

**F**rugal and Gulfstream are two words that usually don't cohabitate the same sentence.

Nonetheless, that pairing is in deep harmony at a high-energy business that is keeping legacy members of one of the world's first and best-known purpose-built business jet series alive and humming along for pennies on the dollar, all the while getting the last drop

of his business technically. He knows every nook and cranny, bolt, fitting, clamp, actuator and component on Gulfstream models ranging from GIIs through to the (now) "aging" GV. He is fluent in factory block changes, so he knows which parts are common to which Gulfstream models down to the line number change.

Spend 5 min. with him and you can't miss the fact that he is as skilled with

of the trunk of his car, bolstered by his deep knowledge and hands-on experience with Gulfstreams and his reputation for being the "go-to-guy" for the straight scoop on Gulfstream service issues. And thus was born Norm Hill Aviation.

The business model changed in 2013 when a former client from Hill's corporate years called with a problem. His GII

# Hotel California

The Mojave's **Gulfstream guru**

BY **LOU CHURCHVILLE** [lou@churchoero.com](mailto:lou@churchoero.com)

Five acres of Gulfstreams and four hangars totaling 30,000 sq. ft., house legacy parts and ready-to-ship AOG, worth about \$14 million — many impossible to get anywhere else.



ALL PHOTOS NORM HILL AVIATION

of value for the owner and the economy out of each aircraft.

So bonded are these two concepts at Norm Hill Aviation that its eponymous founder says he "would rather see a Gulfstream fuselage turned into a hot dog stand and keep it productive than sell it for scrap." Period.

An A&P with over 40 years of hands-on experience with Gulfstreams, Hill is in deep, and is in love. He's in deep with

Gulfstream airframes, systems, component compatibility and interchangeability as Eric Clapton is with guitars.

Earlier in his career, Hill worked at Lockheed, The Jet Center, Circus Circus Hotels' flight department, Dallas Airmotive and Western Jet Aviation. But he came to be wary of corporate acquisitions and their impact in the hangar. So, in 1996 he took a leap of faith and set out on his own. He started working out

had a bad engine, but the costs to overhaul the Spey exceeded the value of the aircraft. Should he accept scrap value, which was \$250,000? Hill had a better answer: Consign the aircraft to me, he said, and, "I'll part it out and we'll share the income." The owner agreed, and they shook hands on the deal. Knowing he now needed an actual place to work on and store a Gulfstream and enter into a new type of business, Hill cashed

**Racked and stacked upright and serviced per Rolls-Royce specifications, these corrosion-proofed engines may be out of calendar time but are re-serviceable for a reasonable price and good for six to eight years of service. Sure beats a full overhaul.**

in his 401K, incorporated, and worried. As things turned out, he need not have fretted.

Over the past six years, that first aircraft has generated gross revenue exceeding \$1.3 million; all by selling its serviceable parts at well below the price of new (if you could still get new), or by overhauling the parts and delivering them on a 24/7 AOG basis.

To many operators, getting five or even seven more years of service from their current aircraft makes a lot more sense than scrapping the plane and replacing it. There can be a sweet spot for aircraft approaching their end of service life. A little extra effort in parts procurement can pay off prior to retirement.

There is an ugly truth, an intangible driving the subtle push to scrap a sick but curable old friend. That is, not many service centers are willing to put the time and effort into managing repairs on legacy models whose required parts may be out of production, scarce or provided on a build-to-order basis, all demanding extra effort and perhaps long lead times to procure. The fact is the big margins and money are in current production airplane service, not keeping aircraft near their end of life flying.

Located at the California City Municipal Airport, some 12 mi. northeast of Mojave, California, Norm Hill Aviation covers about seven acres of ramp, including a five-acre lot currently holding 40 Gulfstreams. All of those aircraft flew there and, just like the Eagles' classic song, "Hotel California," they can "check out any time they like, but they can never leave" — not whole, anyway.

Once checked in at Norm Hill Aviation, an aircraft's critical components subject to internal corrosion or environmental contamination are removed, inventoried, tagged and preserved per their manufacturer's specifications. Delicate electronics are ops checked, removed, tagged and sealed in shrink-wrap plastic.

Planeside operations are supported by four hangars totaling just under 40,000 sq. ft.

In addition to providing serviceable

**These Tays will never fly again, but some of their components will.**



and scarce or out-of-production parts on a quick-turn AOG basis, the company does consultations with Gulfstream owners, as with the first. If an owner's choices are to scrap or repair and is unsure of the best course, the most sen-

probe until he understands the issue and if a subassembly, rather than a complete assembly will solve the problem, that's what he'll report.

If your legacy Gulfstream is facing retirement due to repair estimates that

**Gulfstreams can check in anytime they like, but they can never leave — at least not in one piece. All of Norm Hill's aircraft fly in and stay on gear for as long as possible. Nothing goes to waste.**



sible move is to talk with someone who deals with that decision every day, someone who is knowledgeable, honest, experienced and cares.

And for those who decide to source the parts and fix the problem, Hill will

exceed its practical value or a critical out-of-production avionics component is unserviceable, unavailable and driving you to a full panel upgrade, chances are, Norm Hill Aviation can find the part and keep you flying until the





aircraft is truly ready to check in.

