

# Cheetahs and Tigers

*Which four-place Grumman you choose might depend on the need for speed, climb and payload.*



Photo courtesy American Yankee Association

The Grumman Cheetah and bigger-engined Tiger may be overlooked by some buyers searching the crowded under-\$50K used airplane market. In fact, among entry-level Cessna and Piper models, the AA-5A Cheetah could very well be a used market leader.

With a sporty slide-back canopy, snappy handling and reasonable cruise speed for its fuel-sipping 150-HP powerplant, a Cheetah works for training, traveling and for tooling around the local area. On the other hand, the 180-HP AA-5B Tiger might be the better of the two cats when more climb performance and load-hauling is needed.

Here's a side-by-side comparison of both models—including a detailed accident analysis—to help narrow the buying decision.

## HISTORY

The Cheetah and Tiger basic design traces back to the 1960s and the two-seat AA-1 Yankee. The brainchild of Jim Bede, the Yankee featured revolutionary construction, aluminum-honeycomb sandwich fuselage panels and rivetless bonded

skins. The fuel tanks were housed within a tubular wing spar. While the intentions were good in marketing the Yankee as a trainer, the airplane proved to be a bit too hot for students to handle.

In 1972, American Aviation decided to introduce a 150-HP, four-place version of the AA-1 and called it the Traveler. While the Traveler shared the family genes of the AA-1, it was really an all-new airplane, significant-

***Owners generally boast of low operating costs and excellent dispatch records.***

ly larger and boasted new systems. It also had more traditional fuel tanks. Gone were those grossly inaccurate sight-gauge fuel quantity gauges that held avgas inside of the cabin.

The Traveler was a different airplane that tried to compete with complex aircraft such as the Cessna 177 Cardinal and Piper's PA28R-

series Arrow with little success.

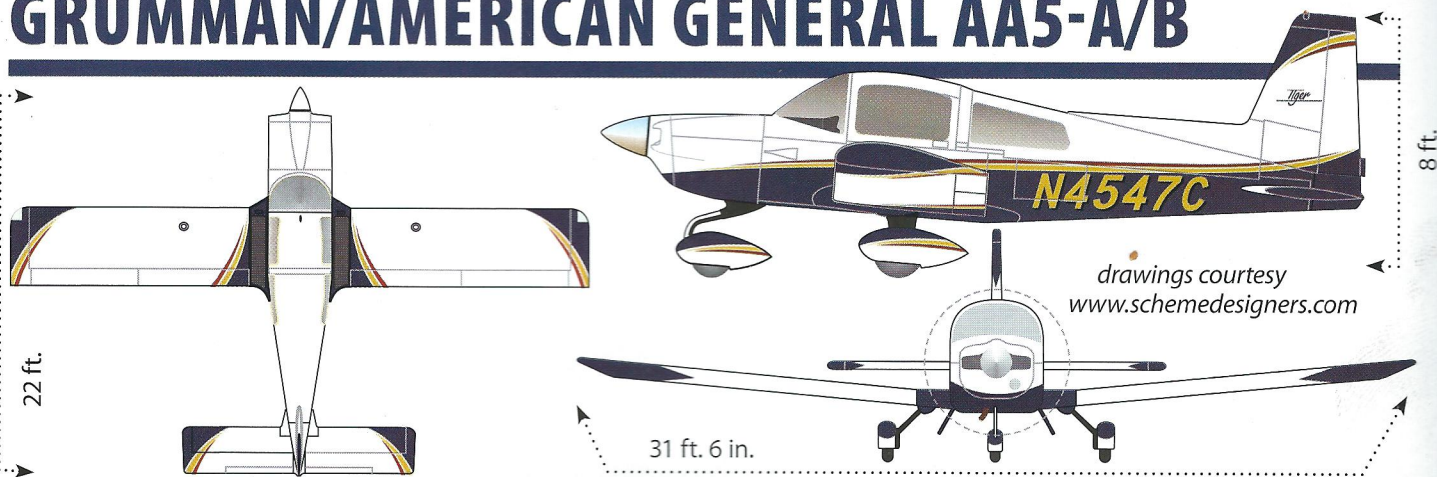
Still, the market wanted more performance than the Traveler could deliver. Then Grumman (with deep pockets) stepped in and involved the famous Roy LoPresti to work his aerodynamic magic on the design. The result was the AA-5B Tiger. Introduced in 1975, the Tiger had bigger fuel tanks, a different elevator, a more efficient cowling and most notably, a beefier 180-HP Lycoming O-360-A4K engine.

In 1976, these airframe improvements were applied to the existing Traveler, which became the AA-5A Cheetah, but it retained the 150-HP Lycoming O-320-E2G engine. Essentially, the Cheetah and Tiger are the same aircraft with different engines.

