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The 737 Max Reactions and the Threat to Article 33 of the Chicago Convention

By Irene E. Howie

*If you can keep your head when all about you
Are losing theirs . . .*

—Rudyard Kipling¹

The world was still at war and the establishment of the United Nations a year in the future when President Franklin Roosevelt invited national representatives to Chicago in 1944 to focus on future peace by laying the framework for postwar civil aviation.² The ambitious conference did not meet all of its goals, but it did succeed impressively in standardizing technical operational practices in what became known as the Convention on International Civil Aviation (Chicago Convention) and its annexes, including affirming the obligation of mutual recognition of airworthiness certificates.

Since then, this foundational principle has stood strong against seismic changes in world politics, aviation technology, and aircraft manufacturing competition. Have the various national reactions to the 737 Max accidents without reference to this obligation cracked that foundation?³

A Global Presumptive Trust: The History of Mutual Recognition of Airworthiness Certificates *Paris Convention of 1919*

The concept of mutual recognition of airworthiness certificates—one nation's trust in another's aircraft safety evaluation—followed closely in the wake of international flight. Only 16 years after the Wright brothers' first flight and eight years before Charles Lindbergh crossed the Atlantic, the Paris Convention of 1919 affirmed that each nation has absolute sovereignty over its airspace and provided the blueprint for

peaceful collaboration in international civil aviation after the First World War.⁴ The treaty, which the United States did not ratify, included technical standards annexes and established a permanent international commission for air navigation with the responsibility to amend those annexes. Essential to its technical construct and operational principles, and ultimately to be included in the Chicago Convention, was mutual recognition of airworthiness certificates:

Certificates of airworthiness and of competency and licenses issued or rendered valid by the State whose nationality the aircraft possesses, in accordance with the regulations established by Annex B and Annex E and hereafter by the International Commission for Air Navigation, shall be recognized as valid by the other States.⁵

This concept of mutual recognition was a presumptive trust in the efficacy of the international regulations to be shepherded by the countries participating in the International Commission and in the commitment of signatory nations to follow them. Without it, there would be burdensome technical regulatory frontiers in the air.

Havana Convention of 1928

Compare this approach with the Havana Convention of 1928, developed by the United States and Latin American countries and intended to address civil aviation operations in the Western Hemisphere.⁶ Unlike the Paris Convention, the Havana Convention, which the United States signed and ratified, did not provide

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Chair's Message

It feels like a lifetime ago that we were together in Washington, D.C., for our Spring Update Conference. Reflecting back, I remember our sense of community and the camaraderie and support we shared—all hallmarks of our Forum and characteristic of our members.

How quickly the world—our aviation world—has changed. For those who have been personally impacted by COVID-19, our hearts are with you. And the Forum stands with the aviation industry as we navigate these truly uncharted skies. The Forum has long been a place aviation lawyers have turned to for leadership, guidance, and support, and we are committed to helping our members, and the industry, through this time. We have dedicated this issue to all the aviation workers, on front lines and behind the scenes, working tirelessly to maintain employees' and customers' safety and to bring the industry back stronger than ever as we emerge from the most significant aviation crisis in history.

As we move past the initial survival phase and towards recovery and renewal, our clients need their lawyers to provide more than legal advice—they need them to serve as trusted advisors and partners. Many of us are called to go beyond advising on “normal” business and regulatory issues to advise on the most complex and, in some cases, existential issues that we will face in our lifetimes. As always, the Forum and the *Air and Space Lawyer* will be here to provide needed substantive content and perspective.

This issue features a candid interview with Southwest Airlines CLO Mark Shaw on challenges facing the industry. It also presents articles on the Chicago Convention and mutual recognition obligations in the context of responding to accidents, liquidated damages for aircraft leases, and potential changes to the FAA registry.

We hope we can be together for our September Annual Conference. Instead of meeting in Montreal, we are planning a combined virtual and in-person conference in D.C. September 8–11, with the in-person session on September 11. We will, of course, follow applicable guidelines to protect members' health and well-being. If we are unable to meet in person, we will convert the September 11 session to virtual sessions. All eight committees (Space, Drones, Finance, General Aviation, Consumer Protection, Cargo, Sustainability, and Airports) will provide virtual content for the remainder of the month. In appreciation of our members and in light of our sector's financial difficulties, members' registration fees will be waived for all September content.

While this is a challenging time, our industry is innovative and resilient. I hope you share my confidence that together we will weather this storm and come out even stronger. In the meantime, be well and please do not hesitate to reach out with any questions or suggestions or if you need assistance along the way. You can reach me at jennifer.trock@bakermckenzie.com or 202-452-7055.

Jennifer Trock

Chair, Forum on Air and Space Law

Jennifer Trock (jennifer.trock@bakermckenzie.com) chairs Baker McKenzie's North America International Commercial Practice Group, is a member of its Global Aviation Group in Washington, D.C., and leads the firm's unmanned aircraft systems (UAS) focus team.



Editor's Column

As we were developing the spring issue of *The Air & Space Lawyer* late last year, we were just becoming aware of Covid-19, and it was not in the United States. By the time the issue was published in March, its impact was already being felt here. Since then, all segments of our industry have been decimated. As of this writing in early May, Airlines for America reports that passenger demand has dropped by 94 percent, with domestic flights averaging 20–25 passengers, and international flights averaging approximately 35 passengers. The number of daily operations has dropped accordingly, and U.S. airlines have halved their active fleets, parking more than 3,000 aircraft. More than 100,000 airline employees voluntarily have reduced hours or compensation or taken early retirement. Aircraft manufacturers, maintenance and other service providers, and airports have been forced to reduce operations and impose significant furloughs.

Looking forward, the great unknown is how quickly demand will rebound to support recalling employees, returning aircraft to service, and resuming manufacturing and maintenance operations once our economy begins to open up again. After 9/11, it took three years for passenger volumes to recover, while it took seven years to recover from the 2008 global financial crisis. This issue is dedicated to all of the aviation industry workers fighting to save it and to maintain the safety and security of its employees and customers.

As lawyers, we have had to help our clients navigate many novel issues this situation has created and at the same time continue to provide ongoing legal advice and support on what are now viewed as

“normal” business and operational issues. In this issue, we are very fortunate to be given a sense of what it has been like for one major airline chief legal officer, Mark Shaw of Southwest Airlines, to deal with the challenges created by the Covid-19 pandemic. Mark’s unique insights underscore the challenge of sustaining an airline fighting an unexpected existential threat.

Business and regulatory challenges do not just go away during times of crisis, and we have three excellent substantive articles that address important continuing issues that will be with us after the Covid-19 pandemic has resolved. In our lead article, Irene Howie presents a very thoughtful analysis and discussion of the implications of the failure of signatory States to rely on Article 33 of the Chicago Convention on International Civil Aviation and its mutual recognition obligation when they responded to the Max 737 accidents. Dan Carragher delivers an excellent discussion of the dilemma facing lessors to craft and enforce liquidated damage clauses and related stipulated loss value clauses after a bankruptcy court in 2019 rejected a creditor’s liquidated damage claim in *In re Republic Airways Holdings Inc.* Finally, Ed Gross and colleagues at Vedder Price review two recent federal studies of the FAA Aircraft Registry, particularly one by the General Accounting Office recommending significant technical and procedural changes and exploring their significant implications for users of the Registry.

To all of our readers, stay safe!

David A. Berg
Editor in Chief

David Berg (airberg600@gmail.com) was general counsel of Airlines for America for 15 years before retiring in 2018. He was Chair of the Forum on Air and Space Law from 2003 to 2005. He resides in Las Vegas, Nevada.



An Interview with Mark Shaw, Executive Vice President–Chief Legal & Regulatory Officer, Southwest Airlines

Mark Shaw advises Southwest Airlines' Board of Directors and Senior Management on a range of legal issues related to the development and implementation of Southwest's business strategy, corporate governance, compliance policies, general corporate matters, and litigation. He also supervises the work of outside counsel retained in legal matters involving the Company, and he oversees its Governmental Affairs, Real Estate, Corporate Facilities, and Airport Affairs functions.

A&SL: Tell us a little about your background. How did you come to work at Southwest, and what experiences prepared you for your current position of Chief Legal and Regulatory Officer?

MS: I started my legal career doing bankruptcy and Chapter 11 restructuring work with Akin Gump Strauss Hauer & Feld in Dallas, Texas. I subsequently moved into the firm's Corporate & Securities group, where I did general securities law and M&A work. At one point, I was asked to assist a partner with a client who was selling used 747s to a foreign airline; I had never worked on an aircraft transaction before but jumped in, and that started what would become an aircraft finance and leasing practice. Ultimately, I spent time with GE Capital Aviation in Ireland on a secondment from Akin Gump, where I continued to gain experience in the aircraft finance and leasing area. That ultimately led me to Southwest, where I spent a number of years working on a broad range of matters, including our public company work as well as general transactional work. I ultimately was put over our entire Corporate & Transactions team, which led to my promotion to General Counsel in 2013. Without a doubt, all of the experience I gained in various practice areas at Akin Gump, together with the broad range of projects I worked on in my early years at Southwest, prepared me for my current position.

A&SL: What disciplines report to you, and to whom do you report?

MS: I report to our Chairman and Chief Executive Officer, Gary Kelly. As Executive Vice President—Chief Legal and Regulatory Officer, I have four departments reporting to me: Legal, Governmental Affairs, Airport Affairs, and Corporate Facilities. Our Governmental

Affairs Department handles all initiatives relating to state, local, and federal government. Closely tied to that is our Airport Affairs team, which manages our airport relationships and projects across our system. Corporate Facilities is responsible for all of our construction projects system-wide and the general maintenance of our headquarters and airport facilities. Obviously, our Legal team works closely with all of these departments on a variety of projects.

A&SL: When did it hit you and your colleagues that COVID-19 was an existential threat, and what was your initial take on how the Legal & Regulatory team could contribute to Southwest's survival?

MS: We always talk about being prepared, and fortunately we were as prepared as we could have been this year. While we kept a close eye on the coronavirus in its earliest stages, we probably became aware of the impact to us the last week of February. Our team plays a critical role during a crisis, and especially one of this magnitude. Southwest has a robust emergency response program, so the good news is we all know our roles in a crisis, and we were equipped to activate the plan.

I knew as the crisis started to grow that our Legal & Regulatory team would play a critical role in numerous areas. We've had to deal with a multitude of legal issues, including supporting our Finance team on significant transactions to increase our liquidity as we navigate through this process. On the Governmental Affairs side, our entire team has had to deal with issues around federal, state, and local requirements and restrictions on our operations arising from the pandemic. Our Airport Affairs team has been partnering with our airports as we have decreased our operations around the system, and our Corporate Facilities Team has been instrumental in the adjustments we've had to make to our airport facilities and headquarters campus—for example, all of the issues around making our airport facilities as safe as possible for our customers, and our headquarters campus as safe as possible for our employees.

A&SL: Did your contingency/business continuity planning include a scenario where demand falls by 90-plus percent, and did it provide a useful playbook?

