MISSION FOR AMERICA · CHAPTER 07 · THE PLAN

The Mission for Aviation

November 2026 · Beta v0.1.0

Published by New Consensus · newconsensus.com

Contents

The Problem **2**
The Mission **3**
Solutions **4**
Solution 1: Build the World's First Zero-Emission Long-Haul Aircraft 4
Solution 2: Build a Regional Electric Aircraft Industry 8
Solution 3: Build a New Generation of Airports for Clean Flight 10
Solution 4: Use Sustainable Aviation Fuel as a Bridge to a Clean Future 11
Presidential Leadership **13**
During the Campaign 13
The Transition 14
Day One 15
The First 100 Days 15
Operational: Years 1–10 15
What the Mission Delivers **15**

The Problem

Aviation is among the hardest sectors of the modern economy to decarbonize, and demand for flight worldwide is projected to grow sharply in the coming decades. No one has yet shown how to meet that growth without fossil fuel. Major industrial nations other than the United States are racing to research and deploy zero-emission aircraft. Because flight cannot simply be banned, aviation's carbon has to be either captured after the fact or never emitted at all. Carbon removal at the scale aviation requires remains unproven. The only viable path is zero-emission technology.

Jet fuel holds far more energy per kilogram than any battery on the market. Replacing it means solving different problems for different flight distances. Today's batteries can power short regional flights of roughly 100 to 250 miles, with hybrid-electric configurations stretching that further. That covers commuter routes and island-hopping. Medium and long-haul flights are a much harder problem. Batteries already make up a large share of an electric aircraft's weight, roughly a third to over half in current designs, and the Eviation Alice's pack reaches about 60 percent of takeoff weight. A battery pack large enough to power a longer trip would weigh so much that the plane could not take off. Next-generation chemistries such as solid-state, lithium-sulfur, and advanced silicon-anode batteries could change that math, but none has yet reached commercial passenger service. Green hydrogen can power long-haul flight today in principle, but the aircraft and airport infrastructure for it do not yet exist at commercial scale.

Recognizing both the need to quit fossil fuels and the immense economic opportunity, governments across the globe are attacking these technical challenges. China's published hydrogen aviation roadmap sets staged development goals around regional aircraft by 2035 and mainline aircraft by 2050. In April 2026, the country flew a 7.5-ton unmanned hydrogen-powered demonstrator aircraft. Japan has committed over $100 million specifically to aircraft hydrogen fuel cell R&D as part of a ¥2.76 trillion (roughly $18 billion) Green Innovation Fund underwriting the country's next-generation aerospace push. The EU is funding next-generation aircraft, including hydrogen designs, through its €4.1 billion Clean Aviation program, and the UK has committed over a hundred million pounds. The United States has no comparable program. NASA's hydrogen aviation work remains at the research and analysis stage on small budgets, while the Trump administration has cut funding for the two hydrogen hubs built around green hydrogen, in California and the Pacific Northwest, and has proposed pulling billions more from the program.

The private aerospace giants the country would normally count on to innovate have largely abandoned their research in the sector. Airbus has pushed its hydrogen airliner years past its original 2035 target and scaled the program back. Boeing has bet on sustainable fuels and conventional designs. The big manufacturers treat zero-emission flight as too risky and too far off to build now, and after decades of consolidation and stock buybacks they no longer take on long engineering bets. If the United States wants the next aircraft, it will have to build it.

The Mission

The Mission for America will rebuild the country's aerospace industry around one goal, replacing every carbon-powered flight with clean, American-built aircraft. The president will begin with a public campaign reminding the nation that aviation is one of the most consequential achievements of American industrial policy, the result of close collaboration between government and private business that produced nationwide prosperity and decades of global leadership. The Mission will revive that partnership for clean flight. Because the incumbents have abandoned the work, it will build the industry directly, standing up new public corporations chartered and capitalized by the RFC and rebuilding the country around the hundreds of thousands of high-wage manufacturing and engineering jobs that come with it.

Clean aviation will be a state-led infrastructure project in the American tradition. The transcontinental railroad, the interstate highways, and the original jet age were all built when the federal government decided a piece of national infrastructure was too important to leave to private markets, and the country will treat carbon-free aircraft the same way.

By the end of the decade, that country will be prepared to launch the world's first commercial zero-emission long-haul aviation network, and American-built electric planes will already serve short-haul routes across the country.

The long-haul effort will rest on three competing public corporations, chartered and fully funded by the RFC, racing to build a working zero-emission long-haul aircraft first. They share every result with one another and with outside startups, universities, and allies, so the whole field advances at the pace of its best performer while three independent teams take separate shots at the hardest engineering problem in aviation. If one stalls, fails, or bets wrong, the other two keep the mission moving. The president will make this race a signature commitment of the campaign and the administration.

The Mission will build in public, one aircraft at a time. The corporations will start with unmanned hydrogen-powered freight drones, the lowest-risk way to test the technology in flight, and hit a more capable benchmark every year, moving to bigger payloads, longer range, piloted cargo aircraft, and finally passenger flight. Each year will produce an aircraft that flies, the supply chain and the workforce will grow with it, and the public will be able to watch the progress. A full-scale zero-emission long-haul prototype will be in ground testing before the first term ends, and the passenger network follows just beyond the 10-year mark.