Production came to a halt in

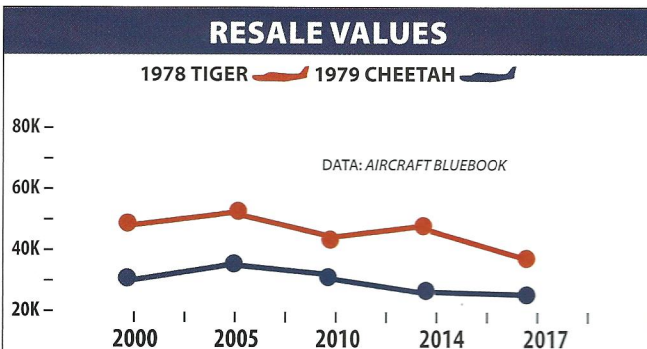
***A Cheetah and Tiger, main photo, share the same airframe design, but a Tiger will get you to the destination airport more quickly thanks to more horsepower.***

# GRUMMAN/AMERICAN GENERAL AA5-A/B



## CHEETAH/TIGER SELECT MODEL HISTORY

MODEL YEAR	ENGINE	TBO	OVERHAUL	FUEL	USEFUL LOAD	CRUISE	TYPICAL RETAIL
1976 AA-5A CHEETAH	LYC. 150-HP O-320-E2G	2000	\$20,000	38/51	800 LBS	128 KTS	±\$29,000
1975 AA-5B TIGER	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$35,000
1977 AA-5A CHEETAH	LYC. 150-HP O-320-E2G	2000	\$21,000	51	950 LBS	135-140 KTS	±\$31,000
1977 AA-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$39,000
1978 AA-5A CHEETAH	LYC. 150-HP O-320-E2G	2000	\$21,000	51	950 LBS	135-140 KTS	±\$32,000
1979 AA-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$43,000
1990 AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$60,000
1991 AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$65,000
1992 AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$70,000
1993 AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	950 LBS	135-140 KTS	±\$75,000
2002 TIGER AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	900 LBS	135-140 KTS	±\$90,000
2003 TIGER AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	900 LBS	135-140 KTS	±\$100,000
2004 TIGER AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	900 LBS	135-140 KTS	±\$110,000
2005 TIGER AG-5B	LYC. 180-HP O-360-A4K	2000	\$21,000	51	900 LBS	135-140 KTS	±\$120,000



- ### SELECT RECENT ADS
- AD 2006-12-07 ECI CYLINDER ASSEMBLIES
  - AD 79-22-04 AILERON TRIM TABS
  - AD 77-08-03 STATIC SOURCE VALVE OVERHAUL
  - AD 76-22-09 OIL COOLER CHECK, REPLACEMENT
  - AD 76-01-01 UPPER ENGINE COWL HINGES

### SELECT MODEL COMPARISONS

#### PAYLOAD/FULL FUEL, POUNDS

TIGER AA5B	~650
CHEETAH AA5A	~650
CESSNA 172	~650
PIPER ARCHER	~650
CESSNA CARDINAL	~650

#### CRUISE SPEEDS, KNOTS

TIGER AA5B	~145
CHEETAH AA5A	~145
CESSNA 172	~145
PIPER ARCHER	~145
CESSNA CARDINAL	~145

#### PRICE COMPARISONS

1978 AA5B TIGER	~45K
1978 AA5A CHEETAH	~45K
1978 CESSNA 172	~45K
1978 PIPER ARCHER	~45K
1978 CARDINAL	~45K



*As owner Peter Kuhns proves in the top photo, it's easy to look cool in a Cheetah with its fighter-like sliding canopy. It also means the cabin, bottom, will get wet on rainy ramps.*

1979 after Gulfstream bought the line and the new owners concentrated on bizjets. That turned out to be a good plan given the big general aviation slide that occurred the following year. American General bought the designs in the late 1980s, and the first AG-5Bs, incorporating a few design improvements, were 1990 models. American General folded in 1994 and the parts inventories and rights were sold to FletchAir.

Original production for the AA-5B Tiger was 1323 airplanes, while 900 AA-5A Cheetahs were built. American General built around 150 AG-5Bs before it folded.

There was also the Martinsburg,

and leather interior) before going bankrupt in 2007. The assets were acquired by True Flight Aerospace ([www.trueflightaerospace.com](http://www.trueflightaerospace.com)), which is advertising that it's currently working on a fuel-injected (Lycoming IO-360) version of the AG-5B Tiger.

