or flood events and the remaining balance comes from hurricanes.

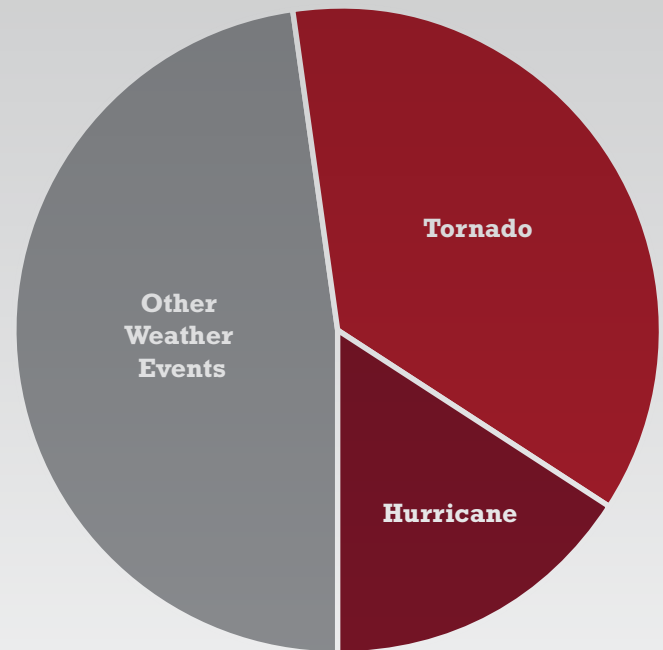
Also surprisingly, many—if not most—of the high-valued hull claims that arise out of tornados are the result of hangar collapse. It would seem counterintuitive that hangaring your aircraft during bad weather is risky, but in the case of tornados, it certainly seems to be. While modern hangars are designed to withstand strong winds and should certainly make a difference in the assessment of hail exposure, at John C. Tune Airport, the damage to aircraft was just as bad for the hangared aircraft as it was for those parked on the ramp, if not worse, irrespective of the quality of the hangar. However, in no way is anyone suggesting someone remove airplanes from hangars when bad weather is approaching! Hail is especially expensive for aviation insurers, as it is typically a widespread event affecting many aircraft at once.

Managing Risk

UNDERWRITERS MANAGE THIS RISK in several ways. We start by using underwriting information to distill the base of operations or heavy maintenance facilities in an effort to manage accumulation of insured aircraft. In certain instances, underwriters offer pricing incentives to attract a proper balance of hangared aircraft, and we do make an effort to assess the robustness of hangars for wind and fire perils (notwithstanding the peril of hangar foam events which is covered elsewhere in this publication).

In many cases, underwriters incentivise the evacuation of aircraft for hurricane perils and we also price for enhanced risk based on specific location perils. In hurricane-exposed areas, underwriters apply deductibles for spares coverage, and in every case, underwriters make certain insured values are both accurate and reasonable.

Significant Weather Events



BEYOND THE RATING of single individual risks, however, managing this exposure at the portfolio level is key and having an understanding of total accumulation by region is a must. But due to the movable nature of the risks underwriters insure, the base airport can only ever provide a likely scenario of the values exposed in such an event anyway.

Next to the tornado in Nashville, airports were also struck in Jonesboro, AR, on March 28, Monroe, LA, on April 12, and Walterboro, SC, on April 13. The assumption that aviation losses happen independently from one another does not apply for such exposures and thus will continue to challenge aviation insurers moving forward. ▼

¹ https://www.faa.gov/airports/airport_safety/airportdata_5010/

*Text: Walter Voigts von Forster, Munich Re
Photos: Eric Weidner, McLarens Aviation*



Recent Developments: Hangar Fire Protection

Inadvertent discharge of foam fire suppression systems in aircraft hangars continues to occur regularly throughout the world since we wrote our white paper outlining issues surrounding accidental discharges in April 2019. These events plague aviation and remain top of mind for many industry participants.

THE CENTRAL QUESTION IS STILL PERTINENT:

Do we need sophisticated foam fire suppression systems in certain hangar environments given the accidental discharge risks, high installation/maintenance costs and technological advancements in the industry that have reduced the risk of fires? It's an especially compelling question since there are hardly any actual fuel spill fires seen in the data. In other words, are the industry-standard fire protection criteria still appropriate for the hazards and risks in today's aviation ecosystem?

