Universal Hydrogen Co.
Senate Commerce Committee Testimony
Jon Gordon, Co-Founder
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Thank you Committee Chair Cantwell, Ranking Member Cruz, and members of the Committee.

My name is Jon Gordon, and I am the co-founder and general counsel of Universal Hydrogen.

I am truly grateful for the opportunity to testify today and share our experiences as one of the companies at the forefront of making true zero emission flight via hydrogen power a reality.

As you may know, earlier this month, Universal Hydrogen achieved the historic first flight of a 40 seat Dash-8 regional aircraft. This flight represents the largest aircraft ever to fly powered with a hydrogen fuel cell powertrain, and is also the largest aircraft ever to fly principally on hydrogen power.

With our first flight, Universal Hydrogen is on track to enter commercial service as early as 2025.

One of the unique aspects of our business model is that we do not require any new and expensive infrastructure. This is because we have made the hydrogen fuel tanks modular, allowing us to fill them offsite and transport them to and from the airport with standard delivery trucks. They also load on and off the plane with existing ground handling equipment. Every airport in the world is now ready to support zero emission hydrogen-powered flight.

Airline interest in our aircraft retrofits has been overwhelming. We now have partnerships with 16 different airlines across 12 different countries, and commitments for over 250 aircraft. Within a decade you will see our hydrogen powered aircraft flying in nearly every region on Earth.

In addition, the cost to passengers for flying our planes should not change, as the cost per available seat mile for airlines, or CASM, is on track to remain the same as jet fuel by the time we enter into commercial service. There is thus no green premium, no hidden costs or fees, for flying our true zero emission aircraft.

Our aircraft will not only provide the world's first zero emission flight solution, they will also improve air quality as well as noise pollution for the communities, many disadvantaged, that live near and around airports.

Our initial launch customer, Connect Airlines, will be flying our true zero emission aircraft between northeast cities, including Washington, DC, as early as 2025. Imagine that, being able to fly to and from Washington, DC or within your states, on green hydrogen produced from sunlight, emitting only pure water.

To some, this promise of emission-free flight could seem like a distant vision, but I hope our first flight brings that reality to each and every one of you today.

The truth is, we are on the verge of a revolution on how we power aircraft, and other heavy transportation. This is good for the economy as well as the environment. We must take the right steps now to ensure the United States is prepared to win the clean transportation race.

And what might those steps be?

First the FAA needs more resources.

We have enjoyed a supportive, and also very critical and analytical, relationship with the FAA. We welcome it.

This transformation is too important for there to be any question as to the safety and validity of new aviation platforms. We invite the strongest and most comprehensive certification process possible. There can be no shortcuts, no stones left unturned.

Our operational team has collectively taken over a dozen models of aircraft through certification. We hold ourselves to the highest standard, and invite the highest level of rigor and scrutiny from the FAA. One of the most important parts of aircraft innovation is preserving the trust of the American people, so the FAA needs all available resources to ensure that the door to certification is only open to those upholding superior safety standards.

My second ask is parity.

At a recent Clean Aviation conference in Europe, participants were asked what technology will fuel the future of flight: electric, hybrid, hydrogen, or so-called Sustainable Aviation Fuels or "SAFs". The clear winner was hydrogen.

And yet, when the White House this month released its report on "National Aeronautics Science & Technology Priorities", the report dismissed hydrogen-powered aviation, in favor of SAFs, which are exponentially more expensive to produce than hydrogen, and will continue to emit the same amount of carbon and other greenhouse gasses at altitude as ordinary jet fuel.

Much like automobile manufacturers in the 1980s, large U.S. aerospace companies are highly invested in not having to change their engines or operations, which is why the airline status quo is so supportive of SAFs. They don't have to do anything different. But blending in small amounts of synthetic fuels that have a carbon footprint that is no better than the fossil fuels they displace, gives us a false sense of accomplishment.

This is especially risky because the EU, the UK, and China are all developing hydrogen-powered aviation. The recent announcement of Rolls Royce's hydrogen burning jet engine is a sign of more things to come. If we limit innovation to our industry's tolerance for change, we will be continuously falling behind.

DOT, DOE, and NASA must be directed to allocate resources equally to hydrogen, electric and hybrid aviation programs as well as SAF.

Third, and finally, we need a voice in DC.

Over the past three years I have had numerous conversations with various offices in the DOE, DOT, and even NASA. They listen with interest, and ask questions sincerely. But no department, agency or division is directed to focus on hydrogen aviation.

If the United States is to maintain its prominence in the future of aviation, all relevant federal agencies must work together to prepare for it, and lay the proper safety, certification and operational regulatory frameworks to ensure its success. Right now we are nowhere near where we need to be as a country.

I recently visited Japan, where the Ministry of Economy, Trade and Industry, and the Civil Aviation Bureau, have established a working group that brings together all relevant agencies in Japan, including commercial interests from airlines, Hydrogen producers, manufacturers, and suppliers, to discuss and formulate new policies for the future of aviation. I would like to suggest such a framework here.

We need a hydrogen, hybrid and electric aviation task force that can work together to prepare for future aviation platforms, and will be isolated from the entrenched status quo interests who only see SAF as worthy of consideration and funding.

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In conclusion, this is an exciting and transformative time to be in aviation. Fueled by concerns about aviation's impact on climate change, and ever increasing competition from Europe, the UK and China, our industry faces a tipping point: we must either innovate or we will fall behind.

I thank you for your time today, and on behalf of the over one million people working in aircraft manufacturing today, I thank you for your continued devotion to our industry, our families, and our future.