

# **“ FACING THE BUYING DECISION, PART II ”**

by Dan Johnson – EAA EXPERIMENTER, NOV. 1999

**In our first discussion on facing the buying decision — i.e., what aircraft will work for your needs and your pilot skills — we discussed the pilot (*that's you!*); this time we'll discuss the many *types* of aircraft choices you have. In the last installment, we'll put these together and help you narrow your choices to a few models.**

## **What Kind of Pilot Are You?**

Let's just say you actually know yourself. While this sounds like a comment that deserves a "duh!" response, don't be too quick to judge. If every pilot or buyer of an aircraft knew what he/she needed or wanted, my job would be easier. But it isn't so. Most pilots know something about what they want, but many don't have enough information to make the best decision.

Some readers are "experts." A good many ultralight or light plane enthusiasts have been around long enough and owned enough of a variety of ultralights to know what they like. These veteran sport aviators represent a lot of combined experience. If you're new to ultralight flying, I strongly encourage you to seek out local experts. They can be your very best source of information because they know *you*. (However, as I reminded you last time, remember that anybody selling any aircraft — whether their own or one they represent — has a bias that you must not overlook. This does not mean their advice isn't worthy, but you must consider their position.)

## **Be Honest with Yourself**

The subject of who you are, pilot-wise, was discussed in the first installment of this three-part series. If you are a new ultralight pilot, you should start there (see *Experimenter*, August 1999, page 7).

To make this second installment more useful, I will refer to categories raised in the first series. I'll try to remind you of the pilot part of the decision as I attempt to show specific makes and models that address what YOU, the pilot, wants or needs. (*Though it will be helpful for you to have read the first article, it isn't mandatory.*)

In the concluding (third) installment, I'll try to put it all together ... that is, I'll try to link you up with a few of your best choices of ultralights and/or light planes. This information will be no better than the accuracy of your own answers about yourself and the type of ultralight or light plane you want or need. That is to say, if you are true to yourself when you go through the first two article installments, the third should help you narrow your choices to a few aircraft. If you fool yourself, you'll fool me, too, and all bets are off as to the quality of my advice. Fair enough?

## Choices, Choices, Choices

Ain't America great? Your problem is trying to choose between many aircraft that might serve your desires. Around the world, most people don't have this problem. For many reasons, ranging from cost to regulations to lack of availability, most people who might like to fly ultralights or light planes can't do so. We're lucky indeed. Our big challenge is to pick the RIGHT airplane from a rather long list. In order to keep this series of articles shorter and more readable, I will present about 80 choices among aircraft. The total list is at least twice to three times that long, depending on how you decide what qualifies.

I've deliberately limited the number of aircraft that I'll refer to in this second installment. I am not excluding certain designs because they are the wrong choice. Instead I will refer to only those with which I've had direct, first-hand experience, *and* those which have found a recognizable share of the American market. If I were able to update this series of articles, I would add a few new designs each year and eliminate some that have dwindled in popularity or disappeared outright.

I have also ignored many excellent international brands. Europe is particularly rich in designs Americans have never seen. Most buyers don't want to be the importer as it carries extra responsibilities, and we have plenty of choices here in USA. So, I've left out virtually all international brands that are not actively represented here. Even some Canadian designs aren't discussed unless they enjoy a visible presence in the U.S. market.

If you own or represent a brand that didn't get mentioned, please don't feel slighted. The article simply had to be limited in size, and I used my judgment as to the brands and models in which I perceive the greatest interest by the flying community. If you are reading this article much after the end of the year 2000, it is surely dated.

## So, Up We Go

One more point bears explaining. In the following seven categories, some aircraft qualities deserve mention in more than one category. Trying to keep the article shorter, I did not cross-index between categories. For example, under "Type of [Pilot] Experience," no mention is made of three-axis versus weight-shift control as that discussion appears under "Personal Preferences."

### Question 1 — Depth of Experience:

- Beginners
- Those trading up
- Those transitioning from other aircraft types

*Beginners* — Fortunately, relative beginners can handle most ultralights and light planes. A few of these aircraft are clearly "move up" models, but less than you'd think.

For those just starting in ultralight flying, a few brands stand out in my mind. Among basic kits, beginners might focus on the Aero-Lite 103, Carlson Sparrow ultralight, CGS Hawk, Fisher FP-606, T-Bird I, Quad Cities Challenger, Quicksilver GT-400, and Quicksilver Sprint or Sport. One defining quality of these choices is that besides having very straightforward flight characteristics, they are all tricycle gear (or available that way). Why is that desirable? Because tricycle-gear aircraft offer the simplest landing qualities.

