

BE ALERT!

# BUYING A USED AEROBATIC AIRCRAFT

BUYER  
BEWARE!

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The sample ad with this article, extracted in part from a popular circular, has Caveat Emptor written all over it. Let's examine it just for the fun of it and see where the buy takes the risk of quality fully upon himself.

## ***FOR SALE***

***Pitts S-1, fully aerobatic, like new, red and white sunburst, engine by Joe Berfsk, fabric checks in the green, chute, built for airshow work, 125 HP, fresh annual, one-of-a-kind, must sell, asking \$19,000, negotiable, or trade for a 150, Vulture Aviation, ask for Mac.***

1. **"Pitts S-1"** — Is it a single-place, flat-wing, four aileron or what? If the full model designation is not spelled out, you should immediately become suspect of the other information.
2. **"Fully aerobatic"** — Read the entire ad. Okay, no mention of an inverted fuel and oil system is made; therefore, this aircraft is not FULLY aerobatic. If it were, it would sport a canopy, Lexan floor, pressure carburetor, etc. We could give up on this character right now but it will be an education if we continue.
3. **"Like new"** — Like a new what? This one statement probably contains the widest difference in personal opinions more than anything else on earth. "It's a cream puff, fly it myself, owned by an old airplane pilot, mint condition, clean, etc." Even a good picture won't reveal the flaws, ringworm, hangar rash, dull paint, beat-up interior, etc.
4. **"Red and white sunburst"** — So, this makes it a "run-of-the-mill" Pitts. What is not known is the type of paint, who finished it and if the aircraft has been hangared.
5. **"Engine by Joe Berfsk"** — Who in (blank) is Joe Berfsk? And what did he do to the engine? With a name like that I wouldn't taxi it around the ramp. He probably has a good reputation back in "Podunk Center," but these ads are also trying to sell a Pitts to a buyer in California.
6. **"Fabric checks in the green"** — The old punch-to test is out. This was one of the first things you did back in the thirties when buying a Travel Air OX-5. The only legal way now is to cut a strip and pull-test it. If you know the date and type of fabric used, it will tell all you want to know. These new Dacrons (fabrics) are a real breakthrough.

7. **"Chute"** — A chute is as personal as your jockey shorts or toothbrush and every aerobatic pilot has a personal preference. What kind of chute is it? When was it packed? How big is the canopy?
8. **"Built for airshow work"** — ALL Pitts are built for airshow work. If so, does it have a smoke system? Is it restricted from certain aerobatic maneuvers? What is the max plus/minus *g*-factor? If it doesn't have two seat belts and a shoulder harness installed, then its airshow flying has been nil.
9. **"125 HP"** — Ah, ha! Here is a clue. The ad is beginning to really be suspect. No mention is made of the manufacturer. A 125 hp engine could be a converted ground power unit sold surplus by the U.S. Air Force. This type has a hollow crank and is banned by the International Aerobatic Club in any sanctioned contest. It can't be much of an airshow Pitts with only 125 hp in this day and age. What type of carburetor is installed? A fuel injector or a PS5C is a must for airshow and competition aircraft. TT (total time) on the engine? TSMOH (time since major overhaul)? Who performed the work besides Joe Berfsk? What type propeller? "125 HP" doesn't say much, does it?
10. **"Fresh annual"** — Doesn't mean a thing! Who did the annual? With the new FAA repairman's certificate now issued, the builder of a homebuilt can sign it off himself. This is a great convenience to the guy who constructed the aircraft but how diligent has he been in his maintenance of this little jewel?
11. **"One of a kind"** — Well, well! Here it is. It probably earned this ignominious title by the number of modifications performed on it. He has been making good use of the word "Experimental." It is always amazing how these backyard geniuses, with limited engineering backgrounds, can "out-think" the designer. I commented to Curtis Pitts at a contest, "I notice you never go out on the ramp and inspect the Pitts." His reply was that, "It just made him mad to see all these modifications that were tried and discarded by experts."
12. **"Must sell, asking \$19,000"** — Now, here is the hooker! If you state the price, you are dead. If you don't mention it and it sounds like a real good deal, you may get some calls. But this friend "must sell." Obviously, he is paying \$18.42 for an ad. "Asking" means that he is not certain just what his Pitts is worth.
13. **"Negotiable"** — Here he really blows it. First, he puts a price he estimates to be a good honest figure on his flying machine then leaves himself wide open to the "What will you really take for it?" crowd. I placed an ad in TRADE-A-PLANE to sell a Bucker Jungmeister and added, "No quibblers or pen pals, please. Only rich playboys need apply." I sold it the next week.
14. **"Or trade for a 150"** — Either this hero has lost his love for aerobatics, the Pitts was too much for him or there is something inherently wrong with it mechanically. Find out the REAL reason for selling and look out for the pilot who wants to downgrade to a lesser beast.
15. **"Vulture Aviation"** — Call around and investigate this operator's reputation. Check with the local Better Business Bureau, banks, FBOs, etc. Be cautious of these oddball, "mod," undignified names as they do nothing for aviation's image.