The military will be the first customer for hydrogen freight and tanker aircraft, de-risking the technology the way it did for the original jet engine. NASA's aeronautics labs and wind tunnels, the federal backbone of American aviation R&D, will be expanded to feed all three corporations. The corporations will be public, and the innovations they generate will be publicly owned. The first return is the clean aviation system itself. And in time, selling American aircraft and airport systems abroad will send financial returns back to the people who carried the risk.

Hydrogen flight may not work out. The storage problem may prove too stubborn, or the economics may never close. If hydrogen fails and no other clean-flight breakthrough arrives either, the country will have

to fly less and lean harder on the trains and buses the Mission will build elsewhere. Running three teams, building in public, and keeping every other clean-transport option moving in parallel gives the country the best chance of avoiding that outcome.

The biggest parallel bet is batteries. The Mission will run a full-scale push on high-capacity batteries beside the hydrogen program, advancing the chemistry, the domestic manufacturing base, and the critical-mineral supply chain together. The Manhattan Projects battery program will drive the energy-density breakthroughs, the Mission for Industry will stand up the domestic manufacturing base, and a national effort to secure the raw materials the whole transition depends on will lock down the critical-mineral supply chain. If batteries advance faster than expected, or if hydrogen stalls, the corporations' industrial base will pivot, and future MFA updates will revise the technology mix as the data comes in.

On a faster timeline, the Mission will establish a domestic regional electric aircraft industry. The RFC will take equity stakes in the most promising American manufacturers, finance the factories that take them to production volume, and place the first fleet orders for federal regional travel. The FAA will give electric aircraft a fast-track certification path. Within five years, certified American-built electric aircraft will fly the short-haul commuter routes today served by aging turboprops burning jet fuel, and by the end of the decade every major U.S. commercial airport will have high-power charging infrastructure ready to turn them around as fast as a refueling stop.

Until the new electric and long-haul fleets are ready, sustainable aviation fuel (SAF) will help bridge the gap in existing aircraft. SAF is a lower-carbon liquid fuel that blends with conventional jet fuel, and current aircraft can burn the mix at up to 50 percent SAF without engine modifications. The RFC will finance airlines that retrofit their fleets for higher SAF blends and a diversified domestic SAF industry to supply them, so the existing long-haul fleet starts burning cleaner fuel years before the first zero-emission jet is ready.

Public transport will also take part. The MFA's investments in conventional rail, high-speed rail, and intercity bus service, detailed in the Mission for Public Transport, will absorb a significant share of short-haul flight demand that does not need aircraft at all, freeing the aviation industry to focus on routes where flight is the right mode.

With the tools and tactics laid out in this chapter, the Mission for Aviation will end the carbon emissions from flight, free the country from a volatile global jet fuel supply chain, and make the United States a leading producer of clean-aviation technology.

Solutions

Solution 1: Build the World's First Zero-Emission Long-Haul Aircraft

The Mission will build the world's first commercial zero-emission long-haul aircraft and the industry that grows up around it. The incumbents have walked away from the job, so the RFC will charter and capitalize

a network of new public corporations to take it on directly, racing each other and sharing everything, and deliver the aircraft, the production capacity, and the airport infrastructure as one program.

Hydrogen first, with other options kept open. Green hydrogen aviation fuel is made by splitting water molecules with clean electricity in machines called electrolyzers. The resulting hydrogen is chilled to roughly −253°C, turning it into a super-cold liquid that holds far more energy per unit volume than the gas form. Stored in heavily insulated tanks at the airport, the liquid is transferred into aircraft by specialized refueling trucks. Once on board, modified jet turbines or onboard fuel cells convert the hydrogen into thrust, exhausting only water vapor. Green ammonia is easier to store and ship than pure hydrogen. It liquefies at a more manageable −33°C, moves through existing fertilizer infrastructure, and can be cracked back into hydrogen at the airport. That cracking step is still pre-commercial and loses roughly a fifth to a third of the hydrogen's energy, and ammonia's toxicity makes it hazardous to handle, so on-site hydrogen production stays the default. Solution 3 lays out where shipped-in ammonia fits the supply plan. Liquid hydrogen takes up several times the volume of jet fuel for the same energy, so the aircraft itself has to change shape (see the next section). The hardest engineering problems are safe, leak-proof, energy-efficient liquid-hydrogen storage and the airframe redesign that goes with it, and those are the problems the public corporations will be set up to solve. While this solution currently focuses on hydrogen, if parallel battery research delivers breakthroughs that make extended-range electric flight viable on medium- and long-haul routes, the corporations and the Department of Defense will pivot the industrial base toward electric.

A leap in aircraft design: the flying wing. The hydrogen aircraft will break with the tube-with-wings shape every airliner has had for 70 years. To carry the bulky liquid-hydrogen tanks, the corporations will build "flying wings," also called blended-wing-body aircraft, a single smooth lifting body shaped a little like a manta ray or the B-2 bomber, where the body and wings together generate lift. A blended wing burns roughly 20 to 30 percent less energy than a conventional jet of the same size, and the leading designs project as much as 50 percent less per passenger. That efficiency would cut fuel use even with ordinary jet fuel, and it means the hydrogen does not have to stretch as far to make long-haul flight work.