### SPEEDSTERS

Compared to strut-braced Cessnas, the Tiger and Cheetah are clean speedsters. The Tiger has a published book cruise speed of 139 knots but owners generally plan on real-world speeds of 130 to 138 knots. This isn't chump speed, since the AA-5, by virtue of its slab-sided honeycomb panel fuselage, is hardly slick in the

drag department. Hard chines run along the lower corner of the fuselage and the wing-fuselage junction has no fairing to smooth interference drag.

The 180-HP Tiger is the fastest of the line, since the 150-HP Cheetah is generally 12 knots slower, while the Traveler is slower yet.

Where Skyhawks and Cherokees could have a slight edge is in climb. At sea level and standard temperatures, the Tiger moves out at 850 FPM, about on par with the competition. With a climb prop, a Tiger may see 1000 FPM, but throw in high density altitude and the Tiger's climb performance sags behind the Archer and Cessna's strutless Cardinal.

Owners tell us the stock Cheetah, with 30 fewer horsepower, can be a dog in hot-weather climbs. The Yankee is worse. Later 160-HP versions of the Warrior, with speed pants, can just about run with a Cheetah.

Cheetah owner Duffy Fainer told us that with the high-compression STC (which raises the horsepower from 150 to 160), PowerFlow exhaust and Sensenich propeller, a tweaked Cheetah can maintain the same rate of climb as a stock Tiger. "Once in cruise, the Tiger will pull away, but for formation purposes, the two airplanes are well matched," he said.

### HAULING AND HANDLING

Gross weight of the Tiger is 2400 pounds and typical IFR aircraft run 1450 to 1500 pounds empty. That leaves a useful load of about 900 pounds for the 180-HP four-placers. That's enough for full fuel (51 gallons) and three adults, plus a little baggage.

The Cheetah has an empty weight only slightly less and a gross of 2200 pounds with useful loads around 750 pounds. Since the Cheetah is a weak climber, loading full fuel into the optional 51-gallon fuel tanks essentially makes it a two-place airplane. But loading might not be a huge issue anyway since the Cheetah lacks any remarkable baggage space. But, fold-down rear seats can create a decent cargo compartment for snowboards, golf clubs and other stuff when you aren't carrying people. Otherwise, any heavy items you can load in need to come into the cabin and be laid over the back seat. Center of gravity

is normally not a problem in either the Cheetah or Tiger, which is a good thing.

As for going places, the Tiger's 51-gallon fuel capacity yields about four hours of endurance with reserve—a pretty good fit for the aircraft. Owners tell us that realistically, you'll need to plan on still-air range with full fuel in the tanks to be about 500-plus miles.

The standard-tank Cheetah, by comparison, has shorter legs. The 38-gallon capacity is good for a bit less than four hours, with reserves. This equals about 450 miles. As a two-placer with the optional 51-gallon tanks full of fuel, the Cheetah will fly a lot longer than you'd be comfortable staying in it.

Speaking of comfort, we wouldn't exactly call the Cheetah or Tiger luxurious. These airplanes are relatively stark with no-frills dwellings, but for many, this adds to some of the appeal.

As for handling, proud owners are spot on when they say Cheetahs and Tigers are the sports car of the skies. The feel is light and responsive with somewhat touchy controls, which really makes it an autopilot airplane for hard IFR.

On the ground, the airplanes are maneuvered with a swiveling nose-wheel (it doesn't caster all the way around) so taxi is accomplished with brakes. As with any castering nose-wheel, this takes some skill. Experienced Grumman pilots know just the right amount of speed to make the rudder effective for most turns.

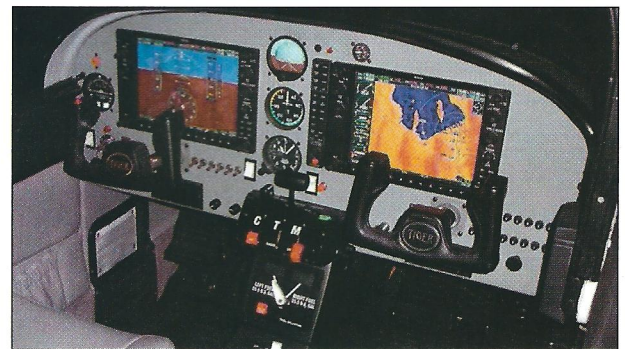
Just don't push these airplanes into a parking spot without a towbar attached—you'll risk damaging the nosewheel. Oh, and chock the mains and not the nosewheel.

The takeoff run consists of riding the brakes a few seconds until the rudder comes alive after angling the airplane a bit right of centerline. Once engine torque starts kicking, the wheel straightens and it's off the brakes pretty quickly. Pilots new to the Grumman get all kinds of tense about that castering nosewheel, but there isn't really much to it.

