

American Flyers has launched more Professional Pilot Careers than any school in the world...

*...but starting
yours is the
most important
to us.*



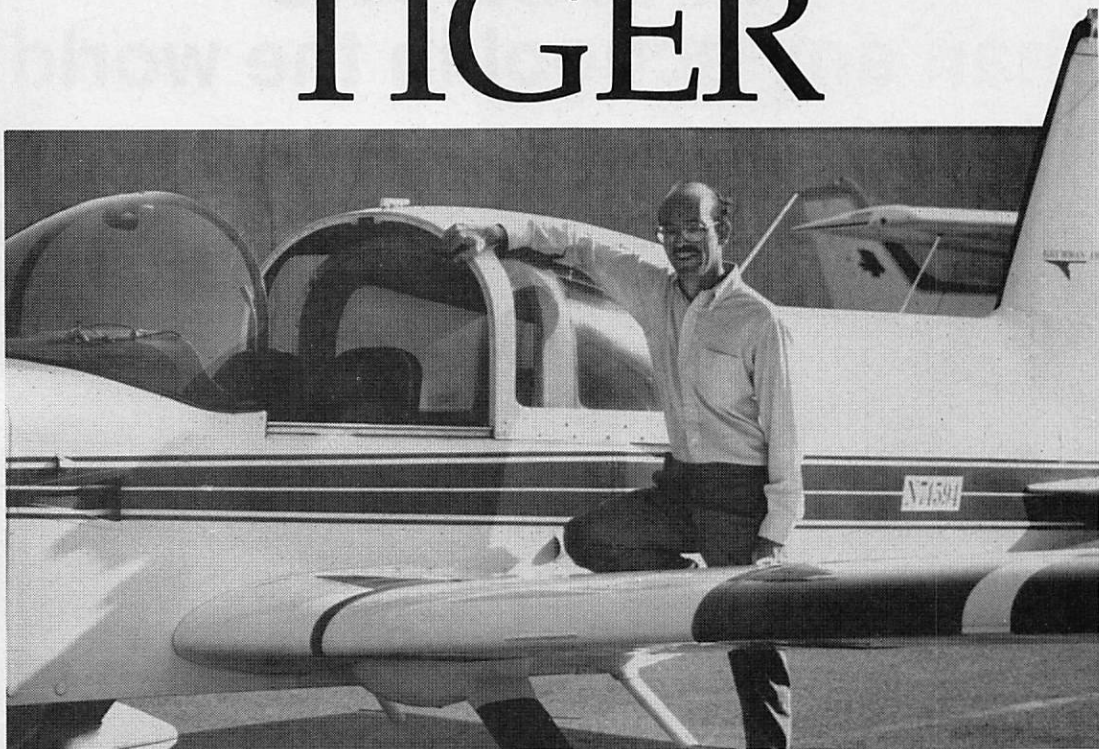
- * Launch your career in as few as 90 days, even with no experience
- * Your program will be tailored to your individual needs
- * Over 50,000 graduates -- you benefit from American Flyers' 48-year history of pilot training
- * FAA-Approved School -- get your ratings faster, more economically
- * Large fleet of fully IFR-equipped training aircraft
- * Headsets and intercoms in all aircraft for clear communicating
- * Live *on* the airport while you train

1-800-327-0808
in Florida: 1-305-772-7500
Telex 4972234

Ft. Lauderdale
Main Campus

AMERICAN  **FLYERS**
Academy

TERRIFIC TIGER



A proud owner and his spotless bird: Steve Fricke and the Grumman-American Tiger.

*Grumman's peppy little Tiger was a
modest success in the '70s,
but devotees have made the nimble,
"convertible" four-seater a real winner*

By Bill Cox

For the most part, the list of general aviation airplanes that almost made it is a long and forgettable one. Over the years, visionary designers presented their own better ideas which didn't turn out that much better after all.

The Grumman/Grumman-American/Gulfstream Tiger is a definite exception. Though it, like most other airplanes, has its share of foibles, it was certainly the most successful of the follow-ons to Jim Bede's original Yankee. The Tiger was the design culmination of the industry's most recent attempt to market a flying convertible.

