Testimony of Joseph W. Brown

President, Hartzell Propeller Inc. and COO of Tailwind Technologies

1 Propeller Place, Piqua Ohio, 45356 | (937) 778-4200

Committee on Transportation and Infrastructure Committee

The Need to Reform FAA and Air Traffic Control to Build a 21st Century Aviation System for America

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Introduction

Chairman Shuster, Ranking Member DeFazio, distinguished members of the Committee: my name is Joe Brown, and today I appear before the committee representing three perspectives: businessman, private pilot and citizen.

As a business person, I am deeply invested in the performance and future of the U.S aviation market and system.

I serve as President of Hartzell Propeller, a 100-year-old Ohio-based company with a proud heritage. The company's origins link directly to the Wright brothers and their pioneering work in Dayton, Ohio. Robert Hartzell, following the advice of his friend and neighbor, Orville Wright, founded Hartzell Propeller in 1917 to manufacture walnut propellers for the Army Air Service—what we now call the United States Air Force.

Hartzell Propeller continues to design, certify and manufacture in rural Ohio. Situated in the small town of Piqua, our team of 300 multi-generational employees has earned a leading position in the global market. My brother and I own the company and have been partners for 25 years.

We also own Hartzell Engine Technologies, an aviation products company based in Montgomery, Alabama, that designs and manufactures starters, alternators, turbochargers, fuel pumps and cabin heaters for piston engine aircraft. The company employees 125 machinists, assemblers, engineers and technicians and is also the market leader in its product categories.

I also serve as Chief Operating Officer of Tailwind Technologies, a holding company that my brother and I formed in 2004 to expand our aviation business into the Commercial, Rotorcraft and Defense markets. Tailwind Technologies buys and grows companies; so far we've completed nine acquisitions around the U.S., including companies based in Texas, Florida, Alabama, California, Michigan and Ohio. Accordingly, we have built a significant presence in

the larger aerospace market, beyond general aviation. We have recently sold two aerospace companies to separate, strategic buyers who wanted to integrate our technology into their product portfolios.

Aviation is more than a business interest. I am a pilot and fly 400 plus hours a year in the U.S. airspace system. I am in an airplane almost every week, typically multiple times per week, utilizing the full range of the ATC system. I am also a lifetime member of the Experimental Aircraft Association and Aircraft Owners and Pilots Association, a member of the Seaplane Pilots Association and of The Recreational Aviation Foundation. I also serve on the board of Experimental Aircraft Association and am a past chairman and current board member of the General Aviation Manufacturers Association.

Based out of the municipal airport in Piqua, Ohio, our company operates a three-aircraft flight department that flies about 1,200 hours annually in support of Hartzell and Tailwind Technologies. Additionally, our company flying club operates three aircraft and has enabled dozens of employees to get their pilot's license and fly in the system. We also manage our local airport and provide hangar, fuel and maintenance services.

I appreciate the opportunity to testify today about what I consider to be a crucial engine of the economy and one of the greatest products of representative democracy: the open and efficient United States airspace system.

The Vast and High Functioning U.S. Airspace System is the Lifeblood of Our Nation's Aviation System

Working with the FAA and industry, Congress, through a combination of thoughtful FAA authorization legislation and appropriations bills, and persistent protection of the freedom to fly in our national airspace, has facilitated the growth of an aviation market second to none. By that I mean the size, variety, demand and impacts of the U.S. aviation market is in a category alone—nothing else in the world even comes close.

The United States, compared to the world at-large, is aviation-centric in its transportation infrastructure and is the most robust market for aviation manufacturers and service providers. For example, there are 10 times more pilots in the United States than Canada.

With approximately 5,000 public use airports, the U.S. Air Traffic Organization is responsible for about one-third of all the world's public airports. Though our country comprises about four percent of the world's population, we have also built, under our expansive sovereign skies, another 14,000 private use airports. In this country, you can fly when you want, where you want, utilizing a vast array of scheduled service, on demand and private aviation solutions.

Accordingly, U.S. aircraft producers and their supply chain have attained a scale and scope that leads the world markets. Our businesses and our customers exist because the people of the

United States, the Congress and the FAA have made it possible for citizens to use the skies freely as commerce corridors and we do so in volumes that no other country can match.

The jobs and continuing investment in the whole of the U.S. aviation system depend on a robust, stable and predictable climate for ALL U.S. airspace users. Users make the market and any change that impinges on users impinges on jobs.

For 580,000 Pilots Like Me, Our Air Traffic Control System Works

The potent combination of good federal governance, an effective civil aviation authority and strong ATC systems not only show in the strength of the U.S. market, but they are fundamental factors in my typical flying day. I travel for work and fly myself to my destinations since our businesses are near airports and most of our customers are based at airports.

I file a flight plan from an app on my smart phone and receive a text back of my expected route. This takes seconds and I can file in as little as five minutes before I depart, or as early as days before. The ATO has authorized secure access points and communications with a variety of private flight planning apps and any pilot with a phone or tablet can seamlessly engage with the ATC routing system.