THE ONGOING DEBATE within the industry about the necessity of these systems has grown even louder in light of recent events. A number of accidental discharges have occurred or were reported in the 18 months since we published our white paper:

- A foam discharge event in a large hangar in Europe involving several VIP airliner aircraft caused tens of millions of dollars in aircraft damage.
- An FBO in the Midwestern U.S. had 15 aircraft in a hangar in which a pinhole in a fire system tank caused a discharge resulting in \$2 million USD in damage.
- An Airbus hangar in the Southern U.S. had two A220s under construction and the extent of the damage is unknown.
- A prominent FBO in Florida experienced a foam discharge involving a Gulfstream G650 and Bombardier Global Express among several aircraft being submerged in foam.

- Following a discharge event (March 2020) in a Delta Airlines hangar at Los Angeles International Airport, photos showed multiple aircraft engulfed in massive amounts of foam—so much that it flowed out onto the ramp.

It's important to note that no fires were reported in any of the above incidents.

FOAM FIRE SUPPRESSION SYSTEMS are designed to combat pooled-fuel fires in hangars. These systems are mandatory for most modern hangars. The standards around fire protection are set forth by the National Fire Protection Association (NFPA) and frequently adopted into state and local building codes.

Many industry stakeholders including hangar owners and operators, trade associations, aircraft owners, FBOs and insurers continue to ask: Is anything going to change?

Are Voices Being Heard?

The National Air Transportation Association (NATA) has been hard at work advocating for change on behalf of its members. NATA has developed various resources to help with understanding the issues around foam fire suppression systems, handling a discharge event and dealing with your local fire marshal.

NATA also commissioned a study to review foam discharges in hangars. This was carried out by the

University of Maryland (with Global Aerospace providing some claims data to support the study) and the findings showed that frequent accidental discharges occur at a much higher rate compared to intentional discharges in response to an actual fire. The study added gravity and credibility to industry stakeholders' calls for change.

IN OUR WHITE PAPER, we referenced an NATA initiative to adopt changes to NFPA 409—the fire protection standards applicable to aircraft hangars. Some of the changes being proposed—requiring foam fire suppression only for Group II hangars with hazardous operations, raising door height thresholds to accommodate larger and newer business jets and reinstating the cluster hangar exemption—would have the effect of significantly reducing the burden of fire suppression systems now borne by many general aviation participants.



Will Feedback Yield Change?

In 2019, the NFPA solicited industry feedback and received hundreds of comments from stakeholders, in addition to the aforementioned NATA member feedback. In summer 2020, the Fire Protection Research Foundation (the research arm for the NFPA) commissioned an RFP to assess the “performance criteria for aircraft hangar fire protection systems.” This could represent a tacit acknowledgment that current systems may not be optimised.

MEANWHILE, ANOTHER EMERGING ISSUE around foam fire suppression systems is the foam itself and the toxic environmental impact from certain foam chemicals. California has proposed legislation to ban PFAS (certain chemical substances found in fire suppression foam) and several other states are not far behind.

So, a continuation of accidental discharges, a growing chorus of feedback from industry and newfound concerns around environmental impacts together could serve as catalysts for the NFPA 409 Technical Committee (TC) to adopt some changes to the fire protection standards.

We encourage stakeholders to adopt best practices for hangar and aircraft safety.

A Postponed Meeting and Important Best Practices

The NFPA 409 TC had planned meetings with its members in 2020 to discuss some of the industry feedback, but unfortunately, these meetings have been postponed until 2021 because of the COVID-19 crisis. Stay tuned. In the meantime, we encourage stakeholders to adopt best practices for hangar and aircraft safety. Some examples to help with risk management and preparedness include:

- Secure aircraft by closing doors when unattended
- Cover engine intakes
- Follow prescribed maintenance protocols
- Develop emergency response protocols for an accidental discharge scenario

ADDITIONALLY, WE RECOMMEND speaking with your local fire marshal. Anecdotal evidence suggests that certain fire marshals are moving faster than the hangar fire protection standards revision process and independently question the efficacy of the advanced fire suppression systems in low-threat environments. A large U.S. metropolitan city fire department recently waived foam fire suppression requirements for a Group II hangar construction project.

While we continue to see unwelcome accidental discharges resulting in significant aircraft and other property damage, as well as business interruption costs and expenses, we have been fortunate to avoid any bodily injury arising from recent events. However, this continues to be a major source of concern.

Advocates for Amended Standards

Whether NFPA makes changes to the 409 standard remains to be seen. It is clear that the industry has spoken and appears to have caught the attention of the NFPA 409 TC.