The Tiger and all its little siblings have been out of production for almost a decade now, but during the AA5B's short, five-year production run, it succeeded in attracting a fiercely loyal

following. Today, pilots lucky enough to own one of the 1323 Tigers built between 1975 and 1979 are almost universally happy with their choice; so happy, in fact, that they're among the most active members of the marque's owner group, the American Yankee Association. Under the direction of San Pedro, Calif.-based Association President Bill Marvel, the AYA is dedicated to the perpetuation of the various Bede/American Aviation models, from the first primitive Yankee to the Tiger and the twin-engine Cougars produced in the late '70s.

Steve Fricke is a fanatic Tiger lover and an eager supporter of the AYA. Fricke, president of Taverner & Fricke paper company in Los Angeles, Calif., bought his Tiger eight years ago after renting the usual variety of Skyhawks,



Steve Fricke's beautiful Grumman Tiger carves the autumn air. Ship cruises at 135 knots, has 950-pound useful load.



ABOVE: Keeping it simple. Grumman's approach to the Tiger was to maintain the basic workability and unadorned construction of the original Yankee trainer that spawned the series.

RIGHT: Easy access cockpit and ample instrument space gives Fricke's Tiger roomy comfort and IFR capability.

Aircraft Comparison Chart*

Aircraft make/model:	Grumman Tiger	Cessna Cardinal	Piper Archer	Cessna Cutlass	Beech Sundowner
Used price ('79 model):	\$21,000	\$33,000 ²	\$36,000	\$44,000 ³	\$24,500
Cruise (kts):	139	130	125	122	116
Stall (kts):	53	46	49	48	51
Rate of climb (SL/fpm):	850	840	735	680	792
Rate of climb (8000 ft/fpm):	413	430	360	420	340
Service ceiling (ft):	13,800	14,600	15,000	17,000	12,600
Takeoff ground run (ft):	865	750	870	960	1130
Takeoff over 50-ft obstacle (ft):	1550	1400	1625	1690	1955
Landing ground run (ft):	410	600	925	575	703
Landing over 50-ft obstacle (ft):	1120	1220	1390	1335	1484
Useful load (lbs): ¹	1040	957	1134	1070	956
Payload (lbs):	734	657	846	746	614
Wingspan:	31 ft. 6 in.	35 ft. 6 in.	35 ft.	36 ft. 1 in.	32 ft. 9 in.
Gross Weight (lbs)	2400	2500	2550	2550	2450
Usable Fuel capacity (gals):	51	50	48	54	57

*All aircraft are fixed-gear, four-seaters with 180 hp Lycoming engines

¹Manufacturers specification, not applicable to equipped airplanes

²Last model, 1978

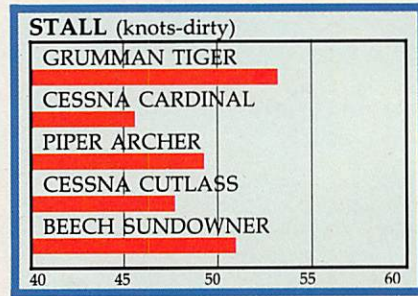
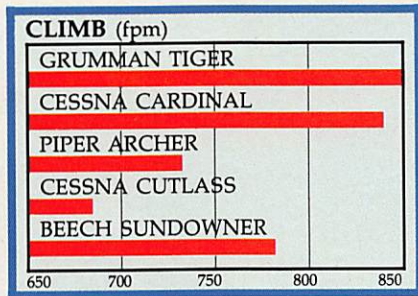
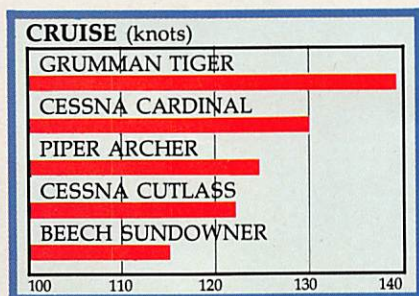
³First model, 1983



Cruising on a fall afternoon. The Tiger's nimble handling and good gas economy make it a viable, low-priced contender for the sport pilot's dollar.