MS: No, and I'm not sure anyone could have predicted this scenario. But again, we were as prepared as we could have been with our focus on keeping a strong balance sheet, keeping our costs and fares low, and taking care of our people. I feel we are probably as prepared or more prepared than our peers in the industry. Also, part of our Emergency Response Plan included a Pandemic Response Plan, so we at least had something to start with as the crisis unfolded.

A&SL: Now, approximately two months into this situation, has your role and that of your team evolved?

MS: It's an all-hands-on-deck scenario around this crisis, so we've had to shift our focus to many of the areas I've described above, but our overall function has not changed drastically—except now we are becoming well-versed in best practices working from home.

A&SL: Give us a snapshot of what your days are like. Is there any rhythm or “normalcy” to them?

MS: Yes, and that is a testament to our Emergency Response program. We have a lot of discipline and rigor in our plan, with daily calls from leaders of all departments. That regular cadence helps to collaborate and share critical information in a timely manner. Like other department leaders, I am also actually increasing the number of weekly meetings with our various teams to make sure everyone is on the same page as far as issues and priorities.

Working remotely for many of our employees has been an adjustment, but one we've made fairly seamlessly. I think one of the most difficult parts for me and many others at Southwest, given our unique culture, has been the relative isolation we've had from our colleagues. We really do thrive on interacting with each other at Southwest, so it has definitely not been normal to not see people very often as we do much more of our work remotely and over our computers and telephones.

A&SL: How have you utilized outside counsel during this period?

MS: We've had to rely quite a bit on our outside counsel during this period, particularly to support us and advise us on the critical, and historic in my opinion, financings that we were challenged to complete in an incredibly short time frame. And while many courts have slowed down, the litigation hasn't stopped, so we have had to continue to rely on outside counsel on our cases across the country. We have a great team of in-house lawyers with an enormous breadth of experience across all areas, so my practice is to only hire outside counsel when we (1) need their particular expertise or (2) need additional resources. We've needed both of those things in abundance during this current crisis.

A&SL: What has been the biggest challenge for you during this extraordinary period, and how does it differ from what you would normally consider your biggest challenge(s)?

MS: Fortunately, or unfortunately, we've had a lot of practice dealing with large-scale issues, most recently with the grounding of the MAX. While this is much bigger than that, many of the challenges are similar. Our biggest challenge is the pace of changes daily and the magnitude of the work. But, again, I can't emphasize enough what a great team we have throughout the Company. When people ask me how I'm doing during these challenging times, I tell them that I've been through three major periods of crisis in my 20 years at Southwest: the first was 9/11, the second was the 2008 financial crisis, and the third has been the double whammy of the ongoing MAX/COVID-19 crisis. I have come to realize through it all what an amazing group of people we have working at Southwest. There is no place I'd rather be, particularly in a time of crisis, than here at Southwest.

I think the biggest challenge from the COVID-19 pandemic is just the scale of it and the speed of the response we've had to make to it from both a financial and operational standpoint, even when compared to 9/11 and the 2008 financial crisis—and that's saying a lot.

A&SL: What are the top two or three pieces of advice you would pass on to young lawyers interested in an in-house aviation career?

MS: First, get as much experience as you can get in as many different areas as you can. Second, if you go in-house in an airline or other aviation-related area, be open to working on as many different types of projects in-house as you can. You never know where that might lead you. Third, you have to want to be a member of a team. As our CEO Gary Kelly has said, the airline business is extremely competitive—it is the ultimate team sport!

A&SL: What are you looking forward to doing when things get back to, or approximate, normal?

MS: Getting back to flying more on Southwest, of course! Followed closely by seeing all of my colleagues at Southwest again, sleeping, and hopefully spending a little more time with my family, including playing some golf!

I think the biggest challenge from the pandemic is just the scale of it and the speed of the response we've had to make, from both a financial and operational standpoint.



Republic Airways: Will Courts Ever Enforce Stipulated Loss Value Claims in Aircraft Leases?

By Daniel J. Carragher

With a global drop in demand and reduction of flight schedules by 90 percent or more in the wake of the COVID-19 pandemic, we could be braced for another wave of insolvency proceedings as passenger airlines, charter operators, and helicopter operators face incredibly difficult decisions about rationalizing fleet size and managing ongoing lease costs. At some point, paying rent on stored aircraft ceases to be a viable option, and airlines and other operators will either default or file for Chapter 11 protection and reject leases.

Rejection of leases in bankruptcy is a powerful tool. The standard for approving rejection is a lenient business judgement standard, and aircraft lease rejection motions typically are allowed unless they drastically modify provisions for insurance, return locations, or pairing of engines with airframes or impair the lessors' rights to recover their property. Rejection also sets a narrow period of time, typically 30 days, for the affected lessor to file a proof of claim for damages arising from the rejection of the lease.

The typical measure of damages in bankruptcy, however, allows a lessor to recover accrued and unpaid rent as of the petition date, plus the actual damages for loss of future rent. The test begins with a calculation of contractually obligated base rent for the remainder of the lease term. From that amount, the fair rental value of the aircraft is deducted to arrive at net rental losses. The resulting damages are discounted to present value back to the petition date so that claims of all creditors are treated comparably. Other actual damages that can be claimed include return condition deficiencies and missing parts.

Unlike claims under real estate leases, there is no cap on the amount of prospective damages that an aircraft lessor can claim. The only reason for disallowance is if the claim is unenforceable under applicable state law for a reason other than because the "claim is contingent or unmaturing."¹ Thus, if the lease provision is enforceable under state law, a bankruptcy claim based on that provision is not subject to disallowance.²

Under a typical aircraft lease, the lessor can claim amounts due under a liquidated damages clause plus any additional damages under any separate tax indemnity

agreement. Using a formula approach designated at the inception of the lease, the lessor may be entitled to damages above and beyond the common view of what constitutes actual damages in bankruptcy cases. The refusal of the court in *In re Republic Airways Holdings Inc.*³ to enforce such a stipulated loss value (SLV) provision is the focus of this article.

Background of U.C.C. Article 2A

U.C.C. Article 2A was first promulgated in 1987 to codify a separate set of rules for personal property leases with a focus on freedom of contract.⁴ The subject matter was deemed sufficiently different from sales (Article 2) and secured transactions (Article 9) to warrant its own body of law. Aircraft leases and pricing models were developed long before Article 2A was promulgated, and the use of SLV or termination value schedules as the basis to calculate liquidated damages was long established. Indeed, creating a statutory framework to recognize and validate preexisting practices was one of the driving forces behind Article 2A.⁵

Some states enacted Article 2A soon after it was released, while others waited several years. New York enacted Article 2A in 1994, and Connecticut waited until 2002. The delay in universal enactment meant that challenges to liquidated damages clauses continued to be evaluated under more restrictive common law standards. As a result, the case law under Article 2A is still in developing. Even after state adoption of Article 2A, many litigants and courts continued to look to the common law and never focused on the potentially different outcome under Article 2A.⁶

Treatment of Liquidated Damages: A Comparison of Common Law and U.C.C. Articles 2 and 2A

Common Law

Under the traditional common law view of liquidated damages, the anticipated damages for breach must be difficult or impossible to estimate, and the liquidated damages must be a reasonable forecast of the anticipated damages. The burden is on the party challenging the enforceability of a liquidated damages clause.⁷

At common law, liquidated damages clauses were viewed with suspicion by courts, and many reported cases have refused to enforce them.

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[B]ecause the goal of contract remedies is compensation, not punishment, if the purpose or effect of a provision stipulating damages is to punish the nonperformance of a party's obligations under the agreement, or to coerce or secure performance of the agreement through the assessment of an unreasonable sum payable on nonperformance, the provision will not be upheld.⁸

There have been notable bankruptcy court rulings invalidating aircraft lease liquidated damages clauses utilizing the common law approach. In *Interface Group-Nevada, Inc. v. Trans World Airlines, Inc. (TWA)*, the U.S. Court of Appeals for the Third Circuit upheld rulings by the lower courts that invalidated a typical liquidated damages clause in a lease for two Lockheed L-1011s.⁹ The court found that damages were not uncertain or difficult to calculate and that the net termination value claim bore no relationship to the lessor's probable loss in the event of breach. Where the liquidated damages formula provided for an amount that was disproportionate to the lessor's actual loss, the clause was void as a penalty. The court cited what it admitted was an improbable hypothetical of a default by Trans World Airlines (TWA) one month before the end of the lease term, where the remaining rent would be \$100,000 and the net termination value claim after resale of the aircraft would be \$11 million. The lessor admitted that the intent was to shift the risk of a market value decrease to TWA, but the court did not consider that as actual damages to the lessor.

In *In re Northwest Airlines*, the bankruptcy court invalidated liquidated damages clauses in leases of two DC-9s.¹⁰ As in *TWA*, the total remaining rent at the time of rejection was far lower than the amount claimed—\$1.36 million in rent as compared to SLV claims totaling \$15 million—more than 10 times the amount that would have been paid if Northwest had not rejected the leases. Citing Minnesota common law, the court easily concluded that the clause was an unenforceable penalty. Making the case even more difficult for the lessor, the SLVs on the leases in question did not decline over time because they were adapted to the particular facts of the case—that is, to the fact that Northwest had invested nearly \$6 million in the aircraft and was entitled to share in 50 percent of the sale proceeds, casualty loss proceeds, or static SLVs stated in the leases.

U.C.C. Article 2

U.C.C. section 2-718(1) governs liquidated damages in contracts involving sales of goods. It provides:

Damages for breach by either party may be liquidated in the agreement but only at an amount which is reasonable in the light of the anticipated or actual harm caused by the breach, the

difficulties of proof of loss, and the inconvenience or nonfeasibility of otherwise obtaining an adequate remedy. A term fixing unreasonably large liquidated damages is void as a penalty.¹¹

Section 2-718(1) first carries forward the common law requirement that damages must be difficult to quantify. If a contract concerns readily available goods for which there is a market external to the contract, a liquidated damages clause may not meet the “difficult to quantify” standard.

Second, liquidated damages must be reasonable in light of anticipated *or* actual harm. This element of section 2-718(1) was a departure from the common law, in which the majority rule focused only on anticipated harm and deemed actual harm irrelevant. Most courts have read this requirement to mean that a liquidated damages clause will be enforced if it meets either one of the tests (anticipated or actual).¹² Many attempts to avoid liquidated damages clauses focus on actual, rather than anticipated, damages, and the benefit of hindsight often figures prominently in such cases. Under the majority approach, the courts will not take a second look at actual damages as long as the liquidated damages were reasonable in light of the damages that the parties anticipated when they entered into the contract.

Third, clauses that impose a penalty are unenforceable. If the liquidated damages clause operates to coerce performance or penalize, rather than compensate, for a breach, the clause will be considered a penalty.

U.C.C. Article 2A

The applicable provision in Article 2A is section 2A-504(1):

Damages payable by either party for default, or any other act or omission, including indemnity for loss or diminution of anticipated tax benefits or loss or damage to lessor's residual interest, may be liquidated in the lease agreement but only at an amount or by a formula that is reasonable in light of the then anticipated harm caused by the default or other act or omission.¹³

The drafters of Article 2A removed some of the key limitations on the enforceability of liquidated damages clauses under common law and under section

At some point in the pandemic, paying rent on stored aircraft will cease to be a viable option.