For our part, Global Aerospace continues to believe the standards should be amended to reflect reduced fire risks thanks to technological advances in aircraft manufacturing and fuel chemistry as well as generally improved operational protocols in aviation. ▼

Fear of *Not* Flying: Perspective From a Grounded Frequent Flyer

In the 2009 American comedy-drama *Up in the Air*, George Clooney plays Ryan Bingham, a frequent flyer who extols the virtues of traveling for work. Living free of burdensome relationships and material possessions, Ryan's entire lifestyle centers on his quest to earn 10 million frequent flyer miles with American Airlines.

HE IS THROWN AN UNEXPECTED CURVEBALL

when recalled to his company's offices where a young, ambitious new hire, promotes cutting costs by conducting business via videoconferencing. This leads Ryan to begin questioning his lifestyle and philosophies. Eventually the new approach fails and Ryan returns to his "comfort bubble," back on the road, but as a changed man.

A Sad "Goodbye" to My Frequent Flyer Status

I am certainly not a Ryan Bingham. I have, however, spent huge chunks of my life on the road traveling for business. And whether I wish to admit it or not, that is part of who I am both personally and professionally. So much so that I recently suffered a short bout of acute anxiety over losing my hard-earned frequent flyer status (the absolute highest my airline of choice offers). Why do I think some of you reading this can relate?

Fortunately, my airline of choice has made it abundantly clear that I will be very well cared for until normal travel patterns resume. Given present circumstances, however (the COVID pandemic), I think all of us can draw important analogies to the movie.

Reflecting on What Truly Matters

Much like one of the central themes of the film—change—I believe the pandemic has accelerated important socio-economic changes that, in many cases, were already underway. The way we work, work-life balance, the way we educate our students, the way we work out, shop, watch movies, care for the elderly and, to a very large extent, how much we adopt technology have all been pushed to the fore during the pandemic. That isn't even all of the changes and arguably society wasn't ready for most of them.

AND WHILE CUTTING COSTS is not the reason this happened, the pandemic, and the changes it forced on everyone, has given each of us a golden opportunity to evaluate virtually everything in our lives. What were we doing before that *really* added value? And over the course of the last year or so, what did we *truly* miss?

In the movie, Ryan ultimately draws the conclusion that he uses travel as an escape. His job (terminating employees), taken with his travel, allows him to conveniently avoid personal relationships and he is happy (he thinks) to get back to it. How ironic is it that this individual uses travel to avoid personal relationships? The movie tragically ends there, with Ryan a very lonely man.

I WANT TO BELIEVE this is where Ryan and most of us differ. Ours is a people business. It is always going to be a people business. Relationships matter and, in a number of subtle ways, relationships make our work infinitely more meaningful and satisfying.

We *need* to understand our clients, what motivates them, what they need and why they need it. And they *need* to understand the same from us. While one of the permanent changes likely brought on by the pandemic involves our working differently to achieve better balance in our lives, I am equally convinced another involves our using travel time more wisely to make absolutely certain we foster and deepen personal connections. That is a very good thing.

Recognising the Need to Reconnect

In his book *Lost Connections*, author Johann Hari discusses the isolating effect of over-reliance on technology and its impact on mental health. Hari argues that the disconnecting aspects of the technology revolution are akin to an environmental change and a prime cause of depression and anxiety, both of which were rising during the COVID crisis.

THE REALISATION OF HOW IMPORTANT personal connections are is indeed one of the real silver linings of the pandemic. I do miss travel, but not just for the sake of travel. Free of my frequent flyer anxiety, I look forward to once again connecting and collaborating. I look forward to injecting as much value in my work as I can through stimulating personal interaction with others. This is why we need offices with people in them. And this is why the airline industry *will* bounce back. ▼

Text: Jeffrey Bruno, President and Chief Underwriting Officer, Global Aerospace

We need to understand our clients, what motivates them, what they need and why they need it. And they need to understand the same from us.



Our Future: Together

2020 has been a challenging year. It is our hope that our industry will come out of these difficult times with renewed purpose, finding greater strength and resilience from each other. We recognise that during these times, our clients need dependability, confidence and trust in the people they choose to do business with.