I did not include any trikes or powered parachutes in this category, and I'll explain why. For most U.S. pilots, trikes will require trike instruction, and it isn't uniformly available. Conversely, while powered parachutes are primarily bought by newcomers — 70 percent nonpilots according to market leader, Buckeye Industries — they don't all employ standard control characteristics. Powered parachutes make good starter aircraft, but they may not prepare you well for other aircraft types.

For most beginning pilots, the conventional flying, three-axis, tri-gear models may be the best all-around choice. However, if trikes or powered parachutes interest you, you should pursue them if instruction is available. Since America is a big country and since aviation is not a huge enterprise, you should be prepared to travel to obtain instruction. Flying from one part of the country to another to get the best training is not a bad idea because your actual training time may not be too long. A one-week vacation — say in Arizona or Florida where the weather is generally good — may be enough to get you to solo. This is not true in general aviation where weeks or months may be required. Once you've soloed, you should join a local club where you can get further feedback and advice while you build your skills.

*Trading up* — Those folks with some background in flying who are ready for a “move up” from the above-mentioned beginner designs might consider the Champion, Javelin, Thunder Gull, Sky Raider, Hurricane, Slingshot, Phantom, RANS S-9 or S-14, the Talon, Kitfox Lite, Hiperlight, or Tornado.

Pilots with time logged in simpler ultralights may want to make the jump to a trike for several reasons including portability, performance, utility in several ways, or just to have something different.

Those with specialized interests may also want to consider the Aventura — or any number of ultralights on floats — for water-based flying. Others may like the look of old-time aircraft; they can examine several models from Fisher, Loehle, or others.

*Transitioning Pilots* — General aviation pilots accustomed to Cessnas and Pipers may be best advised to stick with aircraft offering conventional controls, tri-gear, and faster speeds as these will most closely match what they're used to flying. However, some GA pilots are looking at ultralights to do a different kind of flying. Many airline jockeys fly ultralights because they're fun.

Good advice for any GA pilot is to get at least some ultralight instruction. Your Cessna or Piper (or airliner!) will *not* fly like these light machines. Ultralight takeoffs seem sudden, climb angles are steeper, roll rates are slower, the openness of a cockpit (or lack of an enclosed fuselage) may be disconcerting, and while stalls feel the same, you don't lose nearly the same amount of altitude.

## Questions 2 — Type of Experience

- Cross-over Factor (UL to GA or reverse)
- Amphibious or Float-Equipped
- Taildragger

Immediately, you can perhaps see how the categories overlap. Your background of experience affects your purchase.

*Cross-over factor* — A general aviation pilot with thousands of hours can be expected to make the transition to an ultralight or light plane relatively easily. But is that always true? It depends on the pilot's *attitude*, too. A 7,000-hour pilot with a closed mind will struggle to make an ultralight do what his Bonanza did, and he may not succeed. However, a 100-hour, newly licensed Private Pilot may be more receptive to the transition process. If you like "how it has been," you should stick with something common to your experience. GA pilots may want to stick with the Champion, FireFly, FireStar, Kitfox Lite, Stinger, miniMax, Air-Bike, or Drifter (if they have taildragger experience) and the Aero-Lite 103, Sparrow, Hawk, T-Bird, Airaile, or Tornado if not.

Clearly your background influences what type of control system you prefer. Someone with extensive three-axis experience may not want to learn weight shift flying, however fascinating that method may be. Many pilots don't want to go through the beginner process again, an understandable though limiting attitude. Conversely, those who start in powered parachutes may never choose to try conventional three-axis ultralights.

By now, you may have cleverly observed that I've omitted many two seaters. Some GA pilots are looking at ultralights because they can keep flying after losing their medical. Others still have licenses and want two seats. The former group will be happy to find *many* good choices of Part 103-capable ultralights, but you need to ask questions of the manufacturer to assure your particular aircraft will make the weight (usually the toughest requirement to fulfill).

Licensed GA pilots who want two seaters might consider the Beaver, Capella (with tri-gear), Hawk, Thunder Gull, Flightstar, Challenger, Coyote II, Revelation, Mark III, X-Air, Tornado, or Hornet.

