

Energy-Independent Airports

Too Busy, Didn't Attend (TBDA) Report

September 24, 2026 | SkyTerra Monthly Webinar, featuring Ryan Wilkoff



Featured: Ryan Wilkoff, Founder and CEO of Forever Flight Worldwide and a SkyTerra network member, presenting to the network; hosted by Jonathan Scharf, PhD (SkyTerra Group) with an open discussion joined by attendees. Headshot: LinkedIn.

HIGHLIGHT FROM THE WEBINAR

"This industry is clearly cheaper if we can get it to work, and so I'm excited to start with smaller aircraft."

— Ryan Wilkoff, Forever Flight Worldwide

Executive Summary

What the founder of Forever Flight told the network about electrifying regional airports, and where the money and the megawatts come from.

Regional and municipal airports are large, flat, short of cash and about to need far more local electricity. Ryan Wilkoff's answer: start on the ground, bring private capital so no one waits for a grant, size batteries before the fleet arrives, and treat airport land as a place to build power for the grid while the aircraft go hybrid first.

ABOUT FOREVER FLIGHT WORLDWIDE

An Austin, Texas aviation-energy company that describes its mission as creating energy-independent airports: solar, microgrids and charging adopted with no upfront hardware cost through customizable power purchase agreements, delivered with partners such as Archetype Energy across all fifty states [4].

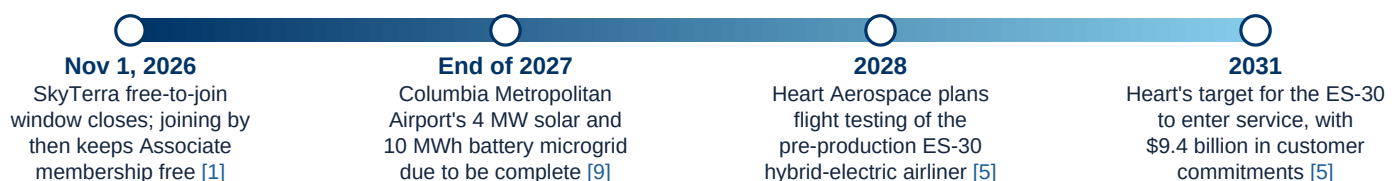
Five things that mattered most

- ON STAGE FROM SKYTERRA (Jonathan Scharf, PhD): the product direction is a train-your-own-double platform that augments field experience rather than replacing it [1].
- Forever Flight partners with regional and municipal airports on generation, storage and charging, funded with private capital, and starts on the ground, where the airport's own load lives [2].
- Plan the load before the fleet: by Ryan's account, a rental-car electrification plan at a large airport he places in Las Vegas nearly quadrupled the non-aeronautical load and stalled for lack of budget [3].
- Aircraft packs sit near 200 Wh/kg today; Ryan's magic number is 300 to 500 Wh/kg, which is why the near-term path is hybrid: cruise on battery, climb and descend on fuel [2][3].
- Airports are flat land next to a constrained grid; generation and backup power are Forever Flight's highest-grossing products today, and building on that land for the grid is the work Ryan says he enjoys [3].

Outlook

The next twelve months belong to the ground side: generation, backup power and demand-charge management at airports that have never owned an electric vehicle, on a grid that NERC, the grid reliability body, expects to add 224 GW of summer peak demand within ten years [7]. The aircraft will arrive on a certification calendar airports do not set.

What happens next



SkyTerra on Stage

Our update before Ryan took the floor: an agentic product direction and a network that invests in its members.



Illustration: the network as we build it, specialists linked through one agentic workspace.

We opened with two months of network news. Ryan Childress joined in August, Red Thread X joined as a partner, the free-to-join window moved to November 1, and enSights' invitation put us on stage at the CHESSA Energize Summit [1].

- Our vision is a train-your-own-double platform: agentic AI that lets an expert train it on a career of experience and offer that experience to others [1].
- The app now records transcripts, cloud documents, emails, calendars and tasks into a queryable knowledge map, then produces slide decks, documents and shareable custom applications we call artifacts [1].
- For Red Thread X we built a searchable artifact over their South by Southwest Zillions report and gave it to them at no cost, because they are part of the network [1].
- Investing in members is deliberate: boosting the Red Thread X video on LinkedIn cost \$30, reached about 13,000 viewers and drew 640 profile clicks, as we do for every webinar speaker [1].

"We see it as a problem if people think they can automate 20-plus years experience of incredible folks in our field."

Jonathan Scharf, PhD, SkyTerra Group [1]

WHY THIS MATTERS

The webinar series, the videos and this brief exist to amplify what members are building. A network that produces its own media, tools and introductions at low cost gives every specialist in it a bigger stage than they could buy alone.