2-718(1). Their purpose was to recognize the common desire of parties to a lease to agree in advance to a formula for establishing the amount due at any point in time for breach of the lease.¹⁴

Under the traditional common law view of liquidated damages, the anticipated damages for breach must be difficult or impossible to estimate, and the liquidated damages must be a reasonable forecast of the anticipated damages. Under Article 2A, there is no requirement that damages be uncertain or difficult to quantify. Article 2A also eliminated the proportionality requirement and the requirement of inconvenience or nonfeasibility of otherwise obtaining an adequate remedy.¹⁵

Of key importance to the enforcement of SLV provisions in aircraft leases, the text of Article 2A itself and the official comment allow loss or damage to the lessor's residual interest to be a permissible element of damages that may be liquidated in the lease agreement as long as the formula for calculating liquidated damages is reasonable in light of the then anticipated harm. The example in the official comment describes the essential elements of a typical liquidated damages provision in an aircraft lease: "A liquidated damages formula that is common in leasing practice provides that the sum of lease payments past due, accelerated future lease payments, and the lessor's estimated residual interest, less the net proceeds of disposition (whether by sale or re-lease) of the leased goods is the lessor's damages."¹⁶

This provides a seemingly firm foundation for the enforcement of a typical SLV or termination value claim. As will be seen below, however, transferring residual risk to the lessee upon default has been held to be unreasonable and punitive under Article 2A.

The Republic Airways Decision

When Republic Airways (Republic) filed for Chapter 11 protection in February 2016, its business plan called for retiring its fleet of smaller regional aircraft, including its ERJ-145s. Seven of the ERJ-145s were leased to Republic's affiliate Shuttle America (successor to Chautauqua Airlines, Inc.) by ALF VI, Inc. as owner participant (Residco), which was the successor to the original owner participant. After rejection, Residco filed proofs of claim seeking over \$55 million in rejection damages.¹⁷ The aggregate SLVs at the time of rejection were \$61.1 million, and the fair market sales value credit applied by Residco was only \$6.56 million, or only 10.7 percent of the anticipated residual values built into the leases in 2002.

The original 2002 leases for the aircraft contained SLV provisions that specified the amount of liquidated damages to be paid by the lessee in the event that the leases were terminated before the end of the 18-year basic terms. The SLV schedule stepped down over time, and the SLV tables were designed to capture not only losses due to lease payments on the aircraft but also lost tax benefits accruing with respect to the leases. The SLV schedules took into account the

projected residual value of the aircraft at the time of termination and the amounts needed for the lessor to receive a four-percent return on its investment.

The leases were amended and restated in December 2013, and new basic rent schedules were adopted that significantly reduced the amount of the monthly rent payments. However, the SLV schedules remained unchanged from the original leases. Had new appraisals been prepared, the projected residual values would have been dramatically lower.

The SLV provision allowed the lessor to claim unpaid "Basic Rent" plus, "as liquidated damages for loss of bargain and not as a penalty" and "in lieu of Basic Rent payable" for the remainder of the term, one of three options:

(1) "the amount . . . by which . . . the Stipulated Loss Value computed as of the specified payment date . . . exceeds . . . the aggregate Fair Market Rental Value . . . of the Aircraft for the remainder of the Basic Term[,] after discounting such Fair Market Rental Value to present worth";

(2) the amount . . . by which . . . the Stipulated Loss Value computed as of the [specified] payment date . . . exceeds . . . the Fair Market Sales Value," determined on the basis of an arm's-length transaction between a willing seller and a willing buyer both with full knowledge of the relevant facts, including the actual condition and maintenance status of the aircraft at such time; or

(3) the amount . . . by which . . . the aggregate Basic Rent for the remainder of the Basic Term . . . , discounted . . . to present worth [as of the payment date], exceeds . . . the Fair Market Rental Value . . . of the Aircraft for the remainder of the Basic Term[,] after discounting such Fair Market Rental Value to present worth."¹⁸

Option three is the "actual damages" formula for breach of a true lease as specified in U.C.C. section 2A-528, whereas options one and two allow the lessor to claim SLV less a credit for either the fair rental value during the remaining term (without giving rental credit for residual value after the end of the term) or sales value. Residco elected option two.

Republic challenged the liquidated damages claims as unenforceable penalty claims under Bankruptcy Code section 502(b)(1), U.C.C. section 2A-504(1), and New York common law. First, Republic claimed that the liquidated damages clause was unenforceable because it gave the lessor the choice of actual damages or SLV claims. Second, Republic claimed that the liquidated damages clause was an unenforceable penalty because it was

grossly disproportionate to the actual damages. Third, Republic challenged the use of liquidated damages because the probable loss was readily calculable.

The bankruptcy court sided with Republic and reduced Residco's claims to actual damages for lost rent during the remaining term.¹⁹ After reviewing the applicable legal standards before and after Article 2A, the court ruled that the penalty analysis under common law carried over under Article 2A:

Although Section 504 of Article 2A does not explicitly incorporate the common law's consideration of "disproportionality to actual damages," many of the cases cited above compare the damages to "probable harm" rather than actual harm; . . . this concept is consistent with the instruction in Section 504 to examine reasonableness in light of the "anticipated" harm caused by a default.²⁰

The court also held that *TWA* is still good law and an important tool by which to assess the enforceability of liquidated damages clauses.

[T]he reasonableness requirement was part of the common law test predating Article 2A and remains part of the test today. Accordingly, the Court sees no reason why it would not consider prior case law on the reasonableness of liquidated damages, including the *TWA* decision, to be relevant and useful precedent, even if ignoring other case law on now discarded elements like the difficulty of estimation.²¹

The bankruptcy court predictably compared the amount of the SLV claims to the remaining basic rent and found the claims to be a multiple of the future rent liability. The court also found that the SLV damages would rise to 104 times the remaining rent if Shuttle America defaulted with one month remaining in the term of the amended leases. However, the court's principal reason for rejecting the claims was that the transfer of residual risk to the lessee, only upon default, is an unenforceable penalty. In the court's view, the liquidated damages are inherently unreasonable unless the claim amount is tied to the anticipated harm *caused* by the default. Because the SLV claim is never triggered if the lessee pays its rent through the end of the term, the potential for such a large liability could only be seen as a punitive measure to compel performance and not one to compensate the lessor for losses caused by a default.

The bankruptcy court could have tailored its ruling to some of the bad facts presented. For example, the court could have focused solely on the disconnect between anticipated residual values at the time the leases were amended and restated in 2013 and the failure of the parties to update the SLV tables to take into account the

dramatic decline in current and projected market values. Under that approach, the liquidated damages clause could have been viewed as a penalty and invalidated on the facts of the case without reaching the issue of whether any transfer of residual risk would be prohibited. A similar approach has been used in other contexts where, for example, a truck lessor intentionally used a price for the leased trucks that was well above market value as the basis for the SLV amounts in its leases. Because that price was intended to be, and was, punitively high, the clause was unenforceable.²²

By considering the original leases and the amended leases and finding that both ran afoul of Article 2A's reasonableness requirements, the *Republic Airways* court cast considerable doubt on whether typical aircraft lease SLV provisions will ever be enforceable.²³

Recommendations and Conclusion

There is no bright line separating an agreement to pay a reasonable measure of damages from an unenforceable penalty clause.²⁴ The *Republic Airways* court deemed an SLV clause to be a penalty, whereas other courts have accepted SLV clauses in aircraft leases as reasonable and enforceable.²⁵

So, how does a lessor convince a court to enforce a liquidated damages clause and avoid having the court treat the clause as a penalty and refuse enforcement? The issues will be resolved as a matter of law without considering extrinsic evidence, so the factual underpinnings for the arguments should be included in the lease. Beyond stating that the liquidated damages clause is not a penalty, the interrelationship of the SLV clause and the timing and amount of basic rent can be explained in the lease so that, but for the lessee's agreement to assume unanticipated residual risk upon an early termination or default, the other pricing terms would not be available to the lessee. A reviewing court will need to take those factors into account in assessing reasonableness. Adverse consequences to the lessor upon early termination should be recited, such as the potential inability to draw on a residual value guaranty or potential loss of the aircraft to foreclosure if the lessee does not perform for the entire term. Lessors may also consider requesting separate lessee or affiliate residual value guarantees if such agreements can be reconciled with the parties' economic, accounting, and tax objectives.

Republic Airways can be distinguished on its facts because the continuation of the 2002 SLV tables in the 2013 amended leases presented a dramatic case of a remedy untethered from the anticipated losses at the time. However, the decision contains a broad prohibition on transfer or residual risk to the lessee if that shift occurs only after default.

Article 2A expressly permits the parties to address loss of residual value in a liquidated damages clause in a true lease. The challenge remains how best to

demonstrate that the liquidated damages amount is reasonable for the purposes of U.C.C. section 2A-504(1) and section 502 of the Bankruptcy Code.

Endnotes

1. 11 U.S.C. § 502(b)(1).
2. In a Chapter 7 liquidation, claims for fines, penalties or multiple, exemplary or punitive damages are allowable but are subordinated to claims of other creditors. *Id.* § 726(a)(4).
3. 598 B.R. 118 (Bankr. S.D.N.Y. 2019).
4. U.C.C. § 2A-102 official cmt. (AM. LAW INST. & UNIF. LAW COMM'N 1987).
5. *Id.*
6. *TAL Fin. Corp. v. CSC Consulting, Inc.*, 446 Mass. 422, 431 (2006) (lease of computer hardware, telephone equipment, software, and office furniture); *In re Nw. Airlines Corp.*, 393 B.R. 352, 356 (Bankr. S.D.N.Y. 2008) (aircraft lease); *Holmes v. Gen. Elec. Capital Corp.* (*In re Holmes*), 369 B.R. 708, 736–38 (Bankr. M.D. Ga. 2007) (aircraft lease).
7. *Honey Dew Assocs., Inc. v. M & K Food Corp.*, 241 F.3d 23, 37 (1st Cir. 2001); *Wells Fargo Bank Northwest v. TAC Int'l Airline*, 315 F. Supp. 2d 347, 350 (S.D.N.Y. 2003) (enforcing a liquidated damages clause under Article 2A equal to the rent for the remainder of the lease term less the fair market rental value of the aircraft, discounted to the payment date).
8. 24 RICHARD A. LORD, *WILLISTON ON CONTRACTS* § 65:1 (4th ed. 2019).
9. *Interface Group-Nevada, Inc. v. Trans World Airlines, Inc.*, 145 F.3d 124, 133–36 (3d Cir. 1998).
10. *In re Nw. Airlines Corp.*, 393 B.R. 352 (Bankr. S.D.N.Y. 2008).
11. U.C.C. § 2-718(1).
12. ANDERSON, *DAMAGES UNDER THE UNIFORM COMMERCIAL CODE* § 13:10 (2003).
13. U.C.C. § 2A-504(1).
14. *Id.* § 2A-504 official cmt.
15. “This section does not incorporate two other tests that under sales law determine enforceability of liquidated damages, i.e., difficulties of proof of loss and inconvenience or nonfeasibility of otherwise obtaining an adequate remedy. The ability to liquidate damages is critical to modern leasing practice; given the parties’ freedom to contract at common law, the policy behind retaining these two additional requirements here was thought to be outweighed. . . . By deleting the reference to unreasonably large liquidated damages the parties are free to negotiate a formula, restrained by the rule of reasonableness in this section.” *Id.*
16. U.C.C. § 2A-504.
17. Residco also filed guarantee claims against parent company Republic Airways Holdings Inc. for the same amounts.
18. *In re Republic Airways Holdings Inc.*, 565 B.R. 710, 713–14 (Bankr. S.D.N.Y. 2017).
19. *In re Republic Airways Holdings Inc.*, 598 B.R. 118 (Bankr. S.D.N.Y. 2019).
20. *Id.* at 132.
21. *Id.* at 131.
22. *Ryder Truck Rental, Inc. v. Maalt, LP*, 2017 WL 9806934 (N.D. Tex. Dec. 13, 2017). After invalidating the liquidated damages clause, the court awarded the lessor its lost profit on the transaction, which is an alternative remedy to the recovery of the remaining rent under U.C.C. § 2A-528(2).
23. The *Republic Airways* court also rejected Residco’s claims for the full amount under unconditional guarantees of the lease claims by Republic Airways Holdings, the parent of the lessee, thus cutting off a potential structural solution of the issues arising under Article 2A. In the court’s view, reading the guarantees to require payment of amounts that were unenforceable under the leases would violate public policy. *Republic Airways*, 598 B.R. at 143–48. Shortly after the court’s decision was issued, the parties reached a stipulated settlement under which Residco’s claims were allowed for \$20 million as compared to the \$55 million sought in the rejection damages claims.
24. *TAL Fin. Corp. v. CSC Consulting, Inc.*, 446 Mass. 422, 431 (2006).
25. *See, e.g., In re Holmes*, 369 B.R. 708, 736–38 (Bankr. M.D. Ga. 2007).