It will also be a better airplane to ride in, with more personal space in every class, larger seats, an overhead bin for every passenger, wider doors and faster boarding, and a quieter cabin, because the engines ride on top of the body where the structure shields their noise from the ground. NASA and Boeing flew a research version, the X-48, years ago, and the American startup JetZero, backed by the U.S. Air Force and United Airlines, is building a full-scale demonstrator to fly in 2027. The military wants the design for its tankers and transports, and the Mission's public corporations will carry it the rest of the way to a hydrogen passenger aircraft.

A wide blended body does not fit neatly into airports built for narrow tube-and-wing jets, which is one more reason the Mission will build a new generation of airports alongside the aircraft (Solution 3).

A network of three competing public corporations. The Mission will charter three public corporations under the RFC, each fully capitalized and racing to build a zero-emission long-haul aircraft first. This is the RFC's parallel-public-corporation model, in which several public companies compete on transparent benchmarks (payload, range, cost, safety, schedule) and improve at the pace of the best

among them. The country has done this before. During World War II the original RFC financed competing aluminum producers, Reynolds and Kaiser, against the Alcoa monopoly, along with competing aircraft makers, and production rose sharply. The Mission for America's Homes and Buildings will follow the same model, chartering a set of competing regional American Building Corporations. Three teams are enough to compete and to cover for one another if one fails, and few enough that each can be fully funded. They will operate like disciplined private companies, run by aerospace operators and engineers, and owned by the public and accountable to the mission. Where private startups can move faster on a piece of the problem, the corporations will partner with them and fund them too.

Funded for results, the way NASA funded SpaceX. The corporations will be paid on the COTS model, the fixed-price, milestone-based structure NASA used to get SpaceX and other newcomers flying for a fraction of the traditional cost. The RFC will set the goal and pay a fixed amount only when a corporation hits a published benchmark, such as the first freight drone to carry a given payload, the first piloted cargo flight, or the first full-scale prototype in ground testing. The teams that hit their marks will earn the next payment and more of the work, and the teams that fall behind will be restructured, restaffed, or merged into the ones that are ahead. Each corporation will have to deliver an aircraft to get paid, with two rivals right behind it. The competition and the milestone payments will do the job that the threat of bankruptcy does for a private firm, without handing the profits to private shareholders.

Open research, shared by everyone. Everything the public pays to discover is public. The three corporations share all of their research and test data with each other, and with private startups, universities, and allied governments working toward the same goal. A breakthrough at one corporation will be shared with the whole field right away. Incumbents often sit on patented technology for decades, and open sharing lets three teams and every startup in the country build on each other's best work as it happens.

Iterative development, freight drones first. The corporations will build iteratively and in public, the way the U.S. synthetic rubber program went from research to a continent of factories in 18 months during the World War II mobilization. The first aircraft will be unmanned hydrogen-powered freight drones, proving the storage, propulsion, and handling systems with no one aboard. Each corporation will hit a published benchmark every year: more payload, more range, then piloted freight aircraft, then the leap to passengers. Annual milestones will hold all three teams to account, show the public steady progress, and let the supply chain and the workforce scale alongside the aircraft. Freight also comes first as a market, because cargo operators and the military will fly these aircraft commercially years before the first passenger boards one.

A certification path built from freight up. Flying freight before passengers is also how the aircraft earns its certification. There is no FAA rulebook today for a hydrogen passenger airplane, and writing one from scratch around an aircraft that does not yet exist would stall the program for years. The freight-first sequence solves that. Unmanned drones and then piloted cargo aircraft will fly first under the experimental and military airworthiness paths the FAA and the Pentagon already use for new designs, and every flight will generate the real-world safety data a passenger standard requires: how liquid-hydrogen tanks behave in a survivable crash, how to detect and safely purge the smallest leaks anywhere in the fuel system over an aircraft's whole life, and how to shield the cabin from the heat of a fuel fire.

Engineers identified these hazards decades ago as the questions that had to be answered before hydrogen could carry passengers, and they can only be answered with hardware in the air. The FAA, working with NASA and the corporations, will turn that flight record into special conditions for hydrogen systems and then into a durable type-certification standard, so the rules harden alongside the aircraft. By the time a hydrogen aircraft carries its first passenger, it will have flown years of cargo missions proving the systems that keep that passenger safe.

Public capital, public upside. The public is underwriting the hardest engineering program in aviation, and it owns what that investment creates. Because the corporations are public, the federal government will hold the equity, own the rights to the technology its dollars develop, and collect the licensing and royalty revenue as the American aircraft and its airport systems are sold worldwide. This fits the open-research model. The corporations will share the underlying science freely, and the public will earn its return from manufacturing and exporting the aircraft and airport systems and from licensing the production designs to the firms that build them. The RFC will stay flexible on structure, using direct capitalization of the public corporations, equity stakes in the private startups it funds alongside them, low-cost loans, or a mix, whichever gets the aircraft built fastest. Where the Mission funds a private firm directly, the RFC will negotiate a share of the returns for the taxpayer.

