
VISIBILITY

Correct, accurate and too late

Turn left, a kilometre ago.

By Hein Pretorius, Founder, Ironwood Aero

A GPS that says "turn left" after you have passed the off-ramp gives correct, accurate information, and it is useless. That is how most countries see general aviation: counted airport by airport, reported a month later, and added up by nobody. A live record at every airport, on one national platform, shows transport, economic and tourism planners the whole picture in time, before electric aircraft, air taxis and drones arrive.

Roads have traffic counts, railways have ticket sales and airlines report every passenger. The regional and general aviation airfields mostly keep their record in files or a spreadsheet, if they keep one at all. Strategic planners have zero visibility of this very important sector of economic activity.

Yet the money involved is larger than most people assume. The asset value of the GA aircraft active at one busy regional airport over two and a half years is estimated at around US\$ 800 million: roughly equivalent to an airline's entire fleet of 36 Boeing 737-800s. In South Africa alone, scheduled air traffic is concentrated at 23 airports. More than 550 other airfields carry general aviation and nothing else, and there the same capital reaches hundreds of towns, farms, lodges and mines instead of a handful of large airports. The same asset value, a far broader economic footprint, and nobody measures it strategically.

That gap matters today, and it will widen quickly as the next generation of aircraft moves into service at exactly these fields. Three kinds are on their way: small electric and hybrid-electric aircraft that carry a handful of passengers on short regional hops; electric air taxis

that take off and land vertically, like a helicopter, from a vertiport or an airfield; and drones, aircraft with nobody on board, carrying cargo, medical supplies and survey equipment. Each of them will need a place to land, a permission, a record and a charge.

Closing the gap starts at each airport, with a digital record kept for the airport's own business first, which pays for itself. A digital record alone is not enough: kept in a desktop system at one airport, it is as invisible to a planner as the paper it replaced. What makes the difference is that every airport keeps its record on one national platform. Built that way, from the ground up, it becomes the layer of data that transport, economic and tourism planning has always lacked, and the foundation the next era of aviation will run on.

The blind spot

Look at what a regional airfield carries and most of it never appears in a plan. The lodge guests who fly in are tourism. The flight school's students, the maintenance shop and the charter operator are an industry. The medevac flight and the firefighting aircraft are public services. The farm and the mine that fly are the regional economy at work.

None of it is counted where it happens. So its value is estimated after the fact, if at all. The UK's Department for Transport studied its own general aviation airfields and concluded that "their true economic and community value may not always be fully recognised by non-aviation stakeholders." Its advice was that airfields "should showcase and publicise their ongoing activities to raise awareness of their contribution to the local economy." Even in a mature aviation country, the evidence comes from studies and surveys.

An asset that produces no numbers is judged on its costs. On a council budget the runway, the fence and the fire cover are visible, and the economic activity they enable is not. That is how airfields that serve whole regions come to be treated as liabilities.

Why it has stayed hidden

Aviation is conservative, and for good reason. Small airports run on small teams and thin budgets, with safety first and everything else after. For many of them, moving the files

into a spreadsheet was the modernisation. It was a sensible step, and it left the record as paper on a screen: typed once, by one person, after the event, and seen by nobody else.

Three familiar remedies have not worked. A national database imposed from above takes years to procure, and an airport has little reason to feed a system that gives it nothing back, so the data decays. One system per airport fixes that airport's invoicing and creates another island of data, with a replacement project waiting a few years later. And a desktop package at each airport puts the record on a computer, where it stays: digital, and still out of every planner's sight.

The lesson underneath both is about data quality. An airport keeps an accurate record when the record runs its own business: when the invoice depends on it.

Building it from the ground up

That is why the path starts with the airport's own needs and earns each next step.

First, the airport. Each movement is recorded once, as it happens, and charged at the approved tariff, with the invoice out the same day. No server room and no IT department: a browser, a tablet or a mobile phone, starting from the airport's own published tariff, with the paper log beside it until the team is ready. The manager sees what is happening today, under their feet, and the revenue that used to slip between the files and the invoice is recovered in the first month.

Then, the season. After a few months the record shows patterns nobody had: busy days and hours, the regular operators, where visitors fly in from and where they go next, how much traffic is training, medevac, firefighting, charter or tourism, and how many passengers each brings. That is the evidence for a hangar, a fuel facility or a capital budget request, and the answer when the council asks what the airport is worth.

Then, the nation. Because every airport keeps its record on the same national platform, the patterns across a region and across the country can be read by consent, without one airport's figures being laid beside another's. Planners begin to see what the UK handbook calls "a national network of airfields that work collectively to deliver key functions."

Each step justifies itself before the next one is asked for. That is what makes it adoptable by a conservative industry, and it is why the network grows instead of stalling.

What planners, funders and regulators gain

Transport planning gets movements by hour, day and season, and knows which airfields carry medevac, firefighting and training, so roads, access and capital follow real counts.

Economic development can show the airport as an economic node: its based businesses, its tenants, and the people it brings in, counted as passengers and not only as aircraft. Economic activity follows people.

Tourism bodies see where visitors fly in from, when they come and where they go next, measured as it happens instead of reconstructed from questionnaires.

Regulators and policy makers get an evidence base for general aviation, and a baseline of movements by aircraft type and weight from which climate and noise questions can be answered by counting rather than modelling.

Funders get what every capital decision needs. Funding follows evidence, and the airports that can show the need are the ones that will receive it.

The next generation lands on the same ground

The UK's aviation strategy expects that "regional airports and new vertiports will have the opportunity to play a key role as these new vehicles offer local and regional travel options." Small electric aircraft for short regional hops, air taxis and cargo drones will use the fields big aviation passed over, and every one of their movements will need a permission, a record, a charge and an invoice.

Policy for that traffic needs a baseline of today's. Airports that already keep their record on a national platform will absorb the new aircraft as more movements on the same record. Airports still on paper will not keep up, and neither will the planners who depend on them. The window to put the record in place is about two years.

In summary

The airfields that serve the regions are the one part of the transport system nobody can see. General aviation carries the same asset value as an airline fleet, with a far broader economic footprint, and nobody measures it strategically. The next generation of aircraft is about to arrive at exactly these fields. The way to see them starts at each airport, on one national platform: a digital record that pays for itself in the first month, shows the airport and its town what it is worth after a season, and gives the region, the state and the new aircraft a shared foundation, by consent.

The future of general aviation will be built on the record each airport keeps. It starts with the next aircraft that lands.

Quotations from the UK Department for Transport, General Aviation Handbook (2023) and Flightpath to the Future (2022), contain public sector information licensed under the Open Government Licence v3.0.

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