Landing is a reasonably easy affair in a Cheetah and Tiger (the Yankee, on the other hand, sinks like a flying manhole cover when the power is pulled off). Owners will say their Cheetahs and Tigers float and adding



*A single radio stack works for basic IFR avionics in a Cheetah, top. Panels in later Tigers look slightly more modern, middle. Garmin's G1000 was standard in the last of Tiger Aircraft's AG-5Bs, bottom.*



insult to injury, coming in with extra speed is a setup for the classic runway overrun.

But, do it right and you're rewarded with a squeaker, helped by the nose strut shock absorber, which was added in the 1978 model year.

### **ERGOS, SYSTEMS**

The sliding canopy adds to the Grumman's sporty cockpit and sports-car-like appeal. The price to be paid is a semi-awkward ingress. Pop the seat cushion off its pan to spare wear and tear of the upholstery. You'll get wet entering and exiting in the rain, but are rewarded with excellent ventilation on hot days during taxi (and in flight).

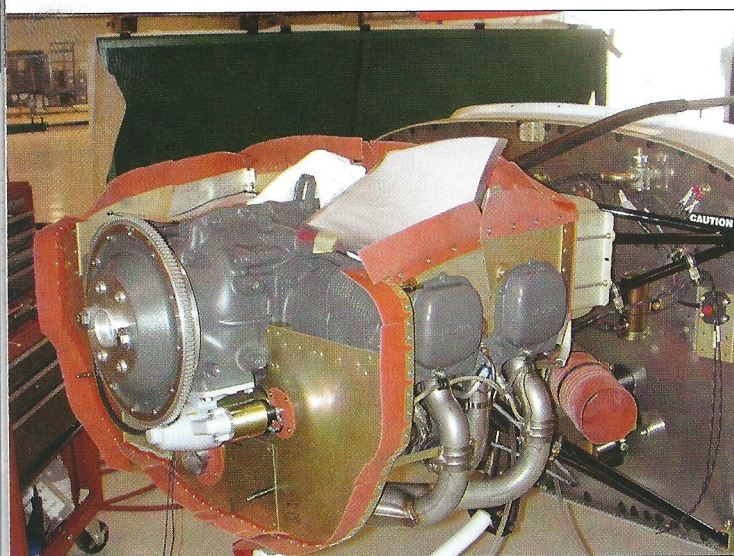
Once inside, the Tiger/Cheetah

interior is comfortable, and the panoramic visibility and canopy view makes it feel roomier than it really is. Linebackers will complain about lack of shoulder space.

Keep a hammer in the aircraft to smash your way out if you crash because that showoff canopy can bend or warp to the point of not sliding open. Also, consider protecting the two pieces of the canopy lock to keep it from getting smashed.



*The Cheetah has the 150-HP Lycoming O-320 under the cowling, top, while the Tiger has the 180-HP O-360, bottom. Both are easy to access with the split cowling on or off.*



The fuel selector is idiot-proof, although without a “both” selection, it does require switching tanks. For the fuel management challenged, the switch is intuitive with arrows pointing to the active tank. The selector is conveniently located and quite visible.

Working the electric flaps is accomplished with a toggle switch up on the center pedestal/console, but you’ll need to look down at the indicator to see how much flaps are hanging. Experienced Cheetah and Tiger drivers tend to simply count to five for half flaps. A slight quirk of the switch is that if you hold it down to extend the flaps and let it go, it snaps back over center and retracts them again. That can bite you if you aren’t careful.

While there were few if any major design changes during the aircraft’s production run, the 1977 model year brought improved soundproofing

and a windshield that was upgraded to quarter-inch thickness and also had better sealing. In 1978, the seats were upgraded for a needed boost in comfort.

Several owners told us they upgraded to Oregon Aero cushions for even better comfort. But you might also have to deal with some aesthetic issues on these old airplanes.

There’s a good chance the used Cheetah or Tiger you’re considering

will have some interior and instrument panel cracks because there’s a lot of plastic trim. As with any airplane, the best investment you can make to preserve the interior (and exterior) from UV and heat damage is a good cabin cover.

### MAINTAINING THEM

In general, the Cheetah and Tiger are simple airplanes that lack hydraulic systems and retractable landing gear. But you won’t get any free passes when it comes to maintenance just because these are little airplanes. Sadly, more than one shop told us some Grumman owners don’t take maintenance seriously enough. As a result, one shop actually refuses to work on Grummans. Don’t be one of those owners, but do understand some design issues that could cause problems.

We’ve always thought the Cheetah and Tiger should have cowl flaps

because the tightly cowled engine can run hot. That means you’ll want to maintain the engine baffling and think hard about installing a graphic engine monitor, in our view. Air Mods ([www.airmodsnw.com](http://www.airmodsnw.com)) sells oil coolers and a baffle modification that reduces oil temps by 25 to 40 degrees. This is a worthwhile mod in our view, given the heat these engines throw.

