

Michael Huerta
The Aviation Club of the UK
London, England
June 15, 2017
As Prepared for Delivery

Good afternoon.

It's an honor and a privilege to visit with you here today at The Aviation Club. I want to especially thank (Chairman) Jane Johnston for the gracious invitation to speak to such a distinguished group of business leaders.

Before I begin, I would like to take a moment to express condolences for the losses and injuries suffered during the recent terror attacks in Manchester and London.

As your colleagues, and as citizens of the world, we share in your sorrow. Let us all reaffirm and strengthen our joint commitment to eradicate senseless violence wherever it might occur.

I think you'll agree with me that we are all fortunate to be involved with aviation during what has become one of the most exciting periods in this industry's development in decades.

Around the world, we are seeing a fundamental change in the definition of the term “aviation.”

For decades, aviation was defined as conventional aircraft flying from Point A to Point B as safely as possible.

The questions back then were, “Can we get there faster? Can we climb higher?”

A great example of the innovation that shaped our industry was Great Britain’s own Sir Frank Whittle. At the age of 23 – while still a junior pilot in the Royal Air Force – he conceived an idea that eventually became today’s modern turbojet engine.

He asked the right questions, he embraced the challenge, and he found the answer, even though the established “experts” initially wrote off his genius to naïve youthful exuberance.

In the process, Whittle triggered series of events that changed the face of aviation, shrunk the world and ushered us all into the Jet Age. As Bill Gates noted, “the airplane became the first World Wide Web, bringing people, languages, ideas and values together.

Today, a host of new users is seeking to change the world again.

But instead of conventional aircraft, they are flying small unmanned aircraft. Or launching commercial space vehicles every couple of weeks.

Others are beginning to envision a day in the not-too-distant future when airborne taxis might whisk you to your next business meeting.

All of these new players are looking to government regulators to enable them to fly when and where they want, and to do so safely and efficiently.

As you might imagine, this is putting increasing pressure on agencies such as the Federal Aviation Administration and the U.K. Civil Aviation Authority to keep pace with the rapid rate of change.

I am pleased to say that we are engaged in a number of cooperative efforts with the U.K. as we work on an international

basis to include these new users into a well-established culture of safety and shared responsibility.

Every day, it seems, we face new challenges, whether it's the new players I just mentioned or dealing with environmental issues or upheavals in the political landscape.

The good news is that aviation has always been characterized by change.

By its very nature, aviation has always been about posing new questions, challenging conventional wisdom, and relentlessly seeking answers.

We are seeing this play out at an unprecedented rate with small unmanned aircraft. A modern jetliner might take five or more years to go from concept to first flight.

With unmanned aircraft, that development schedule is measured in the scale of just a few months.

Instead of a handful of aircraft manufacturers, there are dozens of them, producing hundreds of thousands of aircraft.

In the U.S., the FAA moved swiftly to put into place an initial framework of performance based regulations.

We have collaborated extensively with the industry and other agencies to address emerging safety, security and technical challenges at a pace that ensures safety without unduly stifling innovation.

A few weeks ago, I took a tour of a convention hall in Dallas, where the leading manufacturers of small unmanned aircraft displayed their latest products.

As you might imagine, many of these companies have developed new innovative uses for these aircraft.

I saw a drone that could attach itself to the underside of a bridges or other infrastructure and then methodically inspect for corrosion and cracks.

Another was equipped with sensors that could count the number of apples on each tree as it flies through an orchard.

One thing they all included was an amazing array of miniaturized technology.

I fully expect that some of it will cross over into traditional aviation, where every ounce still counts, even on something as large as a modern jetliner.

I know some people in the aviation industry have been suspicious and even hostile toward the integration of unmanned aircraft into our predictable, clearly defined hierarchy.

But when I meet with some of these new, and often young, inventors and entrepreneurs, I'm reminded of a couple of bicycle mechanics from Dayton, Ohio.

Wilbur and Orville Wright were aviation outsiders. They were bicycle mechanics, not engineers or scientists.

Yet they used meticulous scientific methods to test every leading theory on aeronautics.

They proved conventional wisdom wrong, and then they wrote the first chapter in the story that brings us here today.

I will be visiting the Paris Air Show next week. Every time I attend one of these major gatherings, I marvel at how far we've

come, not just since Wilbur and Orville, but even in the couple of years since I was last in Paris.

As stewards of this industry we share a responsibility to protect this mode of travel and to nurture its future. Every day, we ask ourselves, how can we make flying safer? How can we be more efficient? What lies over the horizon?

Since the beginning of manned flight, aviation has been the catalyst for international relationships. This has particularly been true of the bonds between the United States and the United Kingdom.

Across the globe, aviation has helped to foster an intellectual and economic prosperity that's unparalleled in human history.

Today, we are able to fly longer distances in greater safety and comfort than ever before. Almost any two places on the planet are now reachable in a single flight.