The Ground Side Comes First

Almost all of an airport's emissions fly away; the load an airport controls is on the apron, and private capital means no one waits for a grant.



Illustration: tugs, fuel trucks and shuttles charging on the apron of a regional airport.

Forever Flight works with the regional and municipal airports most travelers never fly through: distributed generation, battery storage and charging, hardware-agnostic and sized to the field. Third-party capital means a project does not wait for grants; economics decide the scope [2][3].

- About 98% of an airport's emissions come from the aircraft; the plan still has to start with the airport's own Scope 1 and Scope 2 load [2].
- Ground vehicles are the near-term fleet: buses, work trucks, tugs and fuel trucks, plus chargers in the parking lots, all of which today's batteries can serve [2].
- A fifteen-foot solar tower from a Dallas team carries the lowest levelized cost of energy in the company's aviation portfolio; Ryan pitched it for data centers too [2].

"These airports we typically work with are very cash-poor, so I would say economics are crucial here."

Ryan Wilkoff, Forever Flight Worldwide [3]

1/3

of the land of ground-mount solar for the solar tower, at higher output [2]

\$0

upfront hardware cost to the airport under its power purchase agreements [4]

WHY THIS MATTERS

Owners who wait for electric aircraft will electrify nothing for years, and the market is moving: Columbia Metropolitan Airport in South Carolina broke ground in June 2026 on a 4 MW solar and 10 MWh battery microgrid expected to cut its utility bill by more than half [9].

Size the Load, Then Go Hybrid

A rental fleet nearly quadrupled one airport's non-aeronautical load; the aircraft will arrive hybrid first, on Ryan's magic number for batteries.



Illustration: an airport rental-car lot, its chargers and the substation that has to carry them.

Asked how a small airport should commission batteries, Ryan started with the customer's questions: demand charges, night operations, a full microgrid or not. Then came the cautionary tale of a large airport, which he places in Las Vegas, that weighed giving away chargers before it had modeled the load [3].

- By Ryan's account, that one fleet multiplied the non-aeronautical electric use; the airport had to stop its planning, buy batteries and find a budget that did not exist [3].
- Ryan's diagnosis: without an energy management system (EMS) and prediction modeling, the gap shows up as missing batteries; Ken Hoffman's read was that no feasibility study was run [3].
- Today's aircraft packs are chosen for safety and cycle life rather than range; until cells reach Ryan's magic number the next decade is hybrid: cruise on battery, climb and descend on fuel [2][3].

"You're able to cruise on battery, which saves you a lot of money, but getting up and getting down has still been a problem."

Ryan Wilkoff, Forever Flight Worldwide [3]

~200 Wh/kg

pack density in today's functional electric aircraft [2]

300-500 Wh/kg

Ryan's magic number for regional electric flight [3]

WHY THIS MATTERS

Every airport will get the same request from a tenant: chargers, please. A load model and a storage plan come first; a 2024 study projects Denver and Minneapolis-St. Paul airport power demand nearly doubling by 2030, with rental-car charging a main driver [10]. As of March 2026 the FAA had 23 electric-propulsion certification projects and none certificated for commercial operations [6].

Airports as Power Plants

Flat land, a constrained grid and a revenue line that pays before any aircraft plugs in.