While probably not an airframe issue these days, worth mentioning is that bond-line separation plagued a few early models. The culprit was an improper bonding sealant, American Cyanamid FM-123, known as “purple passion” among production employees. The FM-123 was used in all Grumman American aircraft built between April 1974 and December 1975. This included Tigers through serial number 125. While there were no wrecks that we know about, at least one delamination occurred on a Tiger in flight.

The Cheetah/Tiger castering nose-wheel can induce shimmy. Improper tensioning in the spring washers, sloppy torque tube struts, worn tires and loose axle nuts all contribute to nosewheel shimmy. If there’s a single piece of hardware on the Grumman that requires attention and extra care, it’s this nosewheel. Lube it and adjust it by the manual are the requirements. (Not many shops have the manual and readers tell us that improperly performed maintenance on used airplanes for sale is common.)

You might thank Grummans for the current trend toward castering nosewheels (yes, like on a Cirrus) and that means brake pads wear quickly. Although savvy pilots learn to taxi with minimum braking, good brake maintenance is important. Several owners reported repeated breaking of the rudder springs and one owner told us he always carries a spare, just in case.

Just like Mooneys, Tigers have wet wings and it’s not uncommon to smell leaking fuel. An AD addresses the fuel tank sealant. The airplane is relatively AD-free but there are two significant inspections: one 100-hour inspection of the ailerons and one 200-hour inspection of the McCauley prop hub for cracks. The AD is a good argument for a highly recommended Sensenich propeller upgrade, which eliminates an annoying RPM restric-



*Duffy Fainer sent us this Cheetah/Tiger formation action cam shot. His Cheetah has the high-compression STC, Sensenich prop and PowerFlow exhaust.*

tion between 1850 and 2250 RPM in descending flight—right at the usual instrument approach speed.

One potentially onerous AD cropped up in 1998: AD 98-2-8 calls for inspection of the hollow crankshaft bore for corrosion pits or cracks. It's a shotgun AD that applies to a number of airplanes with Lycoming engines. If nothing turns up, an anticorrosion treatment takes care of the AD once and for all. If cracks are found, the crank needs to be replaced, and if corrosion pits are found, the AD becomes a 100-hour repetitive inspection until a new crank is put in at overhaul.

### SUPPORT, MODS

Grumman owners enjoy one of the best and perhaps the most enthusiastic owners groups around, the American Yankee Association ([www.aya.org](http://www.aya.org)). It has an excellent newsletter and serves as a pipeline to technical expertise. The group also has a special group insurance plan that may save you money and can direct you to approved instructors for Grummans. There's also The Grumman Gang ([www.grumman.net](http://www.grumman.net)). We're grateful for the help both organizations gave us for this report.

Owners attest that the Cheetah and Tiger are well supported. FletchAir Inc. (800-329-4647 and [www.fletchair.com](http://www.fletchair.com)) has long special-

ized in Grummans. David Fletcher, president of FletchAir, has grown up with the Grumman family of aircraft and has been a stocking Grumman dealer since 1974. When American General folded, FletchAir acquired the parts inventories and manufacturing rights. FletchAir is known worldwide as the single largest manufacturer and distributor of parts for American General, Grumman-American and Gulfstream-American models.

If you want to turn a Cheetah or Traveler into a Tiger, Air Mods NW has a 180-HP conversion. The company can also mod Travelers and Cheetahs for constant-speed props and install split-nose and lower cowlings, plus wingtip and wing-skin embedded halogen landing lights and roller canopy tracks. They can also handle honeycomb and wing repairs as well as interior and engine work.

FletchAir also has a split-nose STC, which eliminates the need to take off the spinner and prop to get at the starter, alternator and front engine baffles. This applies to the 1975 Traveler up through the 1979 Tiger. The AG Tiger already has a split nose bowl, as do the newer Tigers that came from Tiger Aircraft.

Other mods of note: Approach Aviation ([www.approachaviation.com](http://www.approachaviation.com)) has a ram air induction kit, PowerFlow ([www.powerflowsystems.com](http://www.powerflowsystems.com)) has a tuned exhaust system, plus there is AuCountry Aviation ([www.aucountry.com](http://www.aucountry.com)) and LoPresti Aviation ([www.loprestiaaviation.com](http://www.loprestiaaviation.com)) with cowling mods.

Yankee Aviation ([www.yankee-aviation.com](http://www.yankee-aviation.com)) in Hamilton, Ohio, is a small shop specializing in Grumman

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maintenance and its owners, Roscoe and Luann, are Grumman owners and A&P/IAs who trained with Air-Mods NW and FletchAir.