16. **"Ask for Mac"** — He is probably the salesman of the week and is not at all informed on the flying characteristics, history, mechanical condition or logbook entries. The big-time operator — every airport has one.

So, next time you pick up that yellow tabloid and browse through the great sounding deals, try reading between the lines and the lines left out and analyze the inflated description of these airplanes for swap.

Buying a used aerobatic aircraft is very serious business as you just don't stroll around the hangar and pick out the cleanest one there. You are risking your neck by overlooking any of the many items to check out before you fly it and no one is ever going to let you even taxi it without check in hand.

Here are some items to thoroughly check out when buying a used aerobatic aircraft.

1. Call the previous owner. His name and address should be in the logbooks.
2. Call the original builder, ask about materials used, type of fabric and any construction problems. These are usually pretty honest fellows with nothing to hide.
3. Check all engine, propeller and aircraft logbooks. A prop change bears investigating. Don't buy the "lost logbook" malarky. I wouldn't buy an airplane from anyone this careless.
4. Check the G meter and make sure it works.
5. Check for recorded hard landings or ground loops.
6. Look for premature tire changes against the aircraft times. This may indicate a wheel alignment problem.
7. Look in all inspection holes.
8. Remove EVERY bit of cowling.
9. Check the oil screen.
10. Insist on a compression check.
11. Check the shock cords and date of replacement.
12. Inspect all control attach points.
13. Check all controls for looseness. On a four-aileron biplane, hold the top aileron and see how far you can move the bottom one.
14. Check the seat bottom for cracks or popped rivets.
15. Check condition of flying and landing wires. Remove javelin.
16. Check tail section hinges and wires.
17. Look at the tailwheel tire for wear.
18. Run your fingers over the rudder cables near the fairleads for wear.
19. Watch for battery spillage.
20. Look for leading and trailing edge ribs showing cracks.
21. Examine for nails popping up from the aluminum leading edges.
22. Is there a history of any accidents?
23. Is there any distortion of upper wing spars?
24. Have the owner fly it for you and pull some high gs (within the envelope).
25. Then tell him, "I'll think about it."

No joking, really contemplate what you are about to get into. This is no baby buggy you are buying but a high-performance aircraft that is going to take all your piloting skills with no room for mechanical glitches.

But when you find the right one for you, you will have joined a very elite group of pilots to engage in aviation's most challenging sport. You will wonder if there is not something divine in man to rise above worldly limitations and with unselfish devotion create these little biplanes.

Really, the best way to get knowledgeable about buying a used aerobatic aircraft is to join an aerobatic club, attend a contest as a spectator, browse around the competition machines, get acquainted with the pilots, ask questions, inhale the atmosphere, shop around and maybe even get a ride in a two-place to see if you will like the sport.

The recommended way to become indoctrinated into this "fly for fun" pastime is to become more and more involved with the International Aerobatic Club (IAC). A division of the Experimental Aircraft Association, the IAC has jurisdiction over all United States aerobatic functions under the National Aeronautic Association. Here are some of the greatest sportsman pilots in the world.

The IAC has many fine books available on beginners' aerobatics with four categories of competition to choose from — Sportsman, Intermediate, Advanced and Unlimited plus, the newest, Basic category, for the real novice. Also, and most important to the above subject matter, there is a TECHNICAL TIPS MANUAL that includes many malfunction and defects reports that would be most helpful in selecting a used aerobatic aircraft. Before you decide on that "one-of-a-kind," read the TECHNICAL TIPS MANUAL and add to the above check list for the particular type you are "dickering for."