Under Scrutiny: The New GAO Recommendations for FAA Aircraft Registration

By Edward K. Gross, Erich P. Dylus, and Jonathan M. Rauch



The aviation industry has been following legislative and agency initiatives to address various continuing concerns about the efficiency, accuracy, and effectiveness of the U.S. aircraft registry (the Registry) and its management by the Federal Aviation Administration (FAA).¹ These initiatives gained considerable momentum after a handful of news accounts in 2017 and 2018 detailed alleged wrongdoing by bad or negligent actors operating FAA-registered aircraft and ultimately resulted in two different federal examinations of the Registry.



In 2019, the Office of Inspector General of the U.S. Department of Transportation (OIG) conducted the first examination.² It focused on how best to modernize the Registry's capability and functions. The U.S. Government Accountability Office (GAO) conducted the second examination,³ and the resulting May 2020 report focused on the impact of the Registry's practices, procedures, and related laws and regulations, including the risk of Registry fraud and abuse by bad actors and FAA oversight of the safe operation of FAA-registered aircraft regardless of location. The GAO ultimately concluded that there were many inadequacies as to the information required by or available from the Registry relating to the ownership and operation of FAA- (or "N-") registered aircraft, and it made several recommendations as to how those inadequacies should be addressed.

The OIG and GAO Reports: A Response to Incidents of Registration Fraud and Abuse

The Registry maintains registration information on approximately 300,000 civil aircraft. Unlike most of the civil aviation registries in other countries, the Registry is solely an owner (not an operator) registry, so each aircraft is registered in the name of the legal owner. The owner can be an individual or a legal entity such as a corporation, limited liability company, or owner trust, but in each case, the owner must meet certain eligibility requirements such as U.S. citizenship or permanent legal residence.⁴ Registry procedures and practices must comply with

federal statutes and regulations, as well as international civil aviation requirements focused on safe operation and other national or international registration considerations. FAA registration of an aircraft is often desirable to owners and operators, in addition to financing providers and investors, because FAA regulations are a benchmark for aviation safety and maintenance standards across the spectrum of aircraft and their operations. The reliability of the Registry records is essential to the FAA and other agencies and to prospective purchasers and financiers, including in connection with establishing the identity of the registered owner and other interest holders in an aircraft.

The OIG's May 8, 2019, report (the OIG Report)⁵ addressed the FAA's progress in modernizing the Registry and providing public access to Registry-related activities. The OIG Report noted the difficulty of achieving Registry modernization by October 2021 as mandated by Congress in the FAA Reauthorization Act of 2018,⁶ given the Registry's outdated software, lack of real-time registration information, paper-based submission process and back-log of registration submissions.

The purpose, conclusions, and recommendations in the GAO's March 2020 report (the GAO Report) are signaled by its title, "FAA Needs to Better Prevent, Detect, and Respond to Fraud and Abuse Risks in Aircraft Registration."⁷ The GAO Report was included in a letter dated March 25, 2020 to Congressman Peter King (D-NY) and Congressman Stephen Lynch (D-Mass.). Congressman Lynch is the chairman of the Subcommittee on National Security of the U.S. House of Representatives' Committee on Oversight and Reform. Prompted by a 2017 *Boston Globe* article⁸ and other reporting of anecdotal incidences involving criminal, unsafe, and other bad conduct by certain owners of

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FAA registered aircraft, Congressmen Lynch and King first attempted to address their Registry concerns legislatively. When no such legislation gained momentum, they requested the GAO to “examine potential fraud and abuse of aircraft registration requirements and processes as well as the extent of FAA and law-enforcement efforts to address vulnerabilities and challenges associated with aircraft registrations.”⁹ Based on that request, the GAO examined instances and risks of actual and potential fraud and abuse by aircraft registrants, assessed the FAA’s ability to prevent and detect such fraud and abuse and its ability to act and coordinate with law-enforcement entities to respond to fraud and abuse risks relating to aircraft registrations.

The GAO’s Five Risk Indicators

The GAO’s stated objective was to ensure that the Registry does not “enable criminal, national security, or safety risks.”¹⁰ Registry data could be used to address these concerns, if such data were sufficient in scope, reliable, and accessible to the various agencies. The GAO analyzed a wide spectrum of sources, including certain laws, regulations, FAA policies, reviews of reports, Department of Justice (DOJ) press releases, news articles, and Registry data from fiscal years 2010 through 2018.¹¹ It also interviewed officials from the FAA, DOJ, and Department of Homeland Security, as well as selected representatives of aviation industry associations and certain Registry intermediaries that facilitate aircraft registrations for others (e.g., trust companies, banks, and “a registered agent”).

The GAO undertook a number of different analyses based on the referenced research in order to reach the conclusions detailed in the GAO Report. For example, it selected six case studies and Registry intermediary examples for review based on categories of fraud and abuse risks in the registration process (e.g., criminal activity, national security, and safety), but it noted that “[t]hese cases may not represent all existing vulnerabilities and are not generalizable to the FAA registry population as a whole.”¹² The GAO also conducted interviews with FAA and law-enforcement officials for their perspectives and, based on those interviews and other research, the GAO selected five risk indicators of potential fraud or abuse for use by the FAA when analyzing Registry data to identify registrations matching one or more of these risk indicators.

The five risk indicators identified by the GAO were: “(1) registrations using registered agent address, (2) registrations using opaque ownership structures, (3) aircraft registration addresses located in countries identified by the Department of State as associated with major illicit drug production and money laundering, (4) OFAC data on individuals and entities subject to U.S. sanctions, and (5) NTSB safety accident and incident reports.”¹³ By its reference to registrations using “opaque ownership structures,” the GAO was referring

to “corporation- and trust-based ownership that potentially disguises the beneficial owner.”¹⁴ These risk indicators were to serve as “points of inquiry for further examination of conduct that may run counter to the interests of the federal government by posing potential criminal, national security, or safety risks.”¹⁵

In a footnote related to the risk-indicator discussion, the GAO Report notes that it found over 17,000 registrations (out of approximately 300,000) with one or more risk indicators, but of those 17,000 registrations, more than 15,000 (or about 90 percent) were associated with only one risk indicator, about 2,000 registrations (10 percent) were associated with two risk indicators, and the remaining 140 (one percent) were associated with three or more risk indicators.¹⁶ Breaking that down further, the GAO Report notes that of those 17,000 registrations, at least 4,080 were made using a resident agent’s address as both the mailing address and physical address, and 6,800 registrations were made by registrants that were noncitizen trusts¹⁷ or were U.S. citizen corporations using a voting trust.

A Closer Look at the Risks

Registration Information May Not Be Reliable

The GAO found a number of Registry practices to be vulnerable to fraud and abuse. First, when submitting applications to register ownership of an aircraft on the Registry, applicants are required to self-certify as to their eligibility and as to the accuracy of certain information regarding their identity, ownership, and address. The Registry is not required to, and it does not, as a practice, verify such information certified by applicants. The GAO explained why this self-certification process creates fraud and abuse risks—essentially, the Registry is relying on the honesty and accuracy of the information submitted by the applicant without independent verification.

Ownership Structures May Obfuscate the Identity of the True Owner

Another vulnerability noted by the GAO relates to the use of what it refers to as “opaque” ownership structures. According to the GAO, an ownership structure is “opaque” if it affords limited transparency as to the person who ultimately owns and controls the aircraft.¹⁸ Ownership structures considered by the GAO included common types of business entities such as limited liability companies, limited partnerships, and statutory or common law trusts. The purposes for registering an aircraft in the name of a business entity of a type characterized by the GAO as opaque could relate to privacy concerns of individual or corporate aircraft owners that may relate to their safety and security. Noncitizen trusts (NCTs) and certain voting trusts are often used as a means of satisfying the FAA citizenship requirements¹⁹ by companies and individuals that either do not meet, or are uncertain as to whether they meet, the FAA definition of a U.S.

citizen.²⁰ The GAO was concerned, however, that these structures could also be used for money laundering or other illegal purposes.

Risk Assessment and Coordination with Other Agencies Has Been Insufficient

The GAO was also concerned by the FAA's failure to conduct a risk assessment of the adequacy of its eligibility review and information collection procedures to prevent fraud and abuse by Registry applicants. The GAO indicated that such an assessment would be necessary for the FAA to better understand, and then address, vulnerabilities in its current procedures that may allow registration by owners or operators engaged in criminal or terrorist activity or operating an aircraft unsafely.

The GAO Report was also critical of the manner in which the FAA coordinates with the various law enforcement and national security agencies. According to the GAO, there is no formal process by which the FAA can coordinate with these agencies and, without such a process, the FAA and these other agencies are unable to sufficiently leverage their respective resources and agency powers, including information-sharing and joint enforcement actions.

FAA's Data Storage Practices Require Modernization

Lastly, the GAO Report discussed inadequacies in the FAA's data storage practices. According to the GAO, these practices limited the utility of the data for research, noting as an example that details pertaining to aircraft ownership are stored in noncompatible or irregular files. However, the GAO notes that by modernizing the Registry's systems (as contemplated by the OIG Report), the FAA will be better able to generate, research, and analyze the information that it collects for use to determine the common characteristics of registrants who engage in fraud and abuse in the Registry.

GAO's 15 Recommendations to FAA

The GAO Report offered the FAA Administrator 15 recommendations (noting that the FAA agreed with all of them). These recommendations may be loosely grouped into four categories, as described below.