### OWNER FEEDBACK

My first airplane was a Grumman Traveler, a 1973 AA5, that I owned for five years (1991 to 1996) and flew for 3000 hours. I so loved that plane and flying that I left working for the Naval Research Laboratory and started my own aviation business using that Traveler (after adding two camera ports—one thermal, one visual—to do aerial surveying). This is the plane that found the original Wright Brothers hangar on Huffman Prairie (now part of Wright Patterson Air Force Base). Videos of that work are on the Grumman Pilots YouTube channel. I currently own two Cheetahs and they're great planes.

The Grumman Pilots Association is the largest international Grumman association (1000 members and growing) and is committed to supporting the entire fleet through the website [www.grummanpilotsassociation.com](http://www.grummanpilotsassociation.com). There is a YouTube channel featuring maintenance videos on how to properly care for the line. This organization also has Wrench and Elbow-Bending weekends held around the country to teach owners and their mechanics the details of how to properly care for these unique birds. I also own (after spending 11 years finding it) the AA-2—known as the Patriot—which is a the four-seat prototype that led to the Traveler.

Roscoe Rosche  
[www.yankee-aviation.com](http://www.yankee-aviation.com)

I own a 1979 AA-5A with a rebuilt 160-HP O-320 engine and Sensenich 61-inch prop. The plane has a Power-Flow muffler and 1800 hours on the airframe. The airframe has a gross weight of 2200 pounds an empty weight of 1450 pounds. The useful load with full fuel works out to a rather anemic 450 pounds, considering it carries a whopping 51 gallons.

My AA-5A is equipped for basic IFR. Insurance for me as a 400-hour VFR pilot for a \$70,000 hull value is \$1000 per year. I perform owner-assisted annuals every year, which can vary between \$650 to \$950.

The cockpit is slightly tight, but the

amazing visibility makes it bright and comfortable. Cruise speed at 7500 feet ranges (depending on thriftiness) from 7.8 GPH at 105 knots to around 10.5 GPH at 125 knots. On landing, I shoot for an approach speed of 70 knots on short final.

I'm relatively new to flying, but I believe the Cheetah (and its older sibling the Traveler) is the lowest-cost, most-fun-to-fly, four-seat airplane in existence. Transitioning from a 172 to a Cheetah was a major eye-opener (the visibility and docile characteristics are a shock to Cessna graduates), requiring a few hours with an instructor to get the hang of it. The plane flies like a jet fighter, has a low instrument panel and leans so far forward in cruise you're sure something's not right.

Without hesitation I tell new pilots the Cheetah is the ultimate first airplane because it's inexpensive to purchase, inexpensive to maintain and inexpensive to fly. Additionally, the Cheetah is faster than the type-certified O-320-powered competition, has a sliding canopy for cool-factor and is pleasant in cruise flight. I suggest looking for a model that has the high-compression upgrade with the Sensenich propeller, or simply plan on upgrading to it.

The major downside to a Cheetah is the long, hard decision regarding getting a Cheetah or what some call a real airplane like the Tiger. Cheetahs can arguably go fast, but Tigers are just plain fast. Minor baked-in Cheetah squawks include an anemic useful load (not so for the Traveler) and a weak nosewheel—requiring proper and careful landings. Be extra suspicious of grass operations.

Prebuy musts include valve-wobble test (Cheetah engines run hot), nosegear torque tube rust and pitting, spar corrosion and leaky fuel tanks. The AA5-series canopy really deserves a hangar and not a tie-down, so put one on your wish list.

Parts are still easy to come by and Grumman mechanics who specialize in the type are out there. The American Yankee Association is a great organization and at its fly-ins actually fly their airplanes, unlike other groups.

The incredible fun of flying the Cheetah and its incredible range with long-range tanks makes this plane the perfect one for new pilots

who want a moderately fast, true cross-country, fuel-sipping bird. Basically you're getting the reliability and simplicity of a 172 with 10-plus knots better cruise speed on a miserly fuel flow. Oh yeah, and Grumman have way more ramp appeal.

Pete Kuhns  
Shelbyville, Indiana

I have owned the same 1979 Gulfstream American AA-5A Cheetah for the past 25 years and have found it to be an outstanding and economical aircraft for me and my family. The slide-back canopy, sleek aerodynamic lines and bonded surfaces (no rivets) make you realize from first sight that you are not going to be flying an old Cessna or Piper. Due to the canopy and lower instrument panel, it's a good choice for smaller pilots who sometimes can't see over the Cessna 172 instrument panel.

It flies like it looks and is tightly coupled and light on the controls because of the superior aerodynamics courtesy of Mr. LoPresti, plus it can walk away from the 150- and 160-HP Cessna 172s and Piper Cherokees that it competed with.