Workforce pipeline with the Mission for Workforce Development. The aircraft, the airport hydrogen hubs, and the operations that follow need two distinct labor forces. One is the scientific and engineering pipeline of aerospace engineers, materials scientists, propulsion specialists, and fuel-cell researchers, trained at universities and national labs. The other is the unionized installation and operations workforce of pipefitters, electricians, electrolyzer operators, cryogenic technicians, and airport ground crews who will build the airport hydrogen and charging infrastructure and keep it running. The Mission for Workforce Development will coordinate both pipelines with the public corporations, the federal training centers, and the building trades unions so the people are trained and credentialed before the equipment arrives.

Hydrogen infrastructure to match. Hydrogen-powered flight needs cryogenic liquid hydrogen produced, stored, and delivered on site, and over time it needs airports built for the job. The RFC will finance that buildout and recruit host cities with the clean electricity and water to make hydrogen locally. Solution 3 lays out the airport and hydrogen-handling program in full.

A global industry grown around the American aircraft. Long-haul zero-emission aviation will be the next multi-hundred-billion-dollar aerospace market. The same public corporations that deliver the American aircraft will license the technology, export airport infrastructure designs, and anchor a global supply chain running through U.S. factories. American firms will also partner directly with foreign airports to retrofit their hydrogen handling, storage, and refueling systems so they can accept the new American fleet. American aerospace built the original jet age the same way, with American planes flying to American-designed airports around the world, fueled and serviced with American equipment. This time the public will hold the patents.

Green hydrogen supply. Hydrogen-powered aviation depends on green hydrogen reaching roughly $2/kg, down from today's typical unsubsidized range of roughly $3 to $8/kg, with the best-resource regions

already near the low end. The MFA will substantially step up green hydrogen production first for shipping and fertilizer, where demand is immediate and the technology is closer to ready. Green ammonia is the form hydrogen takes for both, serving as a carbon-free fuel for ships, whose first commercial ammonia engines entered service in 2026, and clean fertilizer to replace the fossil-gas ammonia that today accounts for nearly 2 percent of global carbon emissions. The guaranteed offtake from those sectors will pull green hydrogen production costs down and let further applications, including aviation, take hold.

Expand NASA aeronautics. NASA's aeronautics research is a small fraction of its space program, even though its labs and wind tunnels have historically been the federal backbone of American aviation R&D. The Mission will substantially expand NASA aeronautics to feed all three public corporations: airframe design, propulsion testing, materials science, and certification, with the results shared across the whole field.

Is ultra-high-speed passenger flight eventually possible? Yes. Ultra-fast passenger flight is technically possible, and it is closer than it has been in a generation. Concorde proved supersonic passenger service works, and it was retired in 2003 because of cost and noise. The sonic boom that kept it off overland routes is becoming less of a barrier. In June 2026, NASA's X-59 demonstrator flew faster than sound and is designed to produce only a soft "thump", and the FAA has proposed lifting the 53-year overland supersonic ban for aircraft that make no boom on the ground, while bills to the same end move through Congress. Private efforts like Boom's Overture are pushing supersonic passenger flight back toward service. The problem for this Mission is that all of that progress runs on conventional or sustainable jet fuel. Supersonic flight burns far more energy per passenger, and a carbon-free supersonic aircraft, with hydrogen's bulky tanks crammed into a needle-thin high-speed airframe, is a far harder problem than carbon-free subsonic flight. So the Mission's commercial line stays subsonic and zero-emission, where the climate math and the engineering work. Ultra-high-speed and hypersonic flight stay in the federal research portfolio, carried as a frontier R&D line in the Manhattan Projects, so the United States keeps a hand in the technology that could define the generation of aircraft after this one, without betting the clean-aviation mission on it.

What this delivers: The world's first commercial zero-emission long-haul aircraft, built in America by a network of competing public corporations (primary path: hydrogen, with extended-range electric held in reserve through the parallel Manhattan Projects battery program), reached by iterating from unmanned freight drones to piloted passenger flight over the decade. Open, shared research that lifts every American team and startup at once. A global aerospace industry anchored in the United States with the public holding the patents and the upside.

Solution 2: Build a Regional Electric Aircraft Industry

A domestic electric aircraft industry is the near-term foundation of clean American aviation. If the Manhattan Projects battery breakthroughs arrive on schedule, it will also be the foundation of a much larger long-haul electric fleet. The RFC will stand the industry up from scratch, financing factories, certifying aircraft, and supplying the first regional electric fleet in commercial service anywhere in the world.

Scope: ultra-short-haul, 100 to 250 miles to start. Current commercial battery technology (roughly 150 to 220 Wh/kg at the pack level today, with the leading edge approaching 250 Wh/kg) limits electric aircraft to regional routes today. This covers commuter flights, island-hopping, and short intercity routes that currently burn jet fuel in small turboprops. The Manhattan Projects battery program will push the energy-density frontier hard, and if it succeeds beyond current expectations the scope of this industry will extend to medium- and longer-haul routes. Meanwhile, the Mission will deploy what works today.

Build a domestic industry from scratch. No U.S. company has yet reached commercial-scale annual production of a type-certificated electric aircraft. Beta Technologies has opened a Vermont facility designed for up to 300 aircraft per year and is producing ALIA CX300s ahead of expected FAA type certification. A handful of other domestic manufacturers are in the prototype and pre-production stage. The RFC will finance factory construction and take equity stakes in the most promising domestic manufacturers. The RFC will act as a public venture capitalist, starting an industry where private capital has fallen short of production-volume manufacturing.