In today's general aviation cockpit, that proposed route can be loaded to a tablet's moving map and the aircraft GPS navigator via Bluetooth with the push of a button. The seconds to file a plan leverage into effortless flight planning in the cockpit.

Once airborne, air traffic control knows who I am, where I am and where I am going before I even call them through a potent combination of ADS-B, radar and talented controllers.

Thanks to GPS, my aircraft appears as a geo-referenced icon on my enroute charts and terminal procedure displayed on my moving map and I get NEXRAD weather depictions and other pilot advisories in the air. During the flight, I see traffic on my ADS-B enabled TCAS system, and as more aircraft continue to meet the ADS-B equipment mandate, pilots and controllers will all see each other with tremendous precision. This incredible safety feature of the air traffic system is paced only by the rate of adoption by operators.

On arrival, I can follow GPS guidance on Standard Arrival Procedures and request a GPS-based Wide Area Augmentation System or WAAS approach, with glideslope guidance, into most of the airports I choose, a safety enhancement that cannot be overstated. What this means to me is that I can fly to nearly 2,000 WAAS enabled airports spread across this country to get to my customers, in foul weather, and by simply following GPS guidance, land exactly on the runway numbers with extraordinary precision. From my home base of Piqua, Ohio, (population 20,000) to, say, Olney, Texas, (population 3,000) to, perhaps, Albany, Georgia, (population 75,000) or to Teterboro, New Jersey, (14 miles from 5th Avenue and with 20 million metroplex residents), the

NextGen features I use deliver me and the 50,000 other flights air traffic controllers manage each day to our destinations.

Others Agree that Nextgen is Working and Delivering Real Benefits

How good are the many deployed features of NextGen within our vast airspace? The Chief Pilot of Boeing, an aviation mentor and one of the finest aviators I have ever had the opportunity to see fly, made a personal observation to me that he prefers the 3,000 available WAAS approaches to an ILS option in every case. He considers them safer and more precise. He isn't alone in his praise for NextGen features.

Steve Dickson, Senior Vice President for Flight Operations at Delta Airlines, credits NextGen Performance Based Navigation features with improving efficiency, saying, "The benefit is at our major hub airports we are seeing some significant reductions in taxi times for the last few years; that time is very valuable for our customers. For us as a business, it allows us better utilization out of our fixed infrastructure – runways, taxiways, gates, aircraft – and we can put that time back into the schedule and use it to provide a better flight schedule for our customers. . . . To scale that capability across the whole system over the next several years will provide a huge benefit to our operation and to our customers."

Brian Quigley, Managing Director of Flight Operations at United Airlines says of DataComm, "We've done some tests in Newark, Houston, and Dulles, and we like what we see. We've seen a reduction in the time it takes to communicate pretty critical information from the [air traffic controller] folks to our pilots."

Jeff Martin, Executive Vice President of Operations at JetBlue says of ADS-B, "We are excited to say that the FAA is moving and our industry is moving and the benefits are starting to come our way."

Air Line Pilots Association President Tim Canoll extolls the safety benefits of NextGen, remarking, "Pilots embrace all the NextGen additives. All three of the areas that we see benefits in – shared information, situational awareness, and access to decision-making tools – are primarily safety enhancements. Now those safety enhancements go a long way to increasing our efficiency. But from a pilot's perspective, and really from the operators and air traffic control, the primary benefit is enhanced safety."

The aviation community gets it -- from pro pilots, to air carriers, to private users, to the controllers that lead this symphony in the sky -- NextGen works and it is getting more powerful all the time. Importantly, the FAA uses the NextGen Advisory Committee (NAC) to guide priorities and execution of air transportation modernization. This committee, chaired by chief executives of airlines since its formation in 2010, involves all stakeholders and has been a key part, along with effective congressional oversight, in driving success.

Some argue that an organizational model like NAV CANADA would improve ATC modernization outcomes. In a 2015 report, the Department of Transportation Inspector General said that in contrast to the United States, air navigation service providers the IG examined like Germany, France, Canada, and the United Kingdom, "do not embark on large modernization efforts or conduct extensive aviation research and development. Rather, they implement new technologies incrementally, using a variety of methods, such as purchasing commercial-off-the-shelf technologies." The IG also found that "NAV CANADA's capital budget is approximately $120 million annually, and considers a large acquisition to be $10 million."

In most cases, NAV CANADA has taken technology (GPS and RNP to name a few) invented by the FAA and deployed it. The challenge of modernizing the comprehensive U.S. ATC system doesn't gain very much by using NAV CANADA as a benchmark. The system needs and scope are totally different in each case, with NAV CANADA managing far less complexity. Different challenges require different solutions and ours are working well for our needs, thanks to FAA and its tremendous controller workforce, its research and development efforts, strong involvement from the industry and strong oversight by Congress.