Two seaters providing a comparable, alternative interest for modern GA pilots include the Fisher Classic biplane, Preceptor, Aventura II, Drifter (2-seater), or open-cockpit Quicksilver or Sport 1000. Some licensed GA pilots will want the "ultimate ultralight," the twin-engined Air Cam, but such an aircraft will generally be bought only by knowledgeable pilots.

*Amphibious or float equipped* — Floatplane flying is a highly desirable activity that actually works *better* in ultralights or light planes than in general aviation (because the airframes are lighter, it's *much* less hard on the airframe). If float flying interests you, many choices await you because most manufacturers have added straight or amphibious floats to their planes and even some trikes. Only the Aventura is a successful amphibian-hull lightplane. Other choices demand a conversation with factory personnel to determine the advisability of float

operations. If the manufacturer has no experience to offer, then you'll be the "test pilot," a job most of us *don't* want.

Taildraggers are also different in ultralights and light planes. They are generally easier to handle than general aviation taildraggers. The reasons are slower speeds at takeoff and landing plus flatter deck angles. The easiest taildraggers I've flown — requiring almost no transition — include the Hawk, FP-202 and 404, Sky Raider, FireFly and FireStar, Parasol, Stinger, Talon, and AirBike.

### Question 3 — Personal Preference

- Physical (entry, seating, dimensions)
- Open or Enclosed
- Part 103 or Trainer
- Building Evaluation
- Uniqueness factor (see genre)
- Maintenance availability
- Features and systems (laden or spartan)
- Genre (vintage, modern UL, unconventional UL, GA-like)
- Control (3-axis, weightshift, other)
- Storage features (folding wing, "unplug," tear down, none)

Now we have to get personal. In truth, we won't get too personal here, but *you* must remember an article like this cannot address each reader on a personalized basis.

*Physical* — For those with disabilities or other physical restrictions, entry/exit ease is a genuine consideration. Ultralights that are easier to enter/exit include the Aero-Lite 103, Javelin, Hawk, Sky Raider, T-Bird (without doors), Drifter, FireFly or FireStar, Dragonfly, Challenger (without doors), GT-400, Quicksilver, Sport 1000, and Stinger. Many otherwise fine airplanes can be tough to get into without twisting and turning. More challenging aircraft to enter/exit include the Mitchell Wing, Thunder Gull, Hurricane, some Loehle models, Phantom, and Tornado.

If you have a large physique, you may want to pay particular attention to any tandem two seater as they offer the most elbowroom. A few aircraft seem built for big folks including Challenger, Hawk, T-Bird, Drifter, Talon, Beaver, Chinook, SkyWatch, Revelation, Air Cam, and Hornet, at least the front seat of most trikes, and virtually every powered parachute, again especially the front seat.

*Open or enclosed* — One of the first limiting factors involves the openness of the cockpit. Flyers with experience *only* in enclosed cockpits may not enjoy the open quality of many ultralights. Even those machines with windscreens and nose pods may not offer enough protection for the "inside" crowd. You must judge for yourself whether an aircraft meets your needs in this area. All I would add is to reconsider your attitude; open cockpit flying in a slow-flying ultralight can be a thing of joy. One way to help you differentiate is to eliminate faster flying aircraft that are not enclosed.

*Part 103 or trainer* — If you've lost your medical, you need a Part 103-compliant ultralight. Even those so advertised don't always make the grade, and this is

especially true if the buyer (you!) loads the plane up with accessories. If an ultralight qualifies with a Rotax 447 or 2si 460F-35 engine, it may not qualify if you take the Rotax 503 option. Some models claim they make Part 103 definitions by using the Rotax 277 engine that is only available on the used market. However, some manufacturers have worked hard to assure a powerful airplane meets FAA requirements. Some good examples are the Aero-Lite 103, Javelin, Hawk, T-Bird, Hurricane Ultra 103, Firefly, Phantom, N-3 Pup, Challenger UL, MX Sport and Sprint, Kitfox Lite, Hiperlight, miniMax 103, Weedhopper, and several single place trikes or powered parachutes. Those willing to become instructors approved under the EAA, ASC, or USUA programs can fly a large number of two seaters under the exemption to Part 103, but these aircraft are to be used for instruction *only*. All others require an N-number, which demands a valid FAA license with a current medical.