FAA certification. The FAA's electric aircraft certification process is underway through case-by-case special conditions issued under existing certification authority, but no comprehensive final rule for electric aircraft is in place. The President will direct the FAA to establish an expedited certification pathway for electric aircraft, modeled on the streamlined processes used for military and experimental aviation.

Airport charging infrastructure. Electric aircraft need high-power charging fast enough to turn a regional plane around in the same window as a refueling stop. The RFC will finance charging installations at every major hub, starting with the top U.S. hubs in the first years of the Mission and extending to every commercial airport served by the certified electric fleet by the end of the decade. The Clean Power Mission's distribution-grid buildout provides the feeder capacity.

Slot access at major hubs. Airports that opt into RFC financing for their charging and clean-aviation infrastructure will, as a condition of that support, guarantee slot access for the new electric fleet and other clean-aircraft entrants. At capacity-constrained hubs where incumbents would otherwise lock newcomers out, that gives the domestic industry a clear path to market.

Advanced Market Commitments. An Advanced Market Commitment from the federal government guaranteeing it will buy electric aircraft for all federal regional travel will anchor demand and de-risk the first production runs, the same mechanism the government used to stand up vaccines, semiconductors, and other strategic industries.

Fewer short-haul flights in the first place. The Mission for Public Transport will invest heavily in conventional and high-speed rail, intercity bus service, and regional transit connections. Many of the short-haul routes that electric aircraft would serve are better replaced by trains and buses altogether.

What this delivers: Certified electric aircraft serving regional routes within five years. A domestic electric aircraft manufacturing industry that did not exist before. Airport charging infrastructure at every major U.S. hub. Industrial capacity and workforce skills that transfer to the long-haul moonshot as it

matures, whatever the winning technology. Federal procurement anchoring the first production runs. Slot access at major hubs that lets the industry reach scale.

Solution 3: Build a New Generation of Airports for Clean Flight

Zero-emission aircraft do not slot neatly into airports built for 70 years of fossil-powered tube-and-wing jets. The Mission will rebuild the country's airports around the aircraft it is building, starting with the roughly 30 large-hub airports that handle about 70 percent of U.S. passenger traffic and expanding to the medium and smaller hubs as the fleet grows.

Make hydrogen on site wherever the resources allow. Producing green hydrogen at or immediately next to the airport is the most efficient option and the Mission's default, because every step of moving energy around as a chemical wastes some of it. The Mission for Hydrogen calls for green hydrogen production at every major airport and port, and this Mission will build the airport side of that plan, financing on-site production, storage, and refueling at the lead U.S. hubs and recruiting host cities with the abundant clean electricity and water that making hydrogen requires. A NASA engineering study found that converting a major U.S. hub like San Francisco International to liquid-hydrogen service, with on-airport liquefaction, storage, and fueling at ordinary gates, was practical. Dedicated hydrogen pipelines are the long-term ideal but are not yet financeable at scale, and existing natural gas lines cannot carry hydrogen because it embrittles ordinary steel, so on-site supply is the only practical route at most hubs for now.

A hub-and-spoke option for the airports that cannot. Some airports will not have cheap local clean power and water. For those airports, the Mission can make green ammonia in bulk where those resources are abundant, ship it through the existing ammonia and fertilizer infrastructure, and crack it back into hydrogen at the airport. The cost is lost energy. The full ammonia round-trip delivers only about half of the clean electricity it starts with as usable hydrogen over domestic distances, and as little as a third once it is shipped across an ocean, far worse than the small losses of making hydrogen on site. On top of that, splitting the ammonia back into hydrogen has never been done at the scale an airport needs, and ammonia is toxic, so it has to be handled with expert care. That is why the Mission favors on-site production wherever the resources allow and reserves the ammonia route for the airports that need it.

Where on-site production starts. Most large U.S. airports can make hydrogen locally, because most sit on a coast or a major freshwater body and water rarely decides the question. A simple screen sorts the large hubs into three groups:

Water access	Lead hubs	Supply approach
Coastal or Great Lakes	Houston, Chicago, New York, Los Angeles, San Francisco, Seattle, Miami, Boston, Detroit, San Diego, Tampa, Minneapolis, Portland	On-site production from the start, drawing on abundant fresh water or seawater desalination
Humid but supply-constrained inland	Atlanta, Dallas–Fort Worth, Austin, Charlotte	On-site production paired with water efficiency and reuse

Arid inland	Phoenix, Las Vegas, Denver, Salt Lake City	Ship in green ammonia and crack it back to hydrogen, the hub-and-spoke route above

The volumes are small. A fully converted large hub will need on the order of 7 to 11 million gallons of fresh water a day, less than half the output of a single existing seawater desalination plant, set against metro areas that already use hundreds of millions of gallons a day. Even for Atlanta, the busiest airport in the country and the hardest water case on the list, the limit is institutional, set by its shared and litigated river basin. Water screens out only the arid inland hubs, the small group the ammonia option is built for.