Assess Risk

The GAO Report recommends that the FAA conduct and document a risk assessment of inherent and residual fraud and abuse risks with Registry practices that make it vulnerable to unlawful activities, threats to national security, or safety risks. The goal is to develop a detailed strategy to address risks identified in the assessment.

Collect and Verify Registrants' Information

The GAO recommends that the FAA collect and record information on individual registrants, initially including their names, addresses, dates of birth, and driver's or pilot's licenses or both, with subsequent personally

identifiable information (PII) elements to be determined from the FAA's risk assessment findings.

Information on each private legal entity owing more than 25 percent of the aircraft is also to be collected. The GAO recommends that the FAA verify aircraft registration applicants' and dealers' eligibility and information and that it increase aircraft registration and dealer fees to ensure collection of amounts sufficient to cover the costs of FAA efforts to collect and verify applicant information and to keep pace with inflation.

Modernize the Registry's Information Technology and Develop Data Analytics Approaches

The GAO recommended that the FAA record in an electronic format that facilitates data analytics by FAA and its stakeholders certain information currently collected in ancillary files or PDFs regarding owners and related individuals and entities with potentially significant responsibilities for aircraft ownership (e.g., beneficial owners, trustors, trustees, beneficiaries, stockholders, directors, and managers; any such owners and "potentially responsible parties"), and declarations of international operations. These systems would link information on potentially responsible parties through a common identifier.

As part of its IT modernization, the FAA would develop an approach to check sanctions data maintained by the Department of the Treasury's Office of Foreign Assets Control (OFAC) to flag sanctioned individuals and entities across aircraft registration and dealer systems. It would use data collected as part of the modernization project as well as current data sources to identify and analyze patterns of activity indicative of fraud or abuse based on information from declarations of international operations, postal addresses, sanctions listings, and other sources, and information on dealers, noncitizen corporations, and other potentially responsible parties.

Establish Information-Sharing and Enforcement Procedures with Other Agencies

The FAA would ideally develop and implement risk-based mitigation actions to address potential fraud and abuse identified through data analyses, as well as mechanisms, including regulations if necessary, for dealer suspension and revocation. In coordination with relevant law enforcement agencies, it would enhance coordination within the Aircraft Registry Task Force through collaborative mechanisms such as written agreements and use of liaison positions and develop a mechanism to provide declarations of international operations for law enforcement purposes.

Looking Ahead to Implementation: Benefits and Burdens

Timing and Funding of Modernization Will Create Challenges

The OIG's recommended Registry modernization

could result in meaningful improvements to the Registry's capabilities and functions. Currently, registering aircraft on the Registry is a manual, paper-based process requiring the necessary paperwork to be mailed or dropped off in person at the FAA Registration Branch in Oklahoma City, Oklahoma, during business hours on weekdays. The Registration process could become web-based and accessible at all hours like that of the International Registry of Mobile Assets, which allows for 24/7/365 online registrations of interests.²¹ Although access of this type may be more aspirational than practical, if achieved to any significant extent, it could ameliorate many of the time constraints and waiting periods (e.g., an inability to register when the Registry's "window" is closed) for aircraft transaction filings. Eventually, combining technologies such as e-filings and digital signatures with a distributed ledger or blockchain framework could further increase the security, uptime, and fraud-detection abilities of a digital Registry by mitigating honeypot risks of a centralized, sensitive data silo and conflicting registrations.²²

The timing and cost of implementing the recommended undertakings in the OIG Report could have an impact on the implementation of the GAO Report recommendations. Many of the recommendations anticipate that the OIG Report's suggested modernization will have been completed. The high costs of planning, labor, equipment, and technology necessary to achieve the modernization, whether by the October 2021 deadline mandated by the FAA Reauthorization Act or after, will likely require the FAA to make some difficult choices as to how best to deploy the limited amount of funds allocated by Congress for those purposes.

The GAO's recommended undertakings will also require a considerable investment both at the implementation stage and after. Whether Congress will allocate sufficient funding to support the implementation of both the OIG and GAO Reports' recommendations remains to be seen. Further, the GAO-recommended collection and verification of information would naturally interfere with the efficiencies of the registration process contemplated by the OIG Report. The OIG's and GAO's recommended procedural changes, as well as the ongoing assessments, agency collaboration, and other recommended Registry responsibilities, will require staffing and other resources and will perhaps overburden the Registry, especially if implemented before the modernization has been completed.

New Registration Procedures May Pose Risks for Legitimate Registrants

As is typically the case in any market affected by government-imposed changes to established transactional practices, the market participants are likely to scrutinize the purposes of, empirical support for, and the

perceived benefits and costs of, the proposed changes. Participants in the U.S. aviation industry will likely welcome any practical changes to Registry practices if these can be reasonably expected to have a meaningful impact on crime prevention, security, and the safe operation of FAA-registered aircraft.

Aviation market participants have often been asked to adapt to changes to FAA registration requirements, policies, and practices over the many years since the Registry was established, and they have collaborated with Registry and FAA officials on mutually acceptable approaches to achieve their purposes. However, certain of the GAO's recommendations could result in changes to Registry requirements and practices that some aviation industry members might find particularly objectionable. Registry users may be concerned that, even though well-intended, changes implemented pursuant to the GAO's recommendations could make Registry use more laborious and protracted, create certain privacy and security risks, unduly restrict transaction structures, or cause registration validity challenges. Some examples include the following.

Focusing on Individual Risk Indicators May Hamper Legitimate Registrations

As noted above, there are currently 300,000 or so aircraft registered on the Registry, and the GAO flagged 17,000 as having risk indicators, and 90 percent of those registrations had a single risk indicator. The most common risk indicators identified by the GAO and accounting for approximately 11,000 of the registrations flagged by the GAO related to the use of a registered agent's address or were registrations using NCTs and U.S. citizen corporations using voting trusts. These risk indicators, when coupled with any of the other three risk indicators (i.e., addresses in countries identified with illicit drug production or money laundering, names on a sanctions list, or names on NSTB accident or incident reports), would be meaningful. But if focused on as stand-alone concerns, those risk indicators could increase "false positive" fraud/risk flags, result in obtrusive scrutiny, or create invalidation risks.

Transparency May Trigger Security and Other Risks

The GAO's focus on "opaque" structures as a risk indicator could be particularly problematic to a large segment of Registry users. For example, individual and corporate aviation Registry users often rely on ownership trusts or special purpose entities (SPEs) when registering aircraft because they are concerned about privacy or security risks associated with information accessed by the general public (i.e., accessibility to the FAA and other agencies would not be a concern). Undue scrutiny, burdensome verification requirements, or restrictions on the use of these ownership entities could create even bigger challenges for parties to all types of complex or structured transactions.²³

Scrutiny of NCTs and Voting Trusts May Cause Unintended Negative Consequences

The opaque structures of particular concern to the GAO are NCTs and voting trusts. A discussion about the essential nature and use of NCTs and voting trusts for legitimate purposes is beyond the scope of this article. However, NCTs and, in some cases, voting trusts are used to satisfy the FAA's citizenship requirement by both truly foreign individuals or entities (i.e., those organized or domiciled outside the United States), and many apparent U.S. entities (e.g., public companies; entities appearing to be domestic as a result of the composition of owners, officers, board members, etc.).²⁴ NCTs, in particular, are essential business tools in a global economy that have been used for legitimate business purposes for 40 years across the spectrum of general, business, and commercial aviation, including by manufacturers, lessors, operators, and other market participants. NCT regulations and practices developed collaboratively between FAA and industry stakeholders, including by a policy clarification published by the FAA in 2013²⁵ that reaffirmed the legitimacy of NCTs but also added further safeguards and requirements for their use.

The GAO Report acknowledges that FAA regulations allow for valid registrations using NCTs and voting trusts to meet FAA's citizenship requirements. However, the GAO further notes that, based on its findings "and according to FAA and law-enforcement officials," registrations using NCTs and voting trusts "may also mask ineligibility or illicit actors"²⁶ and that Registry officials are expected to detect and take measures to address abusive actions. But of the 6,800 registrations identified by the GAO as being NCTs or voting trusts, no more than six "were associated with individuals subject to U.S. sanctions, four were associated with an FAA revocation or suspension, and 16 appeared to be shell companies."²⁷ The commentary in the GAO Report is likely to heighten industry concerns that legitimate use of NCTs might be subjected to even greater scrutiny and undue and burdensome restrictions or compliance burdens.

Data Storage Poses Hacking and Privacy Risks

As with any centralized repository of PII, the data stored and accessible from the Registry may present a potential honeypot for bad actors and data breaches. Further, Registry access and functionality must take into account certain privacy law concerns in the storage and, if applicable, destruction of PII.

Fee Increases May Produce Unforeseen Economic Consequences

Fee increases could be of concern to a spectrum of Registry users. Depending upon how these fees are charged, large-volume Registry users (e.g., airlines, manufacturers, financiers, lessors, etc.) may face significantly greater transaction costs associated with purchase, lien, and novation filings. Some general aviation owners and

operators might be concerned that these fee increases could limit their access to the Registry.

Aircraft lessors, financiers, and investors might be especially concerned. For example, their transactions often involve multilayered ownership and financing structures and multiple parties, certain of which may be non-U.S. citizens, SPEs, or trusts. Delays and costs resulting from the recommended Registry changes could be significantly cumbersome to these commercial parties due to the volume and types of related Registry filings. Any restrictions or burdensome verification requirements imposed on the use of structural devices such as SPEs or NCTs, voting trusts, or other trusts could limit the use of accepted, commercially efficient financing and investment structures.

The additional scrutiny by the FAA and the other agencies sharing the data collected and stored by the FAA could also be concerning to parties to these transactions. Among other things, parties might be concerned that additional scrutiny by multiple agencies, each having its own purpose and perspective as to compliance, could result in challenges to the validity of certain registrations even if none of the parties were engaged in fraud or abuse of the Registry or unsafe operations. In that event, a financing provider could face a number of risks, including loss of priority and coverage challenges by insurance providers. A lessor would have even greater concerns because it is the registered owner and could face even harsher consequences from any alleged failure to comply with related laws or Federal Aviation Regulations. The concerns mentioned in this article are not merely inconveniences to financiers or aircraft owners; any significant cost to airlines or corporate aviation may mean fewer aircraft sales or more expensive financing for airlines, which will adversely impact ticket prices and availability to customers. Any changes to Registry practices or requirements based on the recommendation in the GAO Report must be sufficiently clear and not unduly burdensome and must recognize that the great majority of Registry users engage in legitimate practices.

Conclusion

Both the OIG Report and the GAO Report include recommendations that, if followed, could result in many substantial benefits to Registry users. Modernization of the Registry as contemplated in the OIG Report would be particularly useful. Systemic improvements addressing the inefficiencies and other inadequacies related to the current lack of real-time registration information, the paper-based submission process, and the resulting backlog of registration submissions are long overdue. Societal changes accelerated by COVID-19 highlight the need for modernization and digitization. The Registry changes recommended by the GAO could also result in considerable benefit, especially with respect to the reliability of the information relating to the ownership and operation of "N-" registered

aircraft and the accessibility of that information to the FAA regarding matters of safety and to other agencies for law enforcement and national security purposes.