*Building evaluation* — You'll have to judge for yourself if you are a builder or a build-to-fly buyer. If you like building, nearly all doors are open, except you may not want the quick-build kits. The rest of us who would really rather fly than build may want to focus on the faster build kits. I'm not a builder myself, but having spoken to many builders, I think I can label the following group as among the easiest to build (though this list is *not* comprehensive): Aero-Lite 103, Mitchell Wing, T-Bird, Hurricane, Phantom, Challenger, GT-400 and MX series, Sport 1000, and Stinger. The Aero-Lite 103, Stinger, and the Kitfox Lite are also available as fully factory built, in a surprisingly rare situation allowed under Part 103. Some other companies are willing to fully build one of their 103 models for you at additional cost. In addition, if you read their literature closely you'll find many kit companies offer fast-build options that can hasten your first flight; of course, at extra expense.

*Uniqueness factor* — If you want something unique, you have two obligations. First, page through one of the industry buyer guides to see what strikes your fancy. (Note: EAA's AeroCrafter offers a comprehensive look at most of the currently available ultralights and light planes. It's available at a cost of \$29.00 plus \$5.00 shipping and handling; contact EAA Membership Services, 1-800-843-3612.) Secondly, visit air shows, read aviation magazine reports, and scan the too-rare industry surveys to see what is common or unusual. Rather than try to be different, I recommend you merely stick with a concept you like. But, remember, the scarcer a plane is, the harder it may be to get it serviced. Uniqueness comes with a price.

*Maintenance availability* — If you don't want to do your own maintenance (like me), then you have a different challenge. Forget uniqueness. What you want is probably something commonplace like the Quicksilver MX series that almost anyone might help you maintain or repair. Other than this one brand, the next most likely choice will be an aircraft sold by a local dealer who offers service. Given good local support, you can use this article to pick the best choice among those offered by your nearby aircraft representative. Engine and instrument (though *not* airframe) maintenance can be conducted by long distance but you must add downtime for shipping.

*Features and systems* — If you must have a Part 103 aircraft, be prepared to sacrifice options. With few exceptions, a Part 103-legal ultralight will need to be quite spartan to stay within the 254-pound weight limit (not including weight allowed for emergency parachutes or floats). However, some single-place trikes or powered parachutes *will* allow you to add accessories as you like. Look for empty weights in the 200-240 pound range and don't expect to find many.

*Genre* — If specialty, niche, or genre aircraft motivate you, then you must spend some time looking at buyer's guides or going to air shows. These airplanes will identify themselves by their appearance. Since this is a highly personal category, I have little to offer. You must use other criteria to narrow your choice to the perfect nostalgic, aerobatic, soaring, or other special aircraft segment.

*Control* — The area of control characteristics or handling is another intimately personal area. What is good for one pilot is bad for another in so many cases that it does not pay for me to try to advise you. However, some easy selections are available. If you want three-axis controls, you're in luck. We have many. The trouble is, they aren't all identical in control characteristics. For the *most* conventional of three-axis handling, I suggest you stick with the Aero-Lite 103, Beaver, Chinook, Capella, Aventura, any Flightstar model, Sparrow, Hawk, Thunder Gull, any Fisher airplane, Sky Raider, Hurricane, any Kolb, any Loehle, Phantom, N-3 Pup, GT-400, Coyote, Kitfox Lite, Talon, X-Air, AirBike, miniMax, Hornet, or Tornado. Even some of these won't seem exactly like a general aviation airplane, mainly as the speed ranges are lower where control surfaces act somewhat differently.

Aircraft with clearly different handling qualities include all trikes, all powered parachutes, the Mitchell Wing, many float planes, the Dragonfly, Weedhopper, and, of course, all forms of foot-launched powered paragliders or powered hang gliders.

Some otherwise conventional-flying aircraft give you an unusual perspective. For example, in the Drifter, Thunder Gull, Talon, Tornado, or Stinger, you sit so far out in front of the wing that you have less visual reference to the wing, and this may affect some pilots negatively. Conversely, for someone seeking "something different," this forward seating may fit the bill.

*Storage* — Finally in our personal choice category, your storage situation/needs can help you choose the best aircraft for you. Those with full-sized, wide-access hangars at airports can choose anything. However, many people interested in ultralights want to hold costs down and a variety of storage options can help in that regard.

Aircraft with quick-folding wings include the Champion, Sky Raider, N-3 Pup, Kitfox Lite, Air-Bike, Flightstar, any Kolb, any RANS models that can use their folding wing retrofit kit, all trikes, all powered parachutes, all powered paragliders, and powered hang gliders. In many cases one person can do the folding operation.

Virtually any ultralight can be disassembled in 45 minutes to hour, sometimes less. But these efforts require bolt unthreading and packing efforts to transport the equipment safely. Usually two or more persons are needed.