Room for the wide body. The blended-wing aircraft is broader than any jet flying today. Gates, taxiways, and jet bridges will be reconfigured for its shape, with boarding flows that load through several doors at once.

Runways sized to the aircraft. The blended-wing shape carries far lower wing loading than a conventional jet, which eases takeoff and can shorten the runway it needs. Where the heaviest fully fueled long-haul aircraft require more runway at the largest hubs, the Mission will provide it, sizing each airport to the aircraft that actually flies it.

Airports connected to their cities. New and rebuilt airports will connect to city centers by high-speed rail and fleets of electric vehicles, so the trip from downtown to the gate is fast and the airport drives regional growth.

What this delivers: A new generation of airports built for clean flight, starting with the lead U.S. hubs: on-site hydrogen production and refueling, terminals and gates sized for the blended-wing body, and high-speed rail links to the cities they serve.

Solution 4: Use Sustainable Aviation Fuel as a Bridge to a Clean Future

The long-term goal is zero-emission long-haul flight. Until that day comes, sustainable aviation fuel is the bridge. SAF is a lower-carbon liquid fuel that works in existing jet engines. It will start cutting emissions from long-haul flights immediately, using the planes the country already has, while the long-haul zero-emission fleet matures. Every SAF pathway runs into a supply limit, either biomass or captured CO_2. SAF can cover only part of current and projected aviation demand. That is why the long-haul program has to run in parallel.

Back several pathways. SAF covers several technologies, each with different costs, timelines, and feedstock limits.

- **Waste-based biofuels** (municipal waste, agricultural residues, used cooking oil) are the cheapest and most available today. The U.S. has more waste and residue feedstock than Europe.
- **Cellulosic biofuels** (forestry residues, energy crops) can scale further but need first-of-a-kind production facilities. They are also the route to *aromatics*, a family of molecules that jet fuel needs to keep engine and fuel-system seals from leaking. Today those aromatics come from petroleum, which is the main reason SAF is still limited to a blend with ordinary jet fuel. A clean, plant-based source of these

bio-aromatics is what lets SAF reach 100 percent, and producing them is a dedicated RFC investment line and a Manhattan Projects research target.

- **E-SAF** (synthetic fuel made from green hydrogen and captured CO_2) is the only pathway not bottlenecked by biomass feedstock, but the most expensive and energy-intensive of the three, taking roughly two units of energy for every one that ends up in the fuel.

The RFC will keep a diversified portfolio across these technologies, weighting its money toward the pathways that are cheapest, readiest, and least in tension with the zero-emission goal.

No new fuel crops. Waste and residue feedstock can supply only about half of a full domestic SAF program, and closing the rest with dedicated energy crops like switchgrass would take tens of millions of acres. SAF will scale only on what the country already produces, including agricultural and forestry waste, residues, and used cooking oil, and the bridge will be sized to what those sources can sustainably supply. As corn ethanol demand falls, the Farming mission will put that freed cropland into food and pasture.

SAF is a temporary bridge. None of these pathways is zero-emission, and none can carry aviation on its own. The cleanest option in commercial production today is HEFA fuel, made by treating waste fats and oils like used cooking oil with hydrogen. Even HEFA cuts emissions only about 60 to 80 percent over fossil jet fuel, and weaker feedstocks deliver far less. The biomass routes hit hard supply ceilings long before they can meet global demand, and e-SAF, the one pathway not bottlenecked by biomass, needs captured CO_2 and consumes green hydrogen that could fly aircraft directly with far fewer conversion losses. SAF plants are ordinary industrial assets with multi-decade lifetimes, so over-committing now would lock in decades of fossil-like flying and divert capital from the zero-emission transition. The Mission will build SAF capacity fast, run it hard during the transition, and wind it down as the new aircraft come online.

Pay airlines to make the switch. The Mission will subsidize SAF use. The RFC will finance airlines that retrofit their fleets to handle higher SAF blends and commit to larger offtake volumes, with the most generous packages reserved for first movers. A revived and expanded federal SAF production tax credit will close the price gap between SAF and fossil jet fuel. It will be fully refundable and paid through direct pay so producers of every size can claim it, available for 10 years, and phased down on a set schedule as the zero-emission fleet matures. Federal departments and the military will be early SAF customers, anchoring demand for the first wave of refinery output. The federal government's two recent attempts at aviation fuel support are already gone or gutted. The IRA-era 40B credit for SAF expired at the end of 2024, and the related SAF blending credit ended in September 2025. H.R.1, the 2025 reconciliation law, then stripped the SAF-specific bonus out of the technology-neutral 45Z clean fuel production credit, cutting SAF's rate from as much as $1.75 a gallon down to the flat $1.00 that every clean fuel now receives, even as it extended the credit through 2029. The main volume-driving programs, the California LCFS and the federal RFS, were not designed for SAF, which can only opt in as a side benefit. The Mission will create the first lasting federal support aimed at aviation fuel, built on incentives.

RFC investment in SAF production. SAF facilities are capital-intensive, first-of-a-kind plants, the kind of risk the RFC is designed to take. Because SAF is a bridge, the RFC will weight its money toward the lowest-regret options. It will build out the waste- and residue-to-fuel capacity that is cheap and ready

today, and finance the first cellulosic refineries as the route to higher volumes and domestic bio-aromatics. It will hold off on building e-SAF plants for now. While green hydrogen is scarce, it is better spent flying aircraft directly than converted to liquid fuel at a heavy energy loss, so the Mission will advance e-SAF through research and the Mission for Hydrogen's electrolyzer buildout, and revisit building it at scale only if hydrogen turns abundant and cheap or the zero-emission fleet falls behind.