On Principle, The Proposal to Privatize ATC is Deeply Troubling

The sovereign skies of the United States belong to the people and ought to be managed by our duly elected representatives who balance our collective interests and adjudicate access. For decades, Congress has devised equitable solutions to challenges like rural access, commercial and general aviation user access, environmental impacts of noise and traffic, infrastructure build out and funding mechanisms. New challenges continue to arise as we work to integrate unmanned aerial systems and commercial space transportation into the National Airspace System with more new entrants coming. The FAA, working with Congress, has managed the safe integration of these new technologies into the NAS because they are chartered to serve a broader public purpose, even if that work is difficult and has to account for disruptive technology. FAA and Congress, working together, have been important contributors to the competitive advantages we enjoy in our aviation market place because they understand the benefits to the nation. It is hard to see an entity outside of government having these broader national purposes in mind.

My concerns are heightened because some have referred to the proposed entity as a co-op of users. A co-op, by definition, is an autonomous association of entities united to meet their common economic interests. Are the public interests better served if Congress gives our wealth and skies to a small group of special interests, operating outside of democratic oversight, so that they can serve their own ends?

Being a user of technology is not at all the same as being a developer and implementer of technology. The proposed ANSP co-op is akin to asserting that a brand new smart phone company, launched to compete with Apple, should be governed by a group of phone users who consume the most minutes.

Fundamentally, can this co-operative of special interests guarantee that it is capable of running the safest, busiest, and most complex airspace in the world, while simultaneously and radically increasing the pace and impact of modernization, while also assuring the American people that it will, first and foremost, serve the public good?

The answer is, it can't. In my opinion, these challenges are in too much tension for a private solution to work and the pain of transition outweighs the imagined benefits.

The ATC Privatization Proposal Has Risk and Uncertain Rewards

There seems to be little doubt among government authorities that transitioning the U.S. ATO and our sovereign skies from the domain of the people to special interests will take many years. The GAO agrees with that assessment, citing a MITRE study of foreign ANSP transitions. Notwithstanding that these other transitions were related to air traffic organizations a fraction of the size and complexity of the U.S., MITRE found that it took five-to-seven years to complete a transition.

Researchers also found that in such a transition, there were financial risks to the user community and the taxpayer, even when the ANSP scale and scope was small. Since private ANSPs are largely fixed cost/variable revenue models, they are financially fragile. This has led to higher fees, reallocation of fees among users and in one case, a government bailout. Given the higher criticality of the air traffic control system to our nation's economy and transportation network, I worry that a newly privatized ANSP will be too big to fail on day one, keeping the taxpayer on the hook for any financial problems it may experience.

Proponents of transitioning the U.S. ATO to a co-op system also argue that the entity will facilitate the pace of modernization because it can borrow on its assets turned over by taxpayers in order to invest in new or emerging technology. It is hard to imagine something more economically hazardous to the American people than an ANSP acting as a venture capitalist, potentially competing with private companies and exposing its healthy balance sheet of (our) $20B in assets to high risk tech investments.

And even without this risk, one should think long and hard about the costs and benefits of this kind of change. NextGen is working; we have the safest, most diverse and complex air system in the world and it creates tremendous economic opportunity for the citizens of this nation. We do need to modernize the system and we are. As I business man, I consider risk/reward relationships in every deal that we do. I believe it is imprudent to take five-to-seven years to, at best, get the same car with a new paint job while also delaying progress on modernization and other pressing priorities we face right now.

A Sensible Alternative

As a businessman and aviation user, I disagree with conclusion that the FAA air traffic organization would benefit from a lengthy and radical change. The FAA air traffic organization has considerable strengths but there are weaknesses that need to be addressed.

I think this is why I find worthy of consideration the recommendations of the FAA's Management Advisory Council (MAC). The MAC, which Mr. Rinaldi sits on, has offered a series of very good suggestions that could be implemented by building on the existing FAA structure. The FAA should not be subject to sequestration or a government shutdown, for example, and there should be other ways to facilitate better financing and management of capital projects. As we have in the NAC, I believe Congress and industry can work together to find some common ground and move forward.

Conclusion

Chairman Shuster and Ranking Member DeFazio: thank you for the opportunity to talk about my experience with the U.S. airspace system and the economy that it drives. I close with this:

The United States does indeed possess the safest, most cost effective, most technically advanced air traffic control system in the world, bar none. That is why my company and our employees thrive with our pilot community making a market for us. That is why so many people travel in commercial and on demand service every day, some 50,000 flights per day. That is why, as citizens, we have the most comprehensive and open aviation infrastructure on the planet. I commend all of the ATO stake holders for capitalizing on this national treasure and doing their jobs with such incredible expertise, and I thank in particular the controllers for moving us safely through the skies. Models like the NAC are working and we should look for opportunities to build on these examples and tackle the kind of challenges FAA's MAC has outlined. This year, as Hartzell Propeller celebrates its 100th anniversary, I look forward to working with all of you to maintain this leadership.

I would be glad to answer any questions that you may have.