The Mitchell Wing folds in somewhat more time and unconventionally, but it can be transport well in that mode. Trikes and powered parachutes can sometimes be carried two or more to a vehicle.

#### Question 4 — Usage

- Local and Short Cross-country
- Longer Cross Country
- Floats or skis
- Soaring
- Training
- Other Work Purpose

*Local and short cross-country* — If you want to enjoy flying within, say, 50 miles of your home field, then just about any ultralight or light plane can suffice. Few are too fast for such "limited" use. In fact, this is how most ultralights are used, according to industry surveys.

*Longer cross-country* — Those who want to go farther either need more patience and time or a faster aircraft. Part 103 machines are limited to 63 mph at max rpm, but others can run away. Swifter ultralight-type aircraft include the Thunder Gull, RANS S-9 or S-14, Tornado, Capella, Coyote, and Hornet. Many can operate in the 70-90 mph range, but some cannot. The slower speed ultralights include the Aventura UL, Sparrow UL, FP-202, T-Bird, FireFly, Drifter, Breese, Dragonfly, GT-400, Quicksilver MX Series, Kitfox Lite, Max 103, Weedhopper, single-surface wing trikes with smaller-engines, plus all powered parachutes, paragliders, and hang gliders.

*Floats or skis* — While most ultralights can be fitted with floats, you'll need to speak to the manufacturer to find out what development has been done on which models. However, some aircraft have long histories of successful float operations, including the Aventura (1 and 2-place, Hawk, T-Bird, FireStar and Mk. III, the Drifter series, Challenger (1 and 2-place, GT-400 and GT-500, plus all Quicksilver models, Kitfox, Tornado, Beaver, Chinook, and Flightstar. Air Creation and Cosmos have both developed floats for their trikes. While powered parachutes generally aren't used with floats, Canadian maker ParaSki has flown this way, and Hank Austin has devised a float system for Buckeyes as well.

#### Question 5 — Weather

- Wind Velocity Restrictions
- Crosswind Restrictions
- Temperature

*Wind Velocity* — As ultralights evolved from the simplest early models, they gained weight and used larger engines. Today the average ultralight can zip along at faster speeds and has crisp enough control to better handle windy conditions. Virtually all models can be handled by experienced pilots in winds of up to 20-25 mph without undue difficulty — though most flying is conducted well

below this wind speed. In many cases, gusty conditions are more challenging as some ultralights respond more slowly to control input (partly a function of the slower speeds compared to general aviation aircraft).

Some ultralights are simply more fun below the 20-25 mph wind speed level and these might include the Aero-Lite 103, Mitchell Wing, Aventura, Sparrow UL, FP-202, -404, and -606, T-Bird, Parasol, AirBike, and Weedhopper. While an experienced factory pilot could still fly these planes in stronger conditions, in fact, the bigger issue is crosswind operations.

*Crosswind Restrictions* — Most trikes — at least those with double surfaced wings — are fine in stronger winds as long as a heavy crosswind isn't part of the conditions. In fact, trikes handle windy, gusty conditions as well or better than most fixed wing designs. Powered parachute and paragliders are definitely low-wind aircraft, far below 20-25 mph. However, most hang gliders can handle winds without many problems. Because powered hang gliders are foot landed, they don't face many problems with crosswinds either.

*Temperature* — If you live in a cold climate, you can either stop flying in winter or rely on good clothing and an enclosure on your plane. It's easy to eliminate the completely open cockpit airplanes for this consideration, but others are harder to judge. Of those with a windscreen and nose pod (therefore a somewhat warmer variety of ultralight), some don't lend themselves to a full enclosure or can't afford the extra weight under Part 103. These include the Aero-Lite 103, Javelin, Hurricane, Firefly, Drifter, Parasol, Dragonfly, Quicksilver MX series, Stinger, AirBike, Weedhopper, Revelation, all trikes, powered parachutes, powered paragliders, and powered hang gliders.

Moving out of Part 103-compliant aircraft, you have many more choices available to address issues of weather. For example, most two seaters *do* offer full or at least more-full enclosures.