What this delivers: Immediate emissions cuts from the planes the country already flies, without waiting for new aircraft. A domestic SAF industry that leans less on imported fossil jet fuel. Cleaner-burning fuel that leaves fewer of the lingering white contrails aircraft streak across the sky, which warm the planet in their own right, on top of the warming from CO_2. A bridge that buys time for the zero-emission long-haul fleet to mature.

Presidential Leadership

Most of the public has barely heard of zero-emission flight, and hydrogen power least of all, so the president's first task will be to explain it and build support for it. The country that invented the airplane has fallen behind, and the companies that should be building the next aircraft have stopped trying. China is already flying hydrogen demonstrators and has published a staged roadmap to full-size aircraft. Japan, the EU, and the UK have each committed huge sums to hydrogen and clean aviation. The United States has no comparable program. The president will lay out what the country will build, a network of new public corporations chartered by the RFC and racing each other to deliver the world's first zero-emission long-haul aircraft, alongside American-built electric planes on every short-haul route within five years.

During the Campaign

The candidate makes the case in person. The candidate will run on rebuilding American aerospace around the next era of flight. The candidate will explain hydrogen aviation to the public directly, including why the country that built the jet age cannot afford to buy the next one from China. The candidate will travel through the aerospace manufacturing regions, the airport and airline-hub communities, and the engineering and trades towns a revived industry would feed, pledging a generational job pipeline of aerospace engineers, factory workers, electrolyzer operators, cryogenic technicians, and airport ground crews.

The first flight. The candidate will fly on a hydrogen-powered aircraft and will pair the flight with a named first commitment, announcing the lead U.S. hub city and the leadership of the first public corporation on the spot, with capital and a timeline.

Explain the odds. The candidate will say that hydrogen flight might not work, and will explain why the country should try anyway, and why running three teams at once and investing in batteries and rail in parallel is the way to hedge that bet. The candidate will also make plain that the effort pays off even if hydrogen flight never does. The same program will leave the country with flying-wing aircraft that burn

far less fuel than today's jets, ready to fly and to sell worldwide, along with cheaper hydrogen and better ways to store and move it. Those advances carry over to shipping, trucking, and fertilizer whether or not a hydrogen airliner ever enters service.

Name who quit and who blocks. The candidate will name the interests that benefit from the status quo, including the legacy carriers guarding their slots against new electric entrants, the fossil jet-fuel suppliers whose market the transition ends, and the blue-chip aerospace giants that abandoned hydrogen to coast on existing designs. The argument is that the companies have given up, so the public will build the industry itself. The president will confront the members of Congress who side with the incumbents directly, from the bully pulpit.

Long-lead groundwork. Volunteer aerospace engineers and program veterans will go to work during the campaign, because chartering the public corporations and designing the first aircraft takes years of preparation. They will draft the charters for the three corporations, short-list the first hub cities against the hard constraints of clean electricity, water, transmission, and load, open informal talks with NASA, the national labs, the most promising electric-aircraft and hydrogen startups, and the candidates to lead each public corporation, and map the iterative freight-first development plan and its annual benchmarks.

The Transition

Name the people. The president-elect will name the RFC aviation mission-team lead, the chief executives who will run the three public corporations, the Secretaries of Defense and Transportation, and the NASA Administrator and FAA Administrator who will drive the build. Everyone leading the Mission will be chosen for hands-on experience in aerospace, engineering, and operations.

Settle the structure and the sites. The incoming team will finalize the design of the three-corporation system, including the shared RFC charter, the open-research rules, the COTS-style milestone payment schedule, and the military's first-customer role for hydrogen freight aircraft. The team will identify the first wave of hub cities for hydrogen production and airport buildout, the refinery sites for SAF production, and the manufacturing regions for the regional electric fleet. The Department of Defense will begin formal site selection for the first military hydrogen aircraft hosts. The team will negotiate memoranda of understanding with governors of aerospace and clean-energy states to align permitting, workforce training, and infrastructure dollars with the federal push.

Lock the deals with the RFC. With the RFC, the team will lock the capitalization and charters of the three public corporations, the equity-by-default terms and factory financing for the most promising domestic electric-aircraft manufacturers, the airline retrofit-financing structure, and the anchor procurement commitments, meaning the federal regional fleet for electric aircraft and federal and military purchases of hydrogen freight aircraft and SAF.

Draft the legislation. Counsel will draft the full package for the opening window, including the charters authorizing the three public aviation corporations, the revived SAF tax credit, the statutory framework for airline retrofit financing, the FAA expedited-certification authorization, and the funding line that carries the long-haul program beyond what existing authority and procurement can reach.