Steve Fricke's N74594 Tiger was his first purchase. 1000 hours later, only \$500 has been spent on airframe maintenance, and most of that went for the brakes.





Grumman American AA5B Tiger

SPECIFICATIONS

Used Price: \$21,000
 Engine(s) make/model: Lycoming
 O-360 A4K
 Horsepower @ rpm @ altitude:
 180 @ 2700 @ SL
 Horsepower for takeoff: 180
 TBO hours: 2000
 Fuel type: 100/100 LL
 Propeller make/type: Fixed pitch
 75-in diameter
 Landing gear type: Tricycle
 Max ramp weight (lbs): 2400
 Gross weight (lbs): 2400
 Max landing weight (lbs): 2400
 Empty weight (std) (lbs): 1360
 Equipped weight (as tested)
 (lbs): 1450
 Useful load (std) (lbs): 1040
 Useful load (equipped) (lbs): 950
 Payload (full std fuel) (lbs): 644
 Fuel capacity std (gals): 52.6
 Usable fuel std (gals): 51.0
 Oil capacity: 8
 Wingspan: 31 ft 6 in
 Overall length: 22 ft
 Height: 7 ft 7 in
 Wing area (sq ft): 140
 Wing loading (lbs/sq ft): 17.1
 Power loading (lbs/hp): 13.3
 Wheel base: 5 ft 4 in
 Wheel track (ft): 8 ft 3 in
 Wheel size: 6.00 x 6
 Seating capacity: 4
 Cabin length: 85 in
 Cabin width: 40 in
 Cabin height: 46 in
 Baggage capacity (lbs/cu ft): 120

PERFORMANCE

Max level speed (kts):
 Cruise speed (kts):

	Altitude	Best Econ
75% power:	8500	139
65% power:	8500	129
55% power:	8500	118

Max range (reserve) (nm):

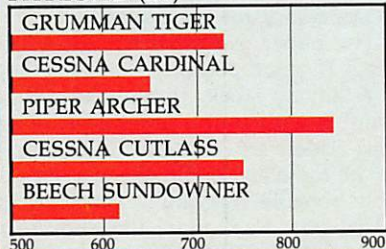
75% power:	8500	554
65% power:	11,800	578
55% power:	15,000	600

Fuel consumption (gph):

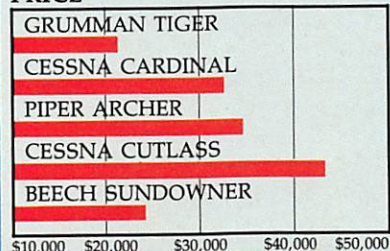
75% power:	10.8
65% power:	9.5
55% power:	8.6

Estimated endurance (65% power)
 (hrs): 5.0
 Stall speed (flaps up, gear up)
 (kts): 56
 Stall speed (flaps down, gear down)
 (kts): 53
 Best rate of climb (fpm): 850
 Rate of climb (8000 ft) (fpm): 410
 Service ceiling (ft): 13,800
 Takeoff ground roll (ft): 865
 Takeoff over 50 ft (ft): 1550
 Landing ground roll (ft): 410
 Landing over 50 ft (ft): 1120

PAYLOAD (lbs)