My aircraft has been modified to a high-compression version, which raised the horsepower to 160 from 150. I consistently fly at a reliable 127 knots true airspeed at 7000 feet at 2600 RPM. Every Cessna 172 or Cherokee 140 I fly with is quickly left in the dust by a good 10 to 15 knots. It was this way even before I did the upgrades.

Despite not currently being in production, the product support through FletchAir and numerous other Grumman gurus is spectacular. In 25 years, I have never not been able to find a needed part with a phone call or two. The Cheetah and Tiger are simple, easily maintained aircraft designed to be pilot and mechanic friendly. The only head scratcher was why the Grumman American folks did not split the nosebowl so that you could take the whole cowl off without removing the propeller. Fortunately, aftermarket STCs took care of that problem and I think the split nosebowl is an absolute must-have for any Cheetah owner. The Lycoming O-320 E2G has been bulletproof.

I have modified my aircraft with

# CHEETAH AND TIGER WRECKS: ENGINE TROUBLES

We had originally planned to take 50 of the most recent Cheetah and Tiger accidents, combine them and call the result the AA-5 Hit Parade. But, since the airplanes are just different enough, we decided to compile stats from a full 100 accidents for each. They're shown in the charts below; we'll look at the AA-5B Tiger first—its data is in the box on the left.

The big news for the Tiger is an almost complete absence of fuel-related mishaps. A grand total of one pilot mismanaged his fuel—he didn't change tanks during his entire flight, even after running the one he was using dry. It's the lowest rate of fuel-related accidents we've seen for any airplane.

The low number for runway loss of control accidents—eight—was somewhat masked by the surprisingly high number of go-around crashes—11. All of the blown go-arounds came after what was about to be an RLOC event. Adding the two together to get 19 events nevertheless indicates that the Tiger has better than average runway handling.

With 30 more horsepower than a Cheetah, we expected to see fewer Tiger go-around accidents—we didn't, and we're scratching our heads. We also expected to see fewer accidents that involved hitting obstructions on takeoff—we did, there were none. More power is not a guarantee that an airplane will climb: Six pilots stalled their airplanes after takeoff and crashed.

Even with more power, density altitude has to be respected in the Tiger. There were five crashes involving pilots who couldn't outclimb rising terrain under high and/or hot conditions.

Virtually all of the 13 engine stoppages were because of failure to do maintenance or doing it improperly.

We were impressed by the chutzpah if not the skill of a pilot who figured it would be fine to buy and immediately fly a Tiger that had been sitting for three years. The bad news was that there was a reason

the airplane hadn't been flown—the engine was in immediate need of serious work and it quit about 20 minutes into the flight. The good news was that the pilot was at altitude over an airport with a nice, long runway. The worse news was that he couldn't hit it. He touched down, on airport property, perpendicular to the runway, on rough ground and tore up his new-to-him Tiger.

Six pilots started takeoff rolls and decided to abort, couldn't get stopped and hit things off the end of the runway. That number seemed high to us, but we could not find out whether five of the six pilots had not calculated takeoff distance or there was something wrong with the airplane that caused it to not accelerate as expected. The sixth one had forgotten to remove the control lock and hadn't done a control check. She figured things out when she couldn't raise the nose during the takeoff roll. It was only after she made a valiant, but unsuccessful, attempt to remove the control lock that she aborted the takeoff and went whistling off the end of the runway.

As for the Cheetah, our examination of the 100 most recent wrecks did not turn up any glaring issues—there were no signs of these lower-powered models lying in wait to bite owners. The biggest single item was engine stoppages in flight. Of the 14, three were blamed on carb ice and 10 were for reasons unknown. The remainder involved either component

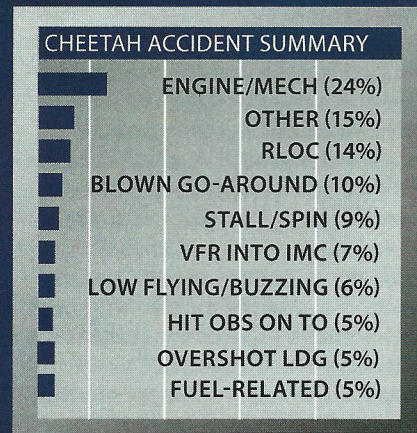
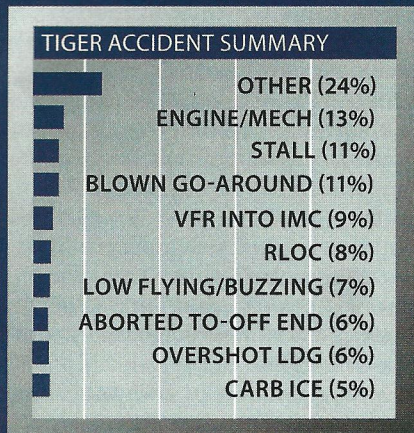
failures due to lack of maintenance or improper maintenance.