During the implementation phases, however, the FAA and other governmental decision-makers must balance their purposes of risk mitigation, including as to data collection, verification, analysis, and accessibility, with the legitimate concerns Registry users may have regarding the significantly greater expenses, burdens, and risks that might result from these changes.²⁸ Of particular concern is the focus on NCTs and voting trusts. As noted above, confirmed reports of any misuse are unusual, and, given the legitimate business purposes and the protections already afforded by the existing regulatory requirements, a further investment by the government and industry of time or resources revisiting NCT regulations and practices does not appear to be supported by the findings in the GAO Report. Collaboration among the FAA and other agencies and participants in the aviation industry would be advisable so that the legitimate use of a modernized Registry is achieved to the (reasonable) mutual satisfaction of all of the various constituencies.

Endnotes

1. See generally 49 U.S.C. ch. 441.
2. U.S. DEP'T OF TRANSP. OFFICE OF INSPECTOR GEN., REP. NO. AV2019052, FAA PLANS TO MODERNIZE ITS OUTDATED CIVIL AVIATION REGISTRY SYSTEMS, BUT KEY DECISIONS AND CHALLENGES REMAIN (May 8, 2019) [hereinafter OIG REPORT], <https://www.oig.dot.gov/sites/default/files/FAA%20Civil%20Aviation%20Registry%20Final%20Report%5E5-8-19.pdf>.
3. U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-164, FAA NEEDS TO BETTER PREVENT, DETECT, AND RESPOND TO FRAUD AND ABUSE RISKS IN AIRCRAFT REGISTRATION [hereinafter GAO REPORT], <https://www.gao.gov/assets/710/705505.pdf>.
4. See 49 U.S.C. § 40102 (a)(15).
5. OIG REPORT, *supra* note 2.
6. Pub. L. No. 115-254, 132 Stat. 3186 (2018).
7. GAO REPORT, *supra* note 3.
8. Kelly Carr & Jaimi Dowdell, *Secrets in the Sky*, BOSTON GLOBE, Sept. 22, 2017.
9. GAO REPORT, *supra* note 3, at 2.
10. *Id.* at 5.
11. *Id.* at n. 7.
12. *Id.* at 4.
13. *Id.* at 39.
14. *Id.* at note 3, at 5.
15. *Id.*
16. *Id.* at note 67.
17. Note that a trustee applying for aircraft registration with the FAA may not mean a foreign entity or persons. See 14 C.F.R. § 47.7.
18. GAO REPORT, *supra* note 3, at 1.
19. See 14 C.F.R. § 47.7.
20. See 49 U.S.C. § 40102 (a)(15).
21. See International Registry of Mobile Assets, <https://www.internationalregistry.aero/ir-web/> (last visited May 14, 2020).
22. See Erich Dylus, *The International Blockchain Registry of Mobile Assets*, 44 AIR & SPACE LAW., no. 1, 2019, at 45–52.
23. GAO REPORT, *supra* note 3, at 40. Note that of the 6,800 registrations that were noncitizen trusts or U.S. citizen corporations using a voting trust, “two were associated with individuals subject to U.S. sanctions, four were associated with an FAA revocation or suspension, and 16 appeared to be shell companies.” *Id.*
24. See 14 C.F.R. § 47.7.
25. Notice of Policy Clarification for the Registration of Aircraft to U.S. Citizen Trustees in Situations Involving Non-U.S. Citizen Trustors and Beneficiaries, 78 Fed. Reg. 36,412 (June 18, 2013).
26. GAO REPORT, *supra* note 3, at 41.
27. *Id.* at 40.
28. Certain industry participants hold the view that expecting the FAA Registry to take an active responsibility for matters pertaining to law enforcement or national security stretches its purpose beyond what is typically expected of aviation registries in other nations and registries of other transportation assets in the United States. Typically, the purposes of these registries include safety, accuracy as to ownership, and lien protection. See 49 C.F.R. §1177 (setting forth federal filing procedures for liens on rail equipment), 46 U.S.C. §12501 (establishing the federal vessel identification system), 46 U.S.C. ch. 313 (on commercial instruments and maritime liens, incorporating the Ship Mortgage Act of 1920), and MD Transp. Code § 13-406 (2018) (setting forth grounds for refusing registration of motor vehicles in Maryland). Unfortunately, all of these transportation assets have been or could be used in money laundering, transporting contraband, or other criminal activity or in acts of terrorism or other threats to national security.

The 737 MAX Reactions

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for annexes or a permanent international administrative body but required cooperation in the interests of uniformity among its signatories' national standards. It did not require mutual recognition of airworthiness certificates and thereby gives us a glimpse of what the future of aviation might have looked like without that now-vital part of the global aviation construct. The Havana Convention created an airworthiness rule far less dependent on trust.

Every aircraft engaged in international navigation . . . shall be provided with a certificate of airworthiness issued by the state whose nationality it possesses.

This document shall certify to the state in which the aircraft is to operate, that, *according to the opinion of the authority that issues it, such aircraft complies with the airworthiness requirements of each of the states named in said certificate.*

The aircraft commander shall at all times hold the certificate in his custody and shall deliver it for inspection and verification to the authorized representatives of the state which said aircraft visits.

Each contracting state shall communicate to the other states . . . its regulations governing the rating of its aircraft as to airworthiness and shall similarly communicate any changes made therein.

While the states affirm the principle that the aircraft of each contracting state shall have the liberty of engaging in air commerce with the other contracting states without being subjected to the licensing system of any state with which such commerce is carried on, *each and every contracting state mentioned in the certificate of airworthiness reserves the right to refuse to recognize as valid the certificate of airworthiness of any foreign aircraft where inspection by a duly authorized commission of such state shows that the aircraft is not, at the time of inspection, reasonably airworthy in accordance with the normal requirements of the laws and regulations of such state concerning the public safety.*

In such cases said state may refuse to permit further transit by the aircraft through its air space until such time as it, with due regard to the public safety, is satisfied as to the airworthiness of the aircraft, and shall immediately notify the state whose nationality the aircraft possesses . . . of the action taken.⁷

The obligation here is dependent not on a mutually recognized international standard of airworthiness but on a complex set of evaluations by the country of aircraft registry as to the standards of airworthiness of possibly multiple countries of transit. This dependency placed an extraordinary burden on national aviation authorities to certify according to multiple aviation codes—although there was a commitment to attempt to achieve consistency among codes—and built in the acceptability of the country of transit second-guessing a foreign-registered aircraft's airworthiness.

Chicago Convention

The Chicago Convention superseded the Paris and Havana Conventions and adopted the framework developed by the former, including technical standards annexes. Article 33 includes almost verbatim the Paris Convention's principle of mutual recognition of airworthiness certificates.

Certificates of airworthiness and certificates of competency and licenses issued or rendered valid by the contracting State in which the aircraft is registered, shall be recognized as valid by the other contracting States, provided that the requirements under which such certificates or licenses were issued or rendered valid are equal to or above the minimum standards which may be established from time to time pursuant to this Convention.⁸

The aircraft airworthiness standards upon which this obligation depends are included in what is now Annex 8 to the Chicago Convention, "Airworthiness of Aircraft." The Chicago Convention created the International Civil Aviation Organization (ICAO), whose mandate is to develop and maintain the standards in the annexes.

The United States was highly influential in the development of the new treaty's technical standards during the Chicago conference. The head of the U.S. delegation summarized this aspect of the conference's work in a letter sent at the end of the conference to President Roosevelt:

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The Chicago Convention's Article 33 includes almost verbatim the Paris Convention's principle of mutual recognition of airworthiness certificates.

[A] huge amount of work had been going on also in the field of standardizing technical practices, services, and requirements. This is being separately reported on by the Civil Aeronautics Board, and no better testimony to the tremendous scope of the work can be found than in the very large number of agreed documents in ten separate technical fields which appear as annexes to the main Convention and the interim agreements. Technicians generally agree that this is a major advance in handling technical arrangements so that planes can fly safely throughout the world, which has yet been taken. I cannot pay too high tribute to the corps of United States experts who worked up the material in advance of the Conference, and

were able to convince the foreign delegations that they were both practicable and wise. In general, it may be said that the United States technicians gave a base for the handling of technical air practices throughout the world, and that the world, having examined them, was glad to accept the base they proposed. . . .

Finally, a substantial beginning has been made towards opening the air to commerce. It is not too much to say that we entered the Conference in the law and atmosphere of the 17th century; and we

came out with a fair prospect of obtaining 20th century conditions.⁹

And it is sobering, in the context of aviation leadership at this moment, to read Roosevelt's reassuring words to Winston Churchill in an effort to arrive at compromise and avoid the conference's collapse over British efforts to bolster its weakened competitive position:

I know the handicaps under which your aviation industry has laboured during the war. We have found ways to help you before and I am confident that we can find ways to help you in overcoming this. We are prepared to make transport aircraft freely available to you on the same terms as our own people can get them. Our only stipulation is that aviation must be permitted to develop, subject only to reasonable safeguards, as far and as fast as human ingenuity and enterprise can take it.¹⁰

The Chicago Convention does not authorize international scheduled commercial air services. Those

are governed by the International Air Services Transit Agreement (IASTA), also adopted at the Chicago conference, and the various bilateral air services agreements. These agreements also incorporate the mutual recognition obligation of Article 33, subject only to compliance with ICAO standards.

The IASTA grants the privilege of flights without landing and flights with stops for nontraffic purposes for those countries that have ratified it. The IASTA's privileges are in accordance with the provisions of the Chicago Convention, including Article 33.¹¹

Otherwise, the bilateral air services agreements govern and include a specific provision governing airworthiness certificates recognition. The U.S.-EU Air Transport Agreement, for example, includes language that tracks Article 33 almost verbatim. It also requires consultations between the parties if there is a concern about the safety standards administered and maintained by the other.

The responsible authorities of a Party may request consultations with other responsible authorities concerning the safety standards maintained by those authorities relating to aeronautical facilities, aircrews, aircraft, and operation of the airlines overseen by those authorities. Such consultations shall take place within 45 days of the request unless otherwise agreed. If following such consultations, the requesting responsible authorities find that those authorities do not effectively maintain and administer safety standards and requirements in these areas that at least equal the minimum standards that may be established pursuant to the Convention, the requesting responsible authorities shall notify those authorities of such findings and the steps considered necessary to conform with these minimum standards, and those authorities shall take appropriate corrective action. The requesting responsible authorities reserve the right to withhold, revoke or limit the operating authorization or technical permission of an airline or airlines for which those authorities provide safety oversight in the event those authorities do not take such appropriate corrective action within a reasonable time and to take immediate action as to such airline or airlines if essential to prevent further noncompliance with the duty to maintain and administer the aforementioned standards and requirements resulting in an immediate threat to flight safety.¹²

The Grounding of the 737 Max

Two crashes of Boeing 737 Max aircraft five months apart resulted in a cascading global grounding of the aircraft, with the United States, the aircraft's state of type design approval and manufacture, coming in last. The national orders collectively resulted in the grounding

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of 387 aircraft operated by 59 airlines in 35 countries.¹³ Each of those nations, of course, had the right under international law to ground any aircraft on its registry, but several of those orders went beyond this to prohibit operations of any 737 Max aircraft in their airspace.