And soon, it will not simply be two points on Earth, but how we manage passengers flying into space and back.

At the same time, the worldwide security environment and concerns about terrorism have added new concerns that extend far beyond questions about aerodynamics and fuel calculations.

Most recently, these concerns have been highlighted by security precautions that resulted in the prohibition of large portable electronic devices in the cabins of many international flights between the U.S., the U.K. and the Middle East and North Africa.

These decisions were taken with utmost consideration for the safety of the traveling public.

Rest assured, the security experts, in conjunction with safety regulators such as the FAA, are working to make sure we understand the evolving threats.

We are working in conjunction with our international partners and the industry to protect the traveling public.

As regulators, airline operators, aviators and business leaders, we are constantly called upon to make flying even safer. And we have achieved an amazing track record together.

I am pleased that airlines and governments around the world have collaborated through organizations such as the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA).

We all know that when one boards an aircraft, it's with the purpose of going from one place to another.

An airline accountant might tell you that the company's product is seats. The more of them you fill – and the higher the fare – the more money you make.

But at its core, I think you'd agree that this industry's real product is safety.

This has been true since the very first days of aviation.

In the United States, here in the United Kingdom, and in the rest of Europe, some version of what we in the States called “barnstormers” crisscrossed the countryside.

They'd drop into a pasture, and for a day or two, they'd take the locals up in the air and show them their little piece of the world from the air.

While many people jumped at the chance to experience a death-defying adventure, the manufacturers and the pilots knew that aviation's viability ultimately depended on convincing the public that it also was safe.

One of my favorite stories is that of an American named Clayton Scott. He was one of the early pioneers to fly into what was then the uncharted territory of Alaska.

Because there were no runways to speak of, the airline he worked for operated so-called flying boats with thin wooden hulls and fabric-covered wings.

The owner of the airline was willing to try anything to entice his pilots to be as cautious as possible.

He announced a contest: The first pilot to deliver 1,000 passengers across the Gulf Alaska without killing anyone would win a new car.

This wasn't as simple as it might seem. Often, Scott would be required to land or take off from a cove or harbor that he'd never visited.

Scott was just a few flights away from the goal when he attempted to depart from a cove near Valdez.

Just before the plane reached takeoff speed, it struck a submerged rock that ripped a hole in the bottom of the mahogany fuselage.

By the time Scott nursed the plane back to shore, his three passengers were sitting up to their chests in water – safe, but wet.

Scott went on to win the car, and he was justifiably proud of it.

Later in life, Scott recalled those days. “A pilot back then had to be part aviator, part bushman, part mechanic – and part crazy,” he said.

They say that there are old pilots and bold pilots, but no old, bold pilots.

Well, Scott was an exception. He remained an active airman for decades afterward, making his last flight as a pilot at age 100.

And the little upstart carrier he flew for in Alaska? The long-forgotten Pacific Air Transport became part of a company that most of you know today as United Airlines.

Now, if you are like me, I suspect that many of you spend quite a bit of time on airplanes as part of your business dealings.

Anytime I board an international flight, I take a moment to look around at the wide variety of passengers loading their luggage into the overhead bins and preparing for the long flight ahead.

To a person, each and every one of them expect one level of safety throughout their flight. For them, safety knows no borders.

For those of us in the safety business, we must do what is necessary to fulfill that expectation. We rely on agreements and treaties, conventions and protocols.

Many of them have been carefully developed over decades, incorporating lessons learned into a format that ensures that

seamless transition from one jurisdiction to another that passengers expect.

The framework for some of these agreements has come into sharper focus as the United Kingdom has wrestled with the prospect of exiting from the European Union.

I know that many in the U.K. were surprised at the outcome of the most recent election, and the uncertainty it has brought about whatever the next steps might be. (I know that we in the U.S. can speak with a little bit of authority about surprise election results.)

From the standpoint of the U.S., I want to reaffirm the importance of the close relationship our two nations have enjoyed for decades. We are tied together by many common interests, and safe, seamless air travel has become a vital part of this.

Every few seconds, an aircraft built of components from suppliers across the globe takes off. On board are citizens from multiple countries – with business that also knows no borders – expecting us to do our jobs.

I can tell you that we in the safety regulatory business are not waiting for the politicians to resolve everything. I am here in London to demonstrate our high level of commitment to these important discussions.

As the U.K. continues along the path toward exiting from the E.U., there will be consequences that would require us to work collaboratively to manage. For example, upon exit from the EU, the U.K. will no longer have status under the US-EU Safety Agreement.

Why is this important? With limited exceptions, U.K. aviation products are currently certified by the European Safety Agency (EASA). And service providers, such as Maintenance, Repair and Overhaul facilities, are certified using EU regulation and EASA procedures.

If the U.K. does not maintain an associated or working arrangement with EASA upon exit from the EU, the UK will need to quickly re-establish competencies in specific areas, especially around the certification of new aviation products.