### **Question 6 — Locale**

- Elevation/Humidity (Density Altitude)
- Runway/Approach
- Populated or Sparse

*Elevation/Humidity (Density Altitude)* — Any lower-powered ultralight that cannot sustain at least a 500-fpm climb rate is not a good candidate for anyone operating from high elevation, high heat, or high humidity climates as these density altitude factors further cut performance. Remember, most ultralight or light plane manufacturers operate nearer to sea level, and their stated performance figures are derived at these lower elevations. In high-density altitude areas, be suspect of any Part 103-compliant ultralight that relies on a single cylinder, low-horsepower engine in order to squeeze under FAA's weight limit. I find nothing wrong with these airplanes, but in Denver you may find climbout too slow for safety. Among those Part 103 aircraft that should do well are those with more powerful engines including Aero-Lite 103, Hawk, Hurricane, FireFly, Phantom, Challenger, MX Sprint or Sport, Kitfox Lite, Airbike, Max 103, Weedhopper. In the trike category, that'll include the Fun Racer, Cosmos Echo,

Tukan, and Maverick, while for powered parachutes your choices will include the Eagle 503, Falcon 582, High Flyer, ParaCycle, and Parascender.

*Runway/Approach* — The above-outlined concerns also apply when considering runway length and approach. While the lower-powered ultralight may be able to land incredibly short, it'll consume more distance on its takeoff run, especially if your chosen runway has a little upslope to it or long grass on it.

*Populated or Sparse* — The remoteness of your flying area is another consideration and may allow you to add a lesser-powered aircraft to your list if you have lots of open climbout area. Or, if soaring flight is one of your goals, you may want to be a greater distance from regulated airspace as well.

### **Question 7 — Affordability**

- Materials
- Build Time
- Imported
- Used

*Materials* — If you are more interested in building than buying a ready-to-fly or quick-build craft, you probably have certain materials with which you are personally familiar. Those more intent on flying than building may opt for a fast-build kit. Regardless of which “build” type you are, within those two groups there are four basic types of airframe materials from which to choose: bolt-together aluminum, welded steel, wood, and structural metal (stressed skin). With coverings, your options are dope-and-fabric, sewn Dacron, metal, or fiberglass. Examples of the faster build kits include those listing less than 100 hour build times, such as the Mitchell Wing, Aventura, Javelin, T-Bird, Spad III, Breese SS, some Challengers, Quicksilver Sprint and Sport plus their two-place versions, Weedhopper, some Flightstars, Revelation, X-Air, nearly every trike model, both single and two-place, every powered parachute, powered paraglider, and powered hang glider.

Those kits in the 100-200 hour range are still relatively fast builds but may include a dope-and-fabric covering, requiring painting and finish work that can consume many hours. These “medium-build” aircraft kits include the Champion, Hawk, Thunder Gull, Flightstar, Hurricane, Drifter, Dragonfly, Phantom, some Challengers, GT-400/500, Coyote, Airaile, Kitfox Lite, Talon, Airbike, Beaver, Chinook, SkyWatch, and Sport/Sprint 1000.

Those in the longest build time categories include the Sparrow, most Fisher airplanes, most Kolb designs, most Loehle aircraft, the N-3 Pup, many RANS models, most TEAM models, Tornado, Air Cam, and Hornet.

The above lists omit some viable factory-built options such as the Aero-Lite 103, Kitfox Lite, Stinger, and the only certified aircraft in this group, the GT-500, plus any custom factory-built offerings.

*Imported* — While the rest of the world produces some fascinating aircraft, importing those aircraft and/or kits can be difficult. Without someone dealing with the intricacies of importing, most are not a viable option in this country. Among ultralights and light planes, historically, most importers have dealt in trikes and

powered paragliders. During the 1999 air show season, we saw other Yankee entrepreneurs beginning to import some interesting fixed wing aircraft, especially from the Eastern European countries, but their future market presence cannot be determined at this time.

*Used aircraft* — Of course, the greatest of all choices comes from the used aircraft market. There is a multitude of used ultralights and light planes available. With a used aircraft, building is important from the standpoint of the quality of construction and ease of repairability. Material content is only important for repair considerations and longevity. Many articles have been written to advise buyers on the pitfalls of buying a used aircraft, and anyone undertaking that buying choice would be wise to review as many of those articles as possible. That is not the focus of this series, but much of the information in this series of articles will still apply to choosing the right used aircraft as well.

### **Last Installment**

In our final edition of "Facing the Buying Decision," scheduled for the January issue, we will attempt to put the information together from the first two installments. We've discussed you and your personal preferences (*Experimenter*, August 1999). Now, we've just finished a review of which aircraft types tend to serve which pilot preferences. In the final version we'll try to tell you how *you* can select a few models that fit your needs.

No matter what your aircraft choice is, however, please train or fly safely.