Remember the hot-dog stand comment? During a recent visit with Hill at California City, he took a phone call from a Florida architect who was looking for a set of wings to incorporate into the design of a new office building in Miami. Without hesitation, Hill outlined what had to be done to render the wings environmentally inert (residual fluids

drained and flushed, wings cleaned), how the wings would be broken down into roadable size, complete with over-pass clearances, and instructions and common hardware to reassemble the airfoil's segments quickly and easily for installation in the building. All this for an amazingly low price and fairly quick turn-time.

Within minutes of the phone call's

end, the caller emailed Hill the drawings showing how the wings would be included in the building, one providing an awning for the main entrance and the other a dramatic detail in the plaza-like covered central courtyard. So, a piece of the donor Gulfstream, while no longer flying, will soar in the imagination of countless visitors to this building — and maybe even move a few kids



Engines mounted on OEM-compliant shipping jigs — details are the components of quality service.



Serviceable flight controls — many out of production — racked, stacked and tagged, and ready to install for pennies on the dollar.



Serviceable thrust reversers and cowl, windshields and side windows, gear doors, winglets, and a thousand other out-of-production or “ultra-long” lead time production items are available AOG, 24/7.



Not all electronics are “legacy,” as evidenced by this Aircell unit, which is serviceable and ready to ship.

## Sourcing Salvaged Parts: The Good, the Bad and the Ugly

The landscape of the aircraft salvage business can feel (and usually look) like the badlands in a spaghetti Western — that is, dry and desolate. And frankly, it can be a business setting complete with desperadoes, diabolically hidden pitfalls and ways to get “snake bit.”

But there is beauty and sustenance (read value) in this harsh vista if you know how to recognize it, and how and where to look. It can also be the shortest, most direct path to lower operating cost and continued service of your aging, but still useful, aircraft.

For Gulfstreams, an informed estimate of the annual market size is \$8 million to \$12 million for serviceable salvaged parts, which bought new might cost twice as much, or possibly more — if you're lucky enough to find them at all.

A rule of thumb is that the larger the production run of a particular make and model of airplane, the bigger the inventory of salvaged parts. Duh.

► **Tip 1.** Quality (and status) of salvaged parts vary significantly. You should know who manufactured the parts, when they were installed and later salvaged, and by whom.

At one end of the spectrum you may be surprised to know that parting out an end of life (retiring) airplane is sometimes a financial “bonus” rather than a gold watch companies give to concurrently retiring pilots and mechanics. In this scenario the plane is stripped of all usable parts and the hulk sold for scrap metal value. The salvaged components can end up anywhere and their associated paperwork/history may become hazy. Buy one of these parts and you might run the risk of

to join our industry some day.

Those structural assemblies or system components that cannot be reused to keep an airplane flying are regularly repurposed in a back shop. Turns out, in the desert they make art. Flight controls, airframe structures, bulkheads, interior components — virtually anything can be reimaged so that those nostalgic souls associated with their

salvaged Gulfstream can take a piece of it home as a coffee table, lamp, room divider or garden art. Even this work element has a frugal purpose, since employees with idle time can conceive, fashion and take pride in this unique Gulfstream-sourced form of art.

Spending a day at Norm Hill Aviation was like entering a Norman Rockwell painting. Here in the desert I discovered

old-school business ethics, a family business serving a small community where people do business with people, not corporate policies. Where clamped tightly to each part sold is personal integrity and character. There are no broken clamps at Norm Hill Aviation.

And it's probably never too early to ready a room at the Hotel California . . .

**BCA**



This conference table is built off Gulfstream flight controls and hardware. Also available are end tables, lamps and bulkhead bookshelves — or made-to-order art and furniture.



Serviceable legacy avionics components can save Gulfstream operators hundreds of thousands of dollars by eliminating the need for a full panel upgrade for the lack of one or two out-of-production boxes — available from Norm Hill Aviation.



getting your receiving plane blacklisted — that is, unsupported by the factory or maintenance facilities. Or you might get a real bargain on a serviceable engine.

Provisions for this journey should be a clear understanding of FAR Part 91.409.F3, Part 25 and Part 135 relative to parts. Know thy regs.

► **Tip 2.** If the donor plane has been in an accident, all or some of the parts and components may be pariahs. For example, an engine that survived a gear-up landing or runway overrun may be blacklisted by the component manufacturer and require a full overhaul before being blessed as serviceable — regardless of post-traumatic borescope and other inspections. For that matter, some airframe manufacturers will blacklist the entire tail number if a questionable component is installed. Know thy donor's history.

► **Tip 3.** Did the airplane fly into the salvage yard? Were the components ops checked and documented by certified mechanics upon arrival and before removal? Were they then tagged, preserved and stored (especially important

for electrical components and avionics)? Know thy vendor's touch.

► **Tip 4.** How are removed components (particularly electronics) preserved and packaged. Did that black box ever touch the desert floor? How about the engines? Were they preserved and stored per manufacturer specifications and then documented as such? Know (and confirm) thy supplier's process.

► **Tip 5.** Call around and get references. Know thy supplier's reputation.

► **Tip 6.** What is the warranty policy? A good standard is 60-90 days on electrical components, six months on radios, six months on hydraulics, etc. But will you just get your money back, or can your supplier furnish a replacement? Remember, you're shopping for rare parts, so make sure there is a backup source. Know the depth of thy vendor's inventory.

► **Tip 7.** What is the AOG support capability of your source, if any? This consideration is closely related to **Tip 6.** Know thy vendor's dedication to customers. **BCA**