It remains stunning to recall the sequence of events.

- On October 29, 2018, a 737 Max operated by Indonesian airline Lion Air crashed 13 minutes after takeoff in Indonesia, killing all on board.
- On November 7, 2018, the Federal Aviation Administration (FAA) issued Emergency Airworthiness Directive (AD) 2018-23-51, which required “revising certificate limitations and operating procedures of the AFM [aircraft flight manual] to provide the flight crew with runaway horizontal stabilizer trim procedures to follow under certain conditions” related to the angle of attack (AOA) sensor failure. The emergency AD was prompted by a Boeing analysis that if an erroneously high single AOA sensor input is received by the flight control system, there is a potential for repeated nose-down trim commands of the horizontal stabilizer.¹⁴ On December 6, 2018, the FAA finalized this AD.¹⁵
- On March 10, 2019, a 737 Max operated by Ethiopian Airlines crashed six minutes after takeoff, killing all on board. Ethiopia grounded its 737 Max fleet that day.¹⁶
- At 9 a.m. on March 11, 2019, the Civil Aviation Administration of China (CAAC) ordered Chinese airlines to ground the aircraft.¹⁷ The deputy head of the CAAC was reported to have said, “They have had difficulty making a decision, so we took the lead,” referring to the FAA.¹⁸ The Chinese decision did not apply to non-Chinese registered 737 Max aircraft operating in China.
- On March 11, 2019, the FAA issued a notice to the world’s civil aviation authorities stating that the agency had not been provided data to draw any conclusions or take any actions with respect to the 737 Max.¹⁹
- Nonetheless, China’s decision set off a chain response, and other countries and airlines followed its lead. Indonesia grounded all of its Max planes that day. Several airlines voluntarily suspended operations of the aircraft: Cayman Airways, South Africa’s Comair, Brazil’s GOL, MIAT Mongolian, Morocco’s Royal Air Maroc, and Aeroméxico.
- That same day, the governments of Singapore and Australia issued orders prohibiting operations of the 737 Max in their countries regardless of the nationality of the aircraft.²⁰
- On March 12, 2019, European Union (EU) Aviation Safety Agency (EASA) prohibited the operation of all 737 Max aircraft in the EU, regardless of aircraft nationality,²¹ and India did the same.²² The EU

directive cited as its basis the possibility of similar causes for both accidents; it noted the FAA’s progress on developing mitigating actions but concluded, based on unspecified “all available information,” that immediate action was necessary.

- In response that evening, the FAA acting administrator issued an official statement that the FAA’s continuing review thus far

shows no systemic performance issues and provides no basis to order grounding the aircraft. Nor have civil aviation authorities provided data to us that would warrant action. In the course of our urgent review of data on the Ethiopian Airlines Flight 302 crash, if any issues affecting the continued airworthiness of the aircraft are identified, the FAA will take immediate and appropriate action.²³

- By midday March 13, 2019, Canada joined the global movement, issuing a safety notice prohibiting the operation of any 737 Max aircraft in Canadian airspace regardless of the nationality of the aircraft.²⁴
- About two hours later, President Trump held a press conference announcing that “we would be issuing” an emergency order prohibiting all 737 Max aircraft from operations in the United States.²⁵ The FAA later that day issued an “Emergency Order of Prohibition,” prohibiting the operation of the 737 Max by any U.S.-certificated operator and the operation of any 737 Max in U.S. territory regardless of nationality. The unusual order was based on “new evidence” suggesting similarities between the two accidents, but the order did not provide specifics regarding the airworthiness of the aircraft and did not suspend its type certificate.²⁶

The national orders prohibiting operations of foreign-registered 737 Max aircraft did not assert that the aircraft failed to meet ICAO airworthiness standards. The orders did not invoke Article 33 or its comparable bilateral air services agreements provisions. The orders did not state that the countries of registry of the 737 Max failed to maintain ICAO minimum standards and that the airworthiness certificates therefore are not entitled to recognition and the attendant operational rights under international law. There was no prior consultation with the states of registry or type design certification with

Two crashes of Boeing 737 Max aircraft five months apart resulted in a cascading global grounding of the aircraft.

facts to support this conclusion. By all accounts, the flurry of national reactions happened as if there was no international framework governing the matter.²⁷

A Precedent for Airworthiness Uncertainty: The 1979 DC-10 Grounding

The uncertainty as to the precise cause of the accidents and corrective actions required for the 737 Max's return to service by the United States perhaps explains why none of these national orders to date has been challenged for overreach or even officially remarked upon. And yet there is precedent for that kind of challenge.

On May 25, 1979, an American Airlines DC-10 crashed in Chicago after one of its engines and pylon separated from the aircraft, killing all 271 people aboard and two on the ground. It remains the deadliest commercial aircraft accident in U.S. history.²⁸ The accident aircraft was type certificated in 1971 and so was not a new-model aircraft. The FAA-mandated inspections of other DC-10 pylons following the accident resulted in the identification of additional cracks that *appeared* to have materialized within days of previous inspection.²⁹ This led the FAA to believe that the source of the problem was in the aircraft's design.

On June 6, 1979, whipsawed by a court action to ground the aircraft, congressional pressure, and continued uncertainty as to the reason for the pylon failure, the FAA took action.³⁰ Citing the possibility that the DC-10 "may not meet the requirements of Section 603(a) of the Federal Aviation Act for a Type Certificate,"³¹ FAA Administrator Bond revoked the DC-10 type certificate for 37 days while the investigation proceeded. That action effectively grounded all U.S.-registered DC-10 aircraft. At the same time, the FAA issued a special federal aviation regulation prohibiting the operation of any DC-10 aircraft in the United States (SFAR 40).³²

The FAA did not specifically state that it believed the DC-10 aircraft did not meet ICAO airworthiness standards, the basis under Article 33 of the Chicago Convention for challenging a foreign-registered aircraft's airworthiness. Thus, the agency did not articulate what it later argued was a key aspect of its reasoning: Because the United States is the state of type design approval and because other civil aviation authorities relied upon that approval in issuing their own airworthiness certificates, the FAA's revocation of the type certificate undermined the validity of all airworthiness certificates issued for that model aircraft.

Following the FAA's lead, a number of foreign civil aviation authorities provisionally suspended individual airworthiness certificates for DC-10 aircraft on their registries. European carriers grounded their DC-10s immediately after the FAA suspended the DC-10 type certificate.

But on June 18, 1979, about two weeks after SFAR 40 was issued, the European aviation authorities approved a new inspection and maintenance program

and decided not to wait for an FAA decision to return their DC-10s to service. Their provisional suspension of the airworthiness certificates was removed.³³ Here, the issue of mutual recognition of airworthiness certificates was joined. European nations decided the aircraft was safe to fly, and their air carriers wanted to resume DC-10 operations to the United States.

On June 25, European aviation authorities met with the FAA and requested rescission of SFAR 40. The FAA was not yet ready and expressed regret that the European decision had come before completion of the FAA's investigation.³⁴ The FAA did not rescind SFAR 40 until July 13, 1979, after the FAA was confident that the cause of the accident was faulty maintenance practices by certain air carriers, not a flaw in the type design of the aircraft.³⁵ The schism reportedly resulted in a loss of trust.

"The European authorities are not so likely to automatically follow the FAA in the future," Armin Baltensweiler, Swissair president, said. "They received a heavy impact from the FAA grounding action and they are likely to do something so as not to be so helpless in the future. There is a large group of airlines that are very satisfied with the DC-10," he added.³⁶

On June 27, 1979, British Caledonian Airways, subsequently joined by others, sued the FAA in the U.S. Court of Appeals for the District of Columbia Circuit for failing to abide by the obligations of Article 33 and the applicable bilateral air transport agreements.

On September 2, 1981, the court ruled in favor of the plaintiffs, concluding that the FAA "Administrator's action *in issuing* SFAR 40 violated various multilateral and bilateral civil aviation agreements," most particularly Article 33.³⁷ The court placed heavy emphasis on the FAA's contemporaneous failure to justify SFAR 40 in the context of U.S. international obligations. The court stated:

Yet, under Article 33 and the pertinent bilateral agreements, failure to observe the minimum safety standards in issuing airworthiness certificates is the only ground on which one country may question the airworthiness judgment of the country of registry. If the Administrator had questioned the foreign government's compliance with minimum airworthiness standards, other provisions of the bilateral agreements would have required him to consult with each of the contracting parties before suspending or revoking operating authorizations. . . .

If doubts about airworthiness exist, one country may refuse to recognize another country's certificate of airworthiness, but only if the certificating nation has not observed the minimum standards of airworthiness established in Annex 8 pursuant to Articles

33 and 37 of the Chicago Convention. As we have emphasized, the Administrator at no time questioned the foreign governments' compliance with the minimum standards of airworthiness.³⁸

Further, in the context of the bilateral air transport agreements, the court found:

We agree that this provision allows the United States to take immediate action, without consultations, if such action is necessary to prevent further non-compliance with U.S. laws and regulations (subparagraph (1)(b)) or with the applicable airworthiness standards (subparagraph (1)(c)). However this provision cannot help the Administrator here, for the reason that none of these alleged justifications for revoking, suspending or limiting operating authorizations was identified or relied on by the Administrator *when he issued* SFAR 40 or when he refused to recognize the foreign airlines' revalidated certificates of airworthiness. We recognize the diplomatic sensitivity of an allegation that a foreign nation has been derelict in complying with law or relevant standards; but if the government wishes to rely on the dereliction it must grasp that nettle.³⁹

The DC-10 grounding resolved itself in a little over a month, with the underlying safety problem found, resolved, and at odds with the FAA's assumption of faulty design in suspending the type certificate and issuing SFAR 40. The court, of course, had the benefit of this knowledge.

The court, which decided the case long after SFAR 40 was rescinded, refused to consider the case moot. It stated that the situation could present itself again, the next time that the cause of an accident was not immediately known:

Although we recognize that air disasters of the magnitude of the DC-10 crash are, fortunately, rare it is not so unusual for the aviation authorities to be at first uncertain as to the precise cause of a crash. As long as the FAA Administrator asserts that he has the legal authority, under such circumstances, to disregard valid airworthiness certificates issued by nations with whom the United States has entered into binding aviation agreements, these nations reasonably can expect to be subjected to the same action at some time in the future.⁴⁰

Staying the Course When Global Trust is Shaken

At the time of this writing and over one year after the FAA issued its prohibition order, the 737 Max is still grounded. The manufacturer, the FAA, and civil aviation authorities around the world are engaged in an ongoing dialogue in an effort to prevent further splintering of safety judgments. No country has remanded

its prohibition order, and no operator has sought to fly the aircraft to a country that has prohibited the operation of any 737 Max in its airspace. Interests have not yet diverged; the reciprocal recognition issue has not yet been joined. Until that happens (or if it never happens), does any of this matter? It does—lest we further wander away from the international foundation that has permitted aviation to flourish.

The presumptive trust underpinning Article 33's mutual recognition obligation has suffered a serious blow and, by the unilateral actions of several nations, so has the obligation itself. Deference to the superior knowledge of the United States as the state of the manufacturer and type design certification eroded quickly after the occurrence of the second accident and the FAA's evident uncertainty about immediate appropriate action. Facts subsequently revealed about what was known and not known during the type certification process help to explain that uncertainty. It was the clear prerogative of each nation to ground its own fleet of the aircraft in the face of that uncertainty.