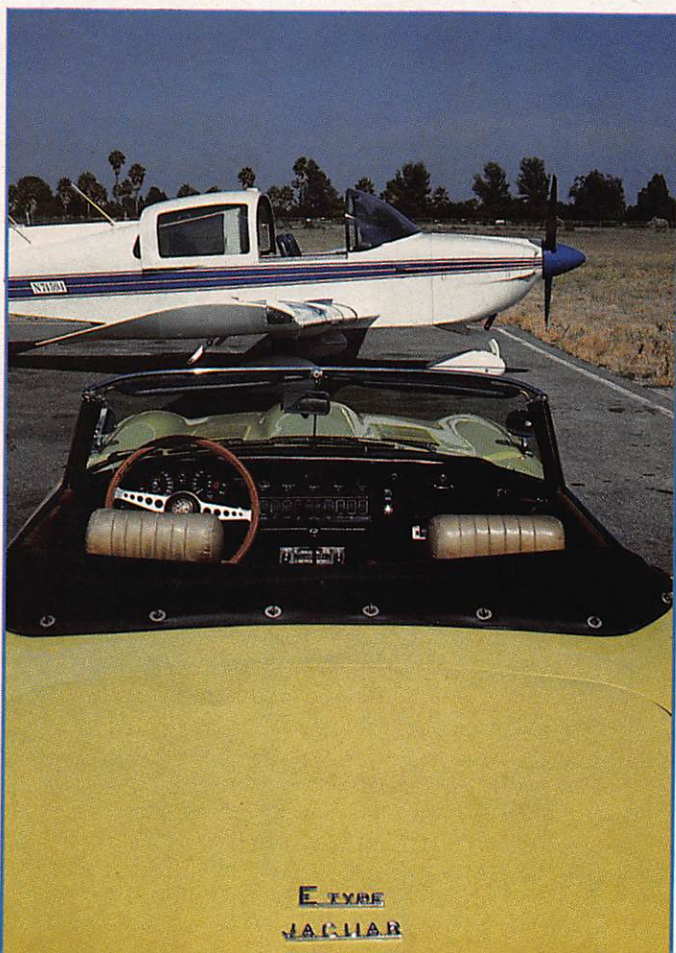
PRICE





Nothing like a "convertible" top to cool off. Grumman specs call for a maximum of eight inches open at speeds up to 113 knots.

Two for the road: The author's XKE serves as fitting companion to the sporty Grumman Tiger.



Skylanes and other Tigers for several years. N74594 was Fricke's first airplane, a choice dictated by his rental experience. "I was only a 200-hour private pilot at the time, so I wanted something without a lot of complex systems," Fricke explains. "I really liked the Tiger's bonded surfaces, great visibility and the responsive controls in both pitch and roll. After looking at everything that was available, the Tiger seemed the best combination of performance for the dollar."

The paper executive bought a 1977 Tiger in good condition and has kept it relatively stock, though he did repaint it with Imron several years ago and added an ARNAV R-20 Loran-C to the radio stack. "It's been a remarkably reliable machine," says Fricke. "I've put more than 1000 hours on it in the last eight years, and it's rarely

TERRIFIC TIGER



Steve Fricke's Tiger panel. There's enough avionics to make IFR feasible, but nothing on this immaculate airplane is overdone.

given me any trouble. In fact, I've only spent a total of \$500 in airframe maintenance in eight years, most of that on the brakes."

Fricke feels simplicity and operating economy are two of the Tiger's best characteristics. "It's a fairly inexpensive machine to fly," he says. "Fuel burn is consistently under 10 gph, and the Tiger is so simple, there's little to go wrong. I fly my airplane frequently, about 150 hours per year, and I've never had any major problems, but I understand repairs to the honeycomb/bonded components are quite expensive."

When I first saw Fricke's Tiger, I was naturally struck by what a clean airplane it is, unfettered by ridiculous excess in avionics or other options. There's enough equipment to make it a serviceable IFR machine, and the original interior is still comfortable and relatively unworn, despite 11 years of service. Comparing Fricke's airplane to the quartet of Piper/Cessna/Beech, IO-360-Lycoming-powered, 180-hp, fixed-gear four-seaters would make an interesting contrast.

Empty weight on Fricke's reasonably-equipped AA5B is 1450 pounds, leaving a real-world 950-pound useful load. This is 90 pounds less than the factory specification for a naked airplane, but if you subtract the same 90 pounds from the useful load of the other airplanes, the Tiger still scores in the middle of the class.

Fill the tanks of Fricke's airplane with 51 gallons of petrol, and the Tiger is left

with a 644-pound allowance, not quite four full-sized people worth, but will easily handle two couples. If you fly with only one other person aboard, as do most owners of four-seaters, you can carry virtually all the baggage you can squeeze through the small aft left baggage door or heft over the cabin wall.