Day One

The first orders will convene DOD, NASA, DOE, and the RFC and direct them to launch the iterative hydrogen-aircraft program under existing authority within 90 days, beginning with the unmanned freight-drone benchmark and the military first-customer contracts, while the corporate charters move through Congress. Another will set GSA to pre-purchasing federal regional-travel fleet orders from RFC-financed electric-aircraft manufacturers on a five-year transition timeline. A further order will instruct the FAA to open and publish draft rulemaking on the expedited electric-aircraft certification pathway within 90 days, with the final-rule clock running from enactment of the certification statute. Another will direct NASA to reprogram its aeronautics budget toward the Mission's research priorities and submit an expanded request, and a last one will require every commercial airport receiving federal funds to include hydrogen-handling and high-power-charging infrastructure in its next master plan update.

The First 100 Days

As the package the transition team produced arrives in Congress, the president will work the votes member by member, making the calls and the case in person. Its central piece is chartering and capitalizing the three public aviation corporations, which only Congress can do. The SAF tax credit, the airline retrofit financing, the FAA certification pathway, and the long-haul funding line will move with it.

Operational: Years 1–10

The president will publicly mark each annual benchmark the three corporations hit, each electric aircraft that enters service, and each airport hub that breaks ground, making the case for hydrogen again as the public meets the technology and restating the odds as the program clears each hurdle. The president will confront the legacy carriers, fossil fuel suppliers, or members of Congress when they move to stall the build, and where a member stands in the way, the president will take the fight into that member's own district at the next election. The RFC aviation team will run the financing, the charters, and the anchor procurement. The White House will keep NASA, DOE, FAA, and DOD aligned and hold the three corporations to their shared benchmarks and open-research rules, and DOD will serve as the first military customer.

What the Mission Delivers

The Mission will fly a more capable aircraft every year. The rows through 2039 are the 10-year mission, which builds the industry and the early fleet. Full conversion of the long-haul fleet follows through the 2050s as the aircraft are built and the fleet turns over. This is the hydrogen-led path the Mission is betting on. If batteries leap ahead or hydrogen stalls, the same industrial base pivots and the mix shifts. Hydrogen fuel demand and the green liquid-hydrogen plants that supply it are shown alongside.

Year	What flies and what gets built	Hydrogen aviation fuel

2030 (Yr 1)	Three public corporations chartered and racing. Unmanned hydrogen freight-drone development begins, military as first customer. Parallel Manhattan Projects battery track. SAF tax credit revived and RFC airline retrofit financing operational, first RFC SAF plants breaking ground. Expedited FAA electric-aircraft certification, first applications filed. First hub cities chosen on clean-power-and-water criteria	~0.001 Mt/yr, <1 plant
2031 (Yr 2)	First unmanned freight-drone test flights. Blended-wing design work. SAF production scaling. RFC equity in 2–3 domestic electric-aircraft makers. Airport charging installations beginning	~0.003 Mt/yr, <1 plant
2032 (Yr 3)	Freight drones flying real cargo at small payloads. SAF blending rising	~0.006 Mt/yr, <1 plant
2033 (Yr 4)	Larger freight drones. First piloted hydrogen freight/regional demonstrator built. E-SAF advancing	~0.013 Mt/yr, <1 plant
2034 (Yr 5)	Piloted hydrogen freight demonstrator flying. Full-scale long-haul prototype in ground testing before the first term ends. Flying-wing in flight test. SAF at meaningful blends, Boeing/Airbus 100% SAF-certified deliveries. First bio-aromatics pilots. First electric types FAA-certified into regional service. Airport hydrogen handling under construction at major hubs	~0.03 Mt/yr, <1 plant
2035 (Yr 6)	Piloted hydrogen cargo in limited service. First regional hydrogen routes. Electric regional service expanding	~0.05–0.06 Mt/yr, <1 plant
2036 (Yr 7)	Cargo fleet and routes growing. Military tanker and transport trials	~0.09 Mt/yr, <1 plant
2037 (Yr 8)	Full-scale long-haul prototype in flight testing	~0.13 Mt/yr, ~1 plant
2038 (Yr 9)	Prototype flight-test program. FAA passenger-certification groundwork	~0.21 Mt/yr, ~1 plant
2039 (Yr 10)	Hydrogen freight in regular commercial and military service, testing complete. First clean-built airports under construction with runways right-sized to each aircraft and high-speed-rail links. Majority of jet fuel SAF-blended and the fleet 100% SAF-capable on domestic bio-aromatics. Domestic SAF and electric-aircraft industries self-sustaining, electric serving regional routes. US ahead of Europe and Asia	~0.3 Mt/yr, ~2 plants
2040	First commercial hydrogen passenger flights begin (single-aisle, key routes). Wide-body hydrogen prototype. SAF carrying most long-haul	~0.6 Mt/yr, ~4 plants
2045	Hydrogen the default for new narrow- and wide-body orders, SAF winding down. Passenger network and airport hydrogen reaching secondary hubs. Green hydrogen near $2/kg	~3.6–4.2 Mt/yr, ~24–28 plants
2050	Majority of medium-haul hydrogen. Long-haul widebody fleet scaling	~12–16 Mt/yr, ~85–105 plants
2055	Long-haul fleet majority hydrogen	~26–33 Mt/yr, ~175–220 plants
~2060	Fleet conversion essentially complete. Hydrogen aviation a full commercial reality, patents and upside held by the public that built it	~37–48 Mt/yr, ~250–320 plants