Yet state action to prohibit the civil aircraft of another ICAO member state from entering its airspace is another matter. It is a rare, drastic step, with a cautionary legal track record. A nation must articulate a specific reason, based on ICAO's airworthiness standards, to prohibit the aircraft of another member state from entering its airspace. None of the 737 Max prohibition orders applicable to external aircraft did this. Fear was in the air; each country issuing these orders appeared to be reacting to the prior action of another, not on consensus-based international standards. It can be argued that each of those orders was issued with insufficient data to support it at the time.

The orders themselves turned out to be an unnecessary overreach. Each nation with operators of the 737 Max grounded the aircraft. A national order to go further and prohibit third-country operations of the 737 Max would have better respected the proven international construct if the issuing nation had awaited further facts; consulted with affected states, including the United States as the state of type design approval; and, if foreign-registered aircraft were deemed unsafe, articulated a basis in Annex 8. This could have been done on a fast track, with the flying public kept informed. There was the safety space and time to do so.

Instead, and for the first time, a widespread precedent has been set at odds with Article 33. What will happen should there be a next time, with a different aircraft model, when the reason for an accident is not immediately evident?

Conclusion

The founders of the Chicago Convention recognized the vital role of civil aviation to the future of the world. They understood that it could only "grow as far and as fast as human ingenuity and enterprise can

take it” if the nations of the world acted in coordination, not based on what individually best suited them.

Regulatory action based on facts and not fear or politics is the hallmark and purpose of the technical operating standards and obligations of the Chicago Convention and the bilateral air services agreements. These obligations and standards are what have allowed for innovation and helped to insulate aviation safety from trade agendas, national political disputes, and the popularity of national leaders for over a century of international aviation.⁴¹

By contrast, and although well-meaning, the orders prohibiting foreign-registered 737 Max operations were an unstructured, nationalistic response, contrary to the unifying purpose of ICAO. They failed to ground themselves in Article 33, the common basis of international aircraft safety standards, and a bilateral or multilateral consultative process.

As evidenced by the various national reactions to the 737 Max accidents, aviation regulatory authorities around the world are exercising greater individual assertiveness. However, especially when trust is shaken, it is important not to kick out the foundation carefully placed and maintained decade after decade because it will be needed to support the rebuilding of trust among national authorities and, perhaps more importantly, the rebuilding of the public’s trust in them.

Endnotes

1. Rudyard Kipling, *If*, in *REWARDS AND FAIRIES* (Doubleday, Page & Co. 1910).
2. National representatives not invited included those from enemy and former enemy governments, as well as the government of Argentina, which the United States did not recognize at the time. II *FOREIGN RELATIONS OF THE UNITED STATES: DIPLOMATIC PAPERS, 1944, GENERAL: ECONOMIC AND SOCIAL MATTERS* 599 (E. Ralph Perkins et al. eds., 1967).
3. As discussed in this article, 737 Max refers to either the Boeing 737 Max 8 or the Boeing 737 Max 9 aircraft, or both.
4. Convention for the Regulation of Aerial Navigation, Oct. 13, 1919 [hereinafter Paris Convention] (signed at Paris).
5. *Id.* art. 13.
6. Convention on Commercial Aviation (Inter-American), Feb. 20, 1928, 47 Stat. 1901, Treaty Series 840 [hereinafter Havana Convention] (signed at Havana).
7. *Id.* art. 12 (emphasis added).
8. Convention on International Civil Aviation art. 33, Dec. 7, 1944.
9. Letter from Adolf A. Berle Jr., Assistant Sec’y of State, to Franklin D. Roosevelt, President of the United States (Dec. 7, 1944), in *FOREIGN RELATIONS OF THE UNITED STATES*, *supra* note 2, at 610, 612; see Jeffrey Shane, *Diplomacy and Drama: The Making of the Chicago Convention*, 32(4) *AIR & SPACE LAW* (2019) (presenting a general history of the Chicago conference).
10. Telegram from Franklin D. Roosevelt, President of the United States, to Winston Churchill, British Prime Minister (Nov. 30, 1944, 1:20 AM), in *FOREIGN RELATIONS OF THE UNITED STATES*, *supra* note 2, at 594.
11. International Air Services Transit Agreement art. 2, Dec. 7, 1944.
12. U.S.-EU Air Transport Agreement art. 8(2), Apr. 30, 2007.
13. *The Grounded 737 Max Fleet*, REUTERS, Mar. 14, 2019.
14. FED. AVIATION ADMIN., EMERGENCY AIRWORTHINESS DIRECTIVE 2018-23-51 (Nov. 7, 2018), [https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgad.nsf/0/83ec7f95f3e5bfbd8625833e0070a070/\\$FILE/2018-23-51_Emergency.pdf](https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgad.nsf/0/83ec7f95f3e5bfbd8625833e0070a070/$FILE/2018-23-51_Emergency.pdf).
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16. *Ethiopian Airlines Grounds Its Boeing 737 MAX 8 Fleet*, REUTERS, Mar. 11, 2018.
17. Keith Bradsher, *China and Indonesia Order Grounding of Boeing 737 Max 8 Aircraft*, N.Y. TIMES (Mar. 10, 2019), <https://www.nytimes.com/2019/03/10/business/boeing-737-max-8-aircraft-crash-china.html>.
18. Gerry Shih, *China’s Ban on the Boeing 737 Max Inspires Others, Ramps Up Pressure on U.S. Regulator*, WASH. POST (Mar. 12, 2019, 5:31 PM EDT), https://www.washingtonpost.com/world/asia_pacific/chinas-ban-on-the-boeing-737-max-inspires-others-and-ramps-up-pressure-on-the-faa/2019/03/12/4d4bf2b0-44a3-11e9-90f0-0ccfeec87a61_story.html.
19. Notice from Fed. Aviation Admin. to Civil Aviation Authorities, Continued Airworthiness Notification to the International Community (Mar. 11, 2019), https://www.faa.gov/news/updates/media/CAN_2019_03.pdf.
20. *Singapore and Australia Both Ground Boeing’s 737 MAX Aircraft*, REUTERS, Mar. 12, 2019, 5:22 AM ET.
21. Press Release, EU Aviation Safety Agency, EASA Suspends All Boeing 737 Max Operations in Europe (Mar. 12, 2019), <https://www.easa.europa.eu/newsroom-and-events/press-releases/easa-suspends-all-boeing-737-max-operations-europe>.
22. Tanvi Mehta, *India Bans Boeing 737 MAX Planes from Its Airspace*, REUTERS (Mar. 12, 2019) <https://www.reuters.com/article/us-ethiopia-airplane-india/india-bans-boeing-737-max-planes-from-its-airspace-idUSKBN1QT2KZ>.
23. Daniel K. Elwell, *Statement from Acting FAA Administrator Daniel K. Elwell*, TWITTER (Mar. 12, 2019, 6:12 PM).
24. Minister Garneau Statement Regarding Restricting Airspace to Boeing 737 MAX 8 and 9 Aircraft, CANADA.CA (Mar. 13, 2019), <https://www.canada.ca/en/transport-canada/news/2019/03/minister-garneau-statement-regarding-restricting-airspace-to-boeing-737-max-8-and-9-aircraft.html>; *Canada Grounds Boeing 737 MAX 8 and 9 Jets, Citing Safety Concerns*, REUTERS, Mar. 13, 2019.
25. *Trump Announces Grounding of Boeing 737 Max 8 and 9 Planes*, ABC NEWS (Mar. 13, 2019), <https://abcnews.go.com/Politics/video/trump-announces-grounding-boeing-737-max-planes-61660989>.
26. FED. AVIATION ADMIN., EMERGENCY ORDER OF PROHIBITION (Mar. 13, 2019), https://www.faa.gov/news/updates/media/Emergency_Order.pdf.
27. After the national prohibition orders had been issued, even ICAO reportedly released a vaguely worded statement that did not call them to account. *ICAO Recognizes Right of Countries to Limit Flights of Boeing 737 MAX*, NEWS.AM (Mar.

13, 2019), <https://news.am/eng/news/500956.html>.

28. See, e.g., Stephan Benzkofer, *Worst Plane Crash in U.S. History*, CHI. TRIB., May 25, 2014; see also Nat'l Transp. Safety Bd., *Accidents Involving Passenger Fatalities: U.S. Airlines (Part 121) 1982–Present*, NTSB.GOV, <https://www.nts.gov/investigations/data/Pages/paxfatal.aspx> (last visited Apr. 18, 2020).

29. Upon subsequent review, the FAA learned that the cracks that were found after second inspection were missed in the first inspection, not newly propagated between inspections.

30. On June 5, 1979, U.S. District Court Judge Aubrey Robinson, in response to a petition by the Airline Passengers Association, ordered the FAA to ground DC-10 aircraft, then stayed his order pending further input from FAA. The FAA hours later grounded the aircraft. See, e.g., R. Within, *U.S. Judge Bids F.A.A. Ground DC-10 Airliners*, N.Y. TIMES, June 6, 1979.

31. FED. AVIATION ADMIN., EMERGENCY ORDER OF SUSPENSION (June 6, 1979), <https://lessonslearned.faa.gov/American191/tc%20suspension%20order.pdf>.

32. 44 Fed. Reg. 33,389 (June 8, 1979). As justification, the FAA stated, “In view of the serious safety problems currently involving operation of that airplane, the Administrator finds that a safety emergency exists which justifies adoption of a special regulation prohibiting operation in the United States of all Model DC-10 airplanes, including those on foreign registries.” *Id.*

33. *DC-10's Are Cleared by Europe Airlines*, N.Y. TIMES,

June 20, 1979; David Brown, *Europe Resumes DC-10 Service*, AVIATION WK. & SPACE TECH., June 25, 1979.

34. *Europeans Challenge DC-10 Grounding Legality*, AVIATION WK. & SPACE TECH., July 2, 1979.

35. 44 Fed. Reg. 42,170 (July 19, 1979).

36. Brown, *supra* note 32, at 35.

37. *British Caledonian Airways Ltd. v. Bond*, 665 F.2d 1153, 1168 (D.C. Cir. 1981) (emphasis added).

38. *Id.* at 1163, 1164.

39. *Id.* at 1164 (emphasis added).

40. *Id.* at 1158.

41. Analyses in the aftermath of the 737 Max groundings raise issues of increasing aircraft automation and pilot interface. New hazards resulting from this innovation may require additional consideration in ICAO standards. See, e.g., JOINT AUTHORITIES TECHNICAL REVIEW BOEING 737 MAX FLIGHT CONTROL SYSTEM (submitted Oct. 11, 2019, to the FAA associate administrator for aviation safety) (identifying a need for greater involvement of human factors and human system integration experts during aircraft certification). Also, the leadership of the U.S. House Transportation and Infrastructure Committee has requested the Office of Inspector General, U.S. Department of Transportation, to review domestic and international pilot training standards, including the use of automation, based on concerns raised by the 737 Max accidents. The launch of the review was announced on February 10, 2020.



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