Getting people aboard proves relatively easy in an airplane with a retractable roof. The sliding canopy certainly helps lend a sports-plane feel to the Tiger, though owners must temper their enthusiasm with a little reality. On the plus side, push the overhead full back on the ground, and you have the next best thing to a convertible, providing maximum ventilation for hot days. On those real scorcher afternoons, it's even possible to slide the canopy back in flight, though only to about eight inches. The limit speed for this type of "semi au natural" operation is the design maneuvering speed, 113 knots.

Living with an overhead hatch isn't all laughin' and scratchin'. Try boarding a Tiger in a rainstorm and you'll dampen not only your enthusiasm but the two front seats as well. The sliding hatch also can be somewhat cantankerous to operate. Because the canopy is fairly wide, it's important to push it straight aft from the center. Side pressure can make the canopy shift left or right and hang up, especially if the tracks haven't been lubricated regularly. Steve Fricke has worked hard to soundproof his airplane's canopy, so it was fairly quiet during my flights, but a common com-

PROTECT YOURSELF,
YOUR PASSENGERS, AND
YOUR INVESTMENT

PRICE
REDUCED
TO
\$198



NOW TEST ANY PIECE OF ELECTRICAL
EQUIPMENT DURING FLIGHT!

- Simply replace existing 2 1/4" volt and amp gauge with one VA-1
- STC'd and PMA'd as a primary instrument
- Features unique Discharge Warning Light to alert you of alternator, regulator or battery failure.
- Works as an accurate load meter for checking xmitter power, fuel pumps, pitot heat and many others.
- Internal & external shunted units available. External shunted units comply with A.D. 86-17-01.
- ONE YEAR WARRANTY.

CALL OR WRITE FOR FREE
INFORMATION ABOUT THE
ELECTRICAL SYSTEM ANALYZER YOU
SHOULDN'T BE WITHOUT!



ELECTRONICS
INTERNATIONAL, inc.

5289 NE Elam Young Pky
#G200

Hillsboro, Oregon 97124

(503) 640-9797 or
(503) 640-8384

Circle No. 20 on Reader Service Card

AVIATION INSURANCE NATIONWIDE

*If you placed your
insurance elsewhere,
you probably paid too much!*

**OWNERS • RENTERS
CLUBS • SCHOOLS**
CORPORATE • COMMERCIAL • FBO'S
SHOWS • BALLOONS • FERRYING

FAST QUOTES • BEST PRICES • PERSONAL SERVICE

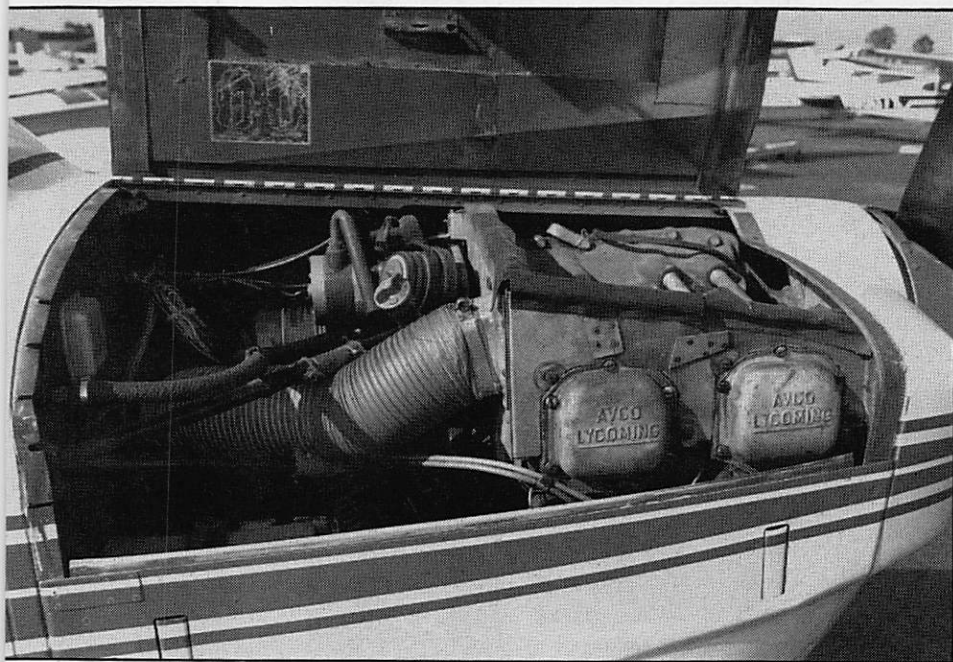
SERVING GENERAL AVIATION FOR 17 YEARS
Formerly Aviation Insurance Unlimited Inc. of Maryland