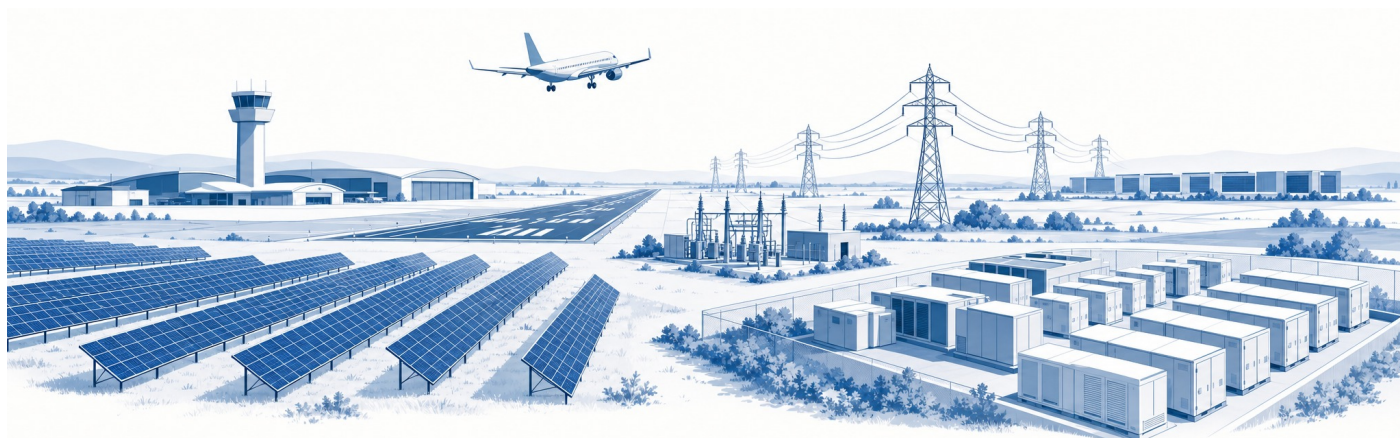


Illustration: solar rows on airport land feeding a substation and the wider grid.

Asked where Forever Flight goes next, Ryan pointed past the fence line. Airports are large flat spaces on a grid that is short of capacity, so building generation there, without clearing land, serves the customer and the grid at once [3].

- Behind the meter is the easiest project, but net-metering rules and the airport's needs decide; where the land allows, Forever Flight builds utility-scale projects that sell back to the grid [3].
- In the short term Forever Flight's highest-grossing products are generation and backup power, sold alongside HVAC and efficiency work; charging waits for the vehicles [3].
- Ryan's ask of the network: electric vehicle makers, hardware teams and EPCs to expand the business model [2].

"There's more and more data centers coming to market, there's more electrification happening, the usage is only going up."

Ryan Wilkoff, Forever Flight Worldwide [3]

50 states

where Forever Flight is open to work, through engineering, procurement and construction (EPC) partners [3]

~2 years

since third-party financing let the company start building generation for the grid [3]

WHY THIS MATTERS

The same acreage that makes an airport expensive to electrify makes it valuable to the grid, and the grid is asking: NERC's latest ten-year outlook adds 224 GW of summer peak demand, most of it data centers [7], and ERCOT, the Texas grid operator, ended 2025 with a large-load queue of 233 GW, up almost 300% in a year [8].

References

Segments of the SkyTerra Monthly Webinar, September 24, 2026, then the public sources cited. Quotations are verbatim, trimmed for length.

[1] SkyTerra update: since our last webinar

September 24, 2026. Jonathan Scharf, PhD (SkyTerra Group), opening segment: new members, the agentic product direction, Red Thread X, Skynote and member investment.

[2] Forever Flight Worldwide: energy-independent airports

September 24, 2026. Presentation by Ryan Wilkoff, Founder and CEO, Forever Flight Worldwide, and a SkyTerra network member: the company's model, a rural Illinois project, the solar tower, emissions, batteries, hybrids and electric aircraft.

[3] Open discussion and Q&A

September 24, 2026. Ryan Wilkoff in discussion with Ken Hoffman (power plant controls and energy management systems), Scott Burton and host Jonathan Scharf, PhD (SkyTerra Group): commissioning batteries, the rental-fleet episode Ryan places in Las Vegas, energy density, growth plans and revenue.

[4] Forever Flight Worldwide website

foreverflightworldwide.com, company description, PPA menu and News page (Archetype Energy partnership, June 1, 2025), and the company's LinkedIn page, accessed September 25, 2026.

[5] Heart Aerospace Completes First Flight of World's Largest Electric Aircraft

Heart Aerospace press release, August 13, 2026 (X1 demonstrator, Plattsburgh International Airport, New York; ES-30 program dates and commitments), accessed September 25, 2026.

[6] Electric Aircraft: FAA Is Evaluating Designs for Certification and Considering Long-Term Regulatory Approaches

U.S. Government Accountability Office, GAO-26-107816, May 27, 2026, accessed September 25, 2026.

[7] NERC 2025 Long-Term Reliability Assessment

North American Electric Reliability Corporation, 2025 Long-Term Reliability Assessment, as reported by Utility Dive, January 29, 2026, accessed September 25, 2026.

[8] ERCOT's large-load queue jumped almost 300% last year

Utility Dive, January 6, 2026, quoting ERCOT, accessed September 25, 2026.

[9] Columbia Metropolitan Airport solar and storage microgrid

Microgrid Knowledge, June 26, 2026, and WIS-TV, June 17, 2026 (groundbreaking, 4 MW / 10 MWh, projected savings, completion at the end of 2027), accessed September 25, 2026.

[10] Electrifying airports: Denver and Minneapolis-St. Paul power demand study

Enterprise Mobility, Xcel Energy and Jacobs, January 2024, as reported by Facilities Dive, February 6, 2024, accessed September 25, 2026.