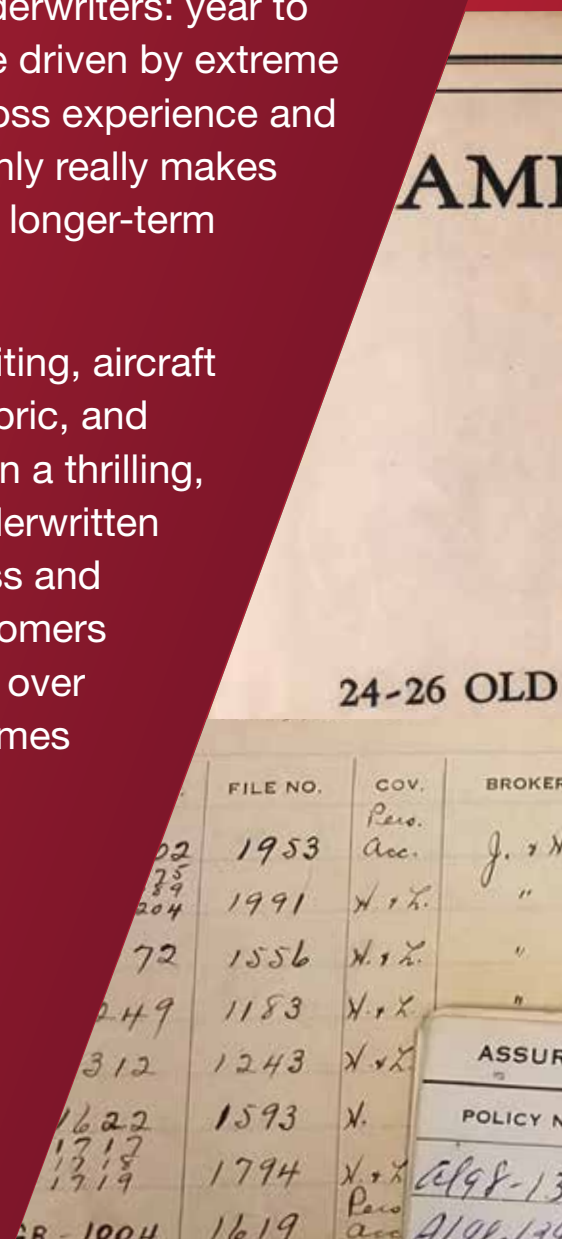


Client Relationships

Aviation is an inherently volatile class of business for underwriters: year to year, its fortunes are driven by extreme fluctuations in both loss experience and market dynamics. It only really makes sense if you can take a longer-term perspective.

When we started underwriting, aircraft were made of wood and fabric, and the story since then has been a thrilling, but bumpy, ride: we have underwritten every innovation, every success and also every failure. We have customers today who have been with us for over 70 years, often through multiple times of crisis followed by as many times of recovery and prosperity.

The experience of 2020 has forced all of us to reassess our business models. But we remain convinced that there is real value in long-term partnerships that can be resilient in any crisis.



24-26 OLD

FILE NO.	COV.	BROKER
02	1953	Pers. Acc.
39		
204	1991	X. X.
72	1556	X. X.
249	1183	X. X.
312	1243	X. X.
1622	1593	X.
1713		
1719	1794	X. X.
28-1004	1619	Pers. Acc.

ASSUR

POLICY N

2698-13

A106-12

Commitment

For almost 100 years, Global Aerospace has adapted and changed with our customers. The reason we can say that is simple.

We are an aerospace speciality insurer, so our interests are uniquely aligned with that of our customers.

Their success is our success. We understand our customers and we are vested in supporting their growth and success. That will not change.



AMERICAN BUREAU of AIRCRAFT INCORPORATED 1928 1929 REGISTER

LICENSED—TEMPORARY LICENSES
AND
IDENTIFIED AIRCRAFT OF U. S.

SLIP / / / / NEW

CO.	POL. DATE	EXP. DATE	
ca	4/14/29	'30	
"	4/18/29	'30	
"	5/19/29	'30	
"	7/19/29	'30	"Defender"
"	8/20/29	'30	"Bird-11"

NO.	COV.	BROKER
3143	L	Betty Clark
417	D	

Into the Future

Simon Sinek, author of *The Infinite Game* and *Start with Why*, says, "We last longer if we compete against ourselves for the good of others instead of competing against others for the good of ourselves."

The backbone of a healthy, globally competitive, knowledge-driven aerospace industry starts with investment in new products and services. We understand the importance of underwriting those investments, whether they be "new space" initiatives, supersonic flight or urban air mobility. Alongside that, we understand the challenges that our customers face in today's uncertain times. After all, it's our future—together.

GLOBAL AEROSPACE



INSURE WITH CONFIDENCE

global-aero.com

GA.43.5 (1/2021)

©2021 Global Aerospace
Underwriting Managers Limited