Additionally, the US-UK Bilateral Aviation Safety Agreement, now largely dormant, may need to be updated and put into place upon the U.K.'s exit from the EU. This is manageable but it will take time and depend on the clarity of the U.K.'s relationship with EASA going forward.

As I mentioned, the FAA is engaged in technical discussions with the U.K. Department of Transport and the Civil Aviation Authority about specific steps that must be taken under various scenarios related to the U.K.'s post-exit status with EASA and Single European Skies.

Now, clearly, discussions such as this are complicated and time-consuming by their very nature.

It is important to keep these time constraints in mind, and to not get sidetracked into a uncomfortable situation in which a missed deadline results in an interruption of service.

I am confident that regulators on both sides of the Pond are committed to “minding the gap” and ensuring uninterrupted, seamless safety oversight and certification of products and

services, as well as continuous collaboration on air-traffic modernization.

I mentioned earlier that aviation has always been an unlikely story, an alchemy of seemingly outlandish dreams and a relentless devotion to exploring the boundaries of science and experimentation.

Aviation is also a shared story.

Throughout its comparatively short history, the aviation community has worked across borders and oceans to encourage advancement.

Now, it's true that some of what drove aviation higher and farther was the spirit of competition. Charles Lindbergh made the first solo crossing of the Atlantic in 1927 to claim a prize that was sought after by many.

But that challenge was set into motion in 1919, when British aviators John Alcock and Arthur Brown made the first non-stop trans-Atlantic crossing from Newfoundland to Ireland.

And as we have seen, so much can happen in a single lifetime.

When Frank Whittle invented the jet engine, he probably never imagined it would one day be packed into a machine as magnificent as the Concorde, but he lived to see it happen.

The same could be true about us today.

If you think about it, many of us in the room have witnessed some remarkable advances just during the space of our own lives.

As a child in the 1960s, I followed the U.S. Apollo program as it made good on President Kennedy's challenge to reach the moon by the end of that decade.

A decade from now, it's entirely possible that privately owned space ventures and citizen astronauts will be making their own giant leaps for mankind.

Already, we've seen entrepreneurs like Elon Musk, Jeff Bezos and Richard Branson, just to name a few driving

enormous changes in both the capabilities and the economics of the space launch industry.

And if you look closely at what has happened even during your career in the aviation industry, you might be surprised at how the landscape has changed.

I'm sure many of you remember during the 1980s and 1990s.

It became apparent back then that, with the increasing volume of commercial flights, the aviation community needed to make major progress in reducing the risk of fatal accidents.

In the U.S., we formed the Commercial Aviation Safety Team, which included members from the airline industry, manufacturers, academia and the government.

The team quickly put its finger on something that had been intrinsically true of this industry since the beginning: The true advancements in safety come through a willingness to identify weaknesses, correct them and then widely share those lessons.

So, beginning in 1997, the Commercial Aviation Safety Team took a systematic approach to identifying common accident causes and then addressing how to eliminate them.

Among other things, the team analyzed data from flight recorders.

Airlines around the world began adopting policies that encouraged flight crews to report – rather than hide – incidents and then identify ways to avoid them in the future.

New technologies were developed, including more realistic flight simulators that makes it possible to train crews to recognize and recover from simulated emergencies in a safe setting.

One by one, probable cause by probable cause, the industry made enormous strides in dramatically reducing accidents caused by factors such as wind shear, controlled flight into terrain and loss-of-control.

By 2008, we had succeeded in reducing the commercial fatality risk by 83 percent from what it had been just a decade before.

It's even more impressive when you consider that – had we done nothing – the experts predicted we'd be experiencing a serious incident or accident very two weeks by now.

Of course, we must never cease our quest to make air travel safer.

Just like that airline owner in Alaska during the 1920s, we recognize that safety is the underpinning of our continued success.

As an international community, we've done a great job on in the U.S. and Europe of ensuring that “one level of safety” that passengers expect. And likewise, large sections of Asia have embraced a similar approach to safety.

Our manufacturers are turning out airplanes that are increasingly more sophisticated and reliable, incorporating

construction materials that would have amazed even the early dreamers.

But, as I said earlier, safety knows no borders.

Aviation accidents still garner worldwide media attention no matter where they occur.

It is incumbent on us as aviation leaders to continue to work through our international safety organizations to encourage the harmonization of standards and to relentlessly pursue the next level of safety.

It means, that like those who came before us, we must never become complacent and wrap ourselves in the comfortable cloak of conventional wisdom.

We can never stop asking if we can do this thing better.

And we must always keep our ears tuned for those voices from the sidelines, the voices of the outsiders and the innovators who just might be onto something.

As a British prime minister once said, “the finest eloquence is that which gets things done; the worst is that which delays them.”

May we all be eloquent as we chart the course of aviation in its second century.

Thank you.