AVIATORS INSURANCE AGENCY LTD
8 Freer St, Lynbrook, NY 11563

800-AIRPLANe

TERRIFIC TIGER



180 Lycoming horses deliver less than 10 gph, 134 knots of cruise.

plaint of Tiger owners is that the overhead canopies don't fit perfectly and often whistle and roar in flight.

Step over the fuselage sidewall, tip the bottom seat cushion up with your toe, settle into the compact bucket and you'll find the Tiger a nice place to visit. Back in the late '70s, I ferried a half-dozen Tigers from one coast to the other, and I always liked their accommodations, though I'm not sure I'd be so enthused if another broad-shouldered pilot shared the front seats with me. All the controls fall readily to hand, and the snug cabin is fairly comfortable, though the Mooney-like center console does constrict leg movement somewhat.

Another Tiger idiosyncrasy is the non-steerable, full-castering nosewheel, regarded as either a blessing or a curse, depending on who you ask. Personally, I love it, even if it does demand more use of the brakes for directional control, especially in strong crosswinds. On smooth surfaces in reasonable winds, the free-wheeling nose gear is easy to manage and allows incredibly tight maneuvers on the ramp. It's true the airplane is difficult (though not impossible) to push back into a parking space, and the forward wheel is a weak link if you're incoherent enough to land the Tiger nosewheel first.

Climb performance is perhaps the most underrated measure of aircraft capability. Few pilots have accidents because their airplanes aren't fast enough, but many come to grief because of a lack of climb performance.

In this area, the Tiger is the definitive winner in its class at sea level, scoring 850 fpm at gross. Sadly, climb doesn't hold up quite so well at altitude. Ascending through 8000 feet, for example, the Tiger scores only about 410 fpm, down to third in our five-plane group. Since all five airplanes have the same horsepower, high altitude climb is a function of airfoil design, wing area and a number of other parameters. Airfoil shapes are at least a little subjective, but it's significant to note that the Tiger has the smallest wing of the lot, only 140 square feet. This also generates a service ceiling that's comparatively low, 13,800 feet.

If high climb isn't all that impressive, cruise is where the Tiger truly shines brightly. In fact, the airplane's efficient induction system helps it retain a surprising amount of power up high. That's at least partially a function of designer Roy LoPresti's wizardry. As many readers may know, LoPresti was instrumental in the Traveler's upgrade to the Cheetah and Tiger back in 1974, before he moved to Mooney to help create the 201 and 231. Grumman-American lists maximum altitude for 75 percent power at 8500 feet, and at that height, the Tiger runs off and leaves the competition in its wake.

With the standard, fixed-pitch, 75-inch-diameter McCauley prop set at 63 degrees, a fuselage clean of antennas, all vents closed, a maximum aft CG and everything perfectly rigged and flushed, the Tiger is alleged to scamper

along in smooth air at nearly 140 knots. Predictably, conditions weren't that perfect when I flew Fricke's Tiger. Though the airplane was well-maintained and brilliantly waxed, the recording tach showed 1950 hours on the engine, and the rigging probably wasn't perfect. It was a typical, hot, summer day over Southern California, so the vents were full open and we were bouncing around a little in the afternoon chop. The result was about five knots less cruise than the book called for. The airplane scored an average 134 knots on a two-way run at an 8500 foot density altitude over a 16-nm course between two VORs. This may not be up to handbook standards, but it's probably at least 5 knots ahead of the second quickest airplane under similar conditions. Major the engine, check the rig, close the vents, flush the antennas, find smooth air and I'm convinced you'd see the full 139 knots or more.