We're always interested in the rate of runway loss of control (RLOC) accidents when we do our accident review. With 14, plus 10 blown go-arounds from potential RLOCs, the Cheetah fell into what we consider to be a very low rate of unpleasant runway adventures. We credit the effective flight controls for playing a part in the good news.

While the little Grumman has a slippery airframe and will float a long ways on landing if a pilot tacks on extra speed on the approach, we counted only five overshoot landing events, about average for four-place airplanes. With 45 degrees of flap travel, their drag can correct for a certain amount of sloppy pilot technique if they are used on landing.

Three of the nine stall/spin accidents were over-gross takeoffs and departure stalls. Density altitude has to be respected in a Cheetah.

There were plenty of accidents involving questionable pilot decision making. Seven pilots crashed after trying to fly VFR in IMC. Six totaled their airplanes as a result of low flying or buzzing. One owner, not a mechanic, changed the vacuum pump in his Cheetah. Despite the engine hemorrhaging oil on two flights and onlookers urging him to have a mechanic look at things, he launched on a third. The oil-starved engine quit shortly after takeoff. The pilot did not survive the forced landing.







\*\*\*\*\*AUTO\*\*ORIGIN MIXED ADC 618  
 #860903001086# AUG17  
 MR JEFF JOHNSON S001  
 IMPULSION UNLIMITED, INC  
 2915 PRESTON MILL RD  
 HUDDLESTON VA 24104-3852

## The Aviation Consumer

### TIGER/CHEETAH

(continued from page 31)

the 160-HP upgrade, the Sensenich prop, PowerFlow exhaust, split nosebowl and new avionics with ADS-B In/Out. There are lots of great mods that can be purchased through FletchAir or shops that keep the Grumman line going strong.

The Grumman Gang is a worldwide network of owners who share their experiences and questions via the internet. It is very active and on most days has 10 to 15 messages from the users. I think the American Yankee Association is one of the best type clubs in existence. It's great for technical issues and many social and camaraderie opportunities for fellow

*Don Metz sent the lower photo (courtesy of the American Yankee Association) of a 1979 Gulfstream American Cheetah running with a 1978 Grumman Tiger.*



Grumman enthusiasts.

Any Grumman American pilot can tell you that getting caught on the ramp in a rainstorm can "dampen" the enthusiasm. The slide-back canopy is an absolute blast to fly or taxi around with (plus it offers incredible ventilation on hot days), but can be a real bummer when trying to enter or exit the aircraft during a gully washer. You can count on both you and your seats getting wet. The canopy seals are notorious for leaking, but can be easily fixed by using a canopy cover—which you should have anyway.

All that speed that the bonded wing gives you in cruise also comes with a slight penalty in that the Cheetah is not a great short-field or climbing airplane. My 172 friends can outclimb me any day of the week, but I quickly overtake them and speed past in cruise. It is a trade-off.

The Sensenich propeller, high-compression engine mod and PowerFlow exhaust have greatly helped the problem. I currently operate the

Cheetah from my home field of Prescott, Arizona, which is 5000 feet with density altitudes of 8000-plus on fairly hot days, with my wife and 16-year-old son on board. It can be a slow climber on high and hot days, but manageable. Of course,

FEEDBACK WANTED

### PITTS SPECIAL



It's time for a fresh look at the market for the Pitts Special aerobatic in the Used Aircraft Guide for an upcoming issue of *Aviation Consumer*. We want to know what it's like to own these aircraft, how much they cost to operate, maintain and insure and what they're like to fly. If you'd like your Pitts to appear in the magazine, send us any photographs (full-size, high-resolution please) you'd like to share to the email below. We welcome information on mods, operating expenses or any other comments. Send correspondence by September 1, 2017, to:

Aviation Consumer  
 Email at:  
 ConsumerEditor@  
 hotmail.com

the ultimate remedy might be the Tiger—essentially the same airplane but with a 180-HP engine.

The Cheetah is arguably the fastest and most economical plane in its class. If you are looking for performance, styling and unmatched fun, the Cheetah may be a perfect fit. It was my third airplane and I never thought I would own any airplane for over 25 years, but I have never crossed paths with any airplane that I could afford that offers the performance, great looks, utility and ease of maintenance that the Cheetah has given, so I have never traded up. It was the best aviation decision I ever made. Before you buy a Skyhawk or Cherokee, give the Cheetah a serious look.

Ken Nebrig  
 via email