Full-Service Fueling Leads to Missed Opportunities

For personal and charter aircraft operators, access to reliable fuel services is critical to ensure safe travel to their destinations. When pilots plan their routes before takeoff, they often schedule stops at airports that provide refueling services at any hour. Recently, many general aviation airports have implemented self-serve fuel systems—where pilots pump their own gas—instead of having fixed-base operators and their staff provide full-service refueling to aircraft. Self-service fueling stations allow these airports to handle fuel calls around the clock and offer reduced fuel prices.

The Eagle River Union Airport lies in the center of Wisconsin's Northwoods, a popular destination for fishing, hiking, biking, and outdoor activities. The general aviation airport’s two paved runways and 72 hangars mainly serve customers across the Midwest and the South. And during the busy summer months, a charter operator runs direct flights from Chicago, Illinois, to Eagle River.

For most of its lifetime, Eagle River was open each day from 8 a.m. to 5 p.m. and employed a fixed-base operator to provide full-service fueling during business hours. Customers who arrived after 5 p.m. were charged a late fee for fuel or were unable to refuel. Because of these time constraints, many pilots would stop at one of the other general aviation airports in the area instead of Eagle River.

Robert Hom, the Eagle River airport manager, recognized the potential to capture missed fuel sales by installing self-serve fueling equipment at the airport and turned to ACRP Research Report 192: Airport Management Guide for Providing Aircraft Fueling Services to help carry out the process.

ACRP Guidance Offers Tools and Tips

Hom first learned about ACRP at the Wisconsin Aviation Conference and ultimately sat on the research panel for ACRP Research Report 192. The management guide includes a methodology to evaluate whether an airport should provide fuel service, a checklist of action items required for providing fuel service, and a sample request for proposals to solicit bids from fuel suppliers. It also addresses a range of topics, such as feasibility evaluations for new or improved fueling facilities, fuel pricing and marketing strategies, and organizational considerations when starting or expanding a fueling service.

As a small, municipally owned airport, Eagle River was eligible for federal Airport Improvement Program funding. However, the application process can be complicated.

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and overwhelming for first-time applicants. Hom used ACRP Research Report 192 to help guide Eagle River’s justification report to install a self-serve fuel facility at the airport.

Moreover, the report’s budget spreadsheet templates helped Eagle River save time and resources when calculating feasibility and cost savings. Instead of re-creating what-if scenarios from scratch, Hom used the example sheets to calculate potential missed customers. Ultimately, this economic analysis helped justify the self-serve fuel facility to airport management.

**Self-Serve Fueling Stations**

**Power Revenue Generation and Cost Savings**

After installing the self-serve fueling station in February 2020, Eagle River saw an immediate 5 percent increase in sales within the first month, despite the general decrease in flying during the global COVID-19 pandemic. The airport continues to offer a full-service fueling option during its regular hours but discounts self-serve fuel rates when the airport is closed. “Every airport wants to be profitable, but you have to consider your impacts on everything around you,” Hom noted. The discounted self-serve fuel option has drawn many new pilots to the airport, including those flying from the East Coast to the West Coast.

The biggest cost savings, however, came from the decrease in staff labor hours. The self-service option saved the airport 15 to 24 labor hours per week, since most small single-engine aircraft with 5- to 10-gallon fuel tanks opted for self-serve fueling. Previously, each small transaction would take nearly 30 minutes of staff time. With only two full-time employees and one part-time employee, self-serve fueling “really takes the time burden off the staff,” according to Hom.

**Lessons Learned**

After nearly a year of using self-serve fueling, Hom noted some key lessons learned that other airport operators could consider before installing similar systems:

1. **Clear signage and instructions are crucial.** Pilots may interpret self-serve instructions differently, which can lead to issues operating the self-serve unit.

2. **Annual operating expenses increase after the first year.** While most operating costs and annual dues were incorporated into the Airport Improvement Program grant, Hom was caught by surprise when the airport had to pay for these costs out of pocket after the first year.

3. **Credit card readers with chip technology improve efficiency.** Since chip readers will soon be universally required, it is best to get ahead of the trend and install these from the onset.

Overall, ACRP Research Report 192 helped guide Eagle River to make thoughtful, well-researched decisions when installing the self-service fuel system. Hom plans to continue using ACRP research in the future, saying that ACRP research reports “do a lot of the groundwork for you, so why wouldn’t you use them all the time?”

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