The greatest joy of a Tiger, however, especially for those who truly appre-



Detail of the fuel selector switch at front of center console. Note ashtray on console.

ciate good control harmony and quick handling, is the way it flies, rather than how fast it travels. Pitch response is very quick in flight, almost too much at times. Sit on the ramp at just over idle power, and you can pulse the nose up and down by merely cycling the yoke. Roll rate is similarly enthusiastic, probably about 70 degrees per second, and the airplane begs to be rolled. Back in

the mid '70s when the Tiger was the hot item on the fixed-gear single market, rumor had it that Grumman-American hoped to inject more horses under the bonnet and certify the Tiger for acro "someday." That decision became academic when the line folded in 1979. Still, the Tiger is probably the most responsive non-acro-certified general aviation airplane after the Bellanca Viking, though the AA5B is only legal in the normal and utility categories.

Handling at low speeds in the pattern is similarly agile, though the airplane's comparatively high stall speed dictates faster approaches. The short span, narrow chord flaps don't look very effective, and sure enough, they aren't. Deflecting them to full travel reduces stall speed only three knots to 53. Applying the standard 1.3 Vs rule dictates an approach speed of nearly 70 knots, at least 5 knots quicker than the standard approach speed of an Archer or Cardinal respectively. Learn to handle a Tiger well on approach and gauge the short flare properly, however, and you can actually undercut the competition's landing numbers.

In the final analysis, it's apparent that Tigers, like all the baby Grummans, aren't construction or performance clones of the other models in the class. Their sliding canopy, sandwich composite, bonded components and tube steel spar set them off from the crowd. As mentioned earlier, everything about them is fast. In the 180-hp fixed-gear class, they're the quickest cruising airplanes by a wide margin and, in combination with comparable fuel capacity, that makes them the longest-ranged. They also have the best sea level climb of the group, by far the quickest handling, a good useful load and the highest approach speed, the latter being the only negative number in the lot.

Given all this, it's somewhat inexplicable why they have the lowest used price of the class. Part of the reason may be the cost of repair. If you're smart enough not to break anything in the first place, however, you're liable to find the Tiger a true economy champ.

I'll tell you this, if I ever fall out of love with Mooneys and decide to drop back to fixed gear, I'll definitely be in the market for a good used Tiger. P&P

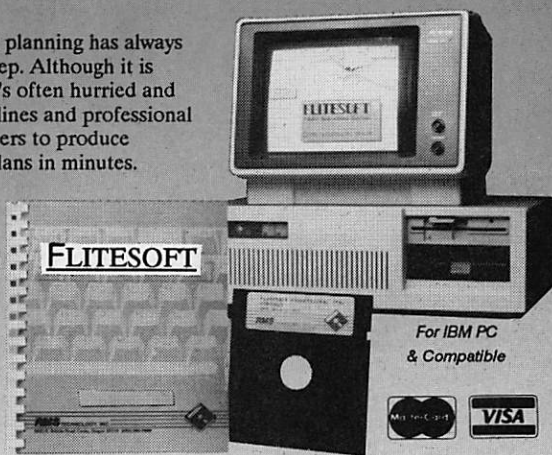
Editor's Note: Less than a week after flying our photo ship to shoot the aerals for this article, pilot Glen Carson lost his life in a flying accident. He was a fine young man (only 24 years old), a consummate flier, and a delightful and enthusiastic person to work with. He will be sorely missed.

When flight planning counts, count on Flitesoft!

Complete and accurate flight planning has always counted, but it's not an easy step. Although it is essential to every safe flight, it's often hurried and incomplete. That's why the airlines and professional flight departments use computers to produce complete and accurate flight plans in minutes.

Flitesoft brought computer flight planning benefits to all pilots. It delivers accurate flight plans, custom tailored to your aircraft, optimized for minimum time, fuel or cost.

Flitesoft is used nationwide at major FBOs and is counted on by more pilots than any similar product. Isn't it time you too counted on Flitesoft?



Only Flitesoft Provides:

- Nationwide airport & navaid data
- 35 data items per waypoint
- Aircraft performance & financial data
- Automatic Victor & Jet airway routing
- On screen weight and balance
- Automatic RNAV/LORAN routing
- Integrated pilot log book
- Graphic route display
- Periodic update service
- IFR/VFR flight plans

Flitesoft was reviewed and rated best by:
Aviation Consumer, Flying, Plane & Pilot,
Private Pilot, and Western Flyer.

To order or get more information call:

800-533-3211

RMS TECHNOLOGY, INC.

9680 S. Gribble Road, Canby, Oregon 97013

Circle No. 42 on Reader Service Card

ACCELERATED PILOT TRAINING COURSE GUARANTEED PRICE

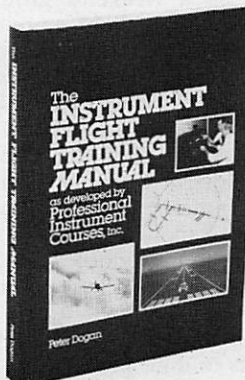
Pvt, IFR, Com, CFIA, CFII, Sing. & Multi. & ATP

- Graduates of our FAA Approved Ground School courses receive final test results same day of test. Further FAA testing is not required.
- Combine that overdue vacation with training
- Home of the World's Most Beautiful Beaches
- FAA Examiners on our staff
- Professional Instructors
- Use your plane or ours
- Courses CUSTOM-DESIGNED for you
- FAA Approved School since 1946

Call Registrar (904) 785-4325

SOWELL AVIATION CO.
Post Office Box 1490
Panama City, Florida 32401

Circle No. 11 on Reader Service Card



Simplified!

IFR FROM THE EXPERTS!

Learn today's IFR principles and practices with this new *Instrument Flight Training Manual* by Peter Dogan. Based upon PIC's very successful instrument training program that has helped thousands get their IFR.

Ideal text for students... valuable "up-date" for rated pilots. 150 excellent illustrations make complex material easy-to-understand. Chapter review questions. Special sections for the CFII. 256 pages. Discounts to dealers, schools & instructors.

Phone TOLL FREE 800-423-2708 (800-542-6657 in Cal.) and charge to VISA/MC, or send \$17.95 plus \$1.19 postage. Cal. residents add Sales Tax. 10-DAY MONEY-BACK GUARANTEE!

AVIATION BOOK COMPANY

1640-PL Victory Blvd., Glendale CA 91201

— ASK FOR FREE CATALOG OF BOOKS & PILOT SUPPLIES —

Circle No. 4 on Reader Service Card

Masters Of The Video Universe



*John and Martha King
along with Steve
Elisberg have taken
home video flight
instruction into the
second generation with
fast-paced, comprehensive,
professionally
produced courses*

By Vernon Barr



Martha King explains sectional map reading in the King aviation video course.

In the beginning, there was the book. Then came the slide and the film strip, often accompanied by either tapes or records. But the flight training scene was devoid of movement, zoom and digital graphics.

Then two traveling ground school organizations, one called Aviation Training Center (ATC) and another called King, discovered what the entertainment industry had known for some time. People were very happy to sit in their own homes, in front of their televisions to be amused or even educated.

The idea of home video courses was sound, considering that marketing indications were in the correct order. Nearly everybody had a VCR or was contemplating purchasing one for the family. And so the home video course

for pilots came into being.

One of the pioneers of home video flight training is Steve Elisberg, founder and president of ATC. In 1977, Elisberg started ATC as a weekend ground school specializing in flight engineer and ATP ratings. Three years later, the first ATC audio tape courses were produced and four years later, in 1984, the first home video courses emerged.

These early courses had a newscast style with an instructor and a moderator, Elisberg himself. But now a completely new generation of video cassette courses has been introduced for the 1988 written exams which went into effect Sept. 1.

ATC and King have made noticeable improvements to their products. ATC has significantly changed the presenta-

tion of their courses by utilizing 3-D animation, in-flight photography and location footage at FAA facilities such as control towers and radar centers. ATC also uses a variety of instructors and guest speakers in each course. Professionally written scripts and extensive editing make their network quality production lively and informative.

ATC's instrument course, for example, starts with weather and uses bright, high contrast graphics with movement to explain the different types of clouds and fog, and is punctuated with enough action to hold the most active students to task long enough to learn.

ATC has also updated and expanded the accompanying text which comes with their video courses. A significant improvement in both ATC and King's