

FAA Publishes The Sport Pilot Initiative



The long-awaited Sport Pilot Notice of Proposed Rulemaking (NPRM) was published in the Register on February 5, 2002. The announcement has created many comments and questions within the ultralight community. The first public discussion of the NPRM occurred at the "M FAA" forums at the Air Expo in Ontario, California, on February 8-9.

In the most simplistic sense, the Sport Pilot initiative is essentially a microlight license, similar to that issued by other countries. In a broader sense, the Sport Pilot NPRM is a whole new way for the FAA to look at pilot licensing procedures and aircraft certification. It creates two new categories of aircraft: "weight-shift" and "powered parachute."

Depending on the print size used to download the NPRM from a web site, the proposal can be 100 pages in length. A printed copy can be obtained from the Federal Aviation Administration Office of Rulemaking, ARM-1, 800 Independence Ave., SW, Washington, D.C. 20591, or can be requested by telephone at 202-267-9680.

The FAA is soliciting public comments about the proposal. The address to submit comments is in the Preamble to the NPRM. The deadline to submit comments is May 6, 2002.



Due to the extensive length of the proposal it is only possible herein to mention the major changes of the NPRM. Under the proposal, the present ultralight two-seat training Exemption would be replaced by a Sport Pilot certificate. This certificate would be issued by the FAA, and would be a full-fledged FAA pilot's license, not an "ultralight" license like the ones presently issued by national ultralight organizations.

(Note: the FAA, like many governmental agencies, uses specific language to denote terms which are different from that used by laymen, including most pilots. For example, the official name for a pilot's "license" is a pilot "certificate." What pilots refer to as a "written exam" is "knowledge exam" by the FAA. The word "practical test" is used by the FAA to denote what pilots call the "oral exam" and "flight check.")

To obtain the Sport Pilot license, a pilot applicant would be required to take an FAA written exam, and a flight check, just as applicants for a Private Pilot or Commercial Pilot do.

Three years after the Sport Pilot is put into place the ultralight training system used today (by Flight Instructors and Advanced Flight Instructors), would be replaced by Sport Pilot Instructors. The present ultralight trainers would be replaced by new Sport Aircraft, which would be designed to be "ready-to-fly" from light aircraft manufacturers. The ultralight trainers used today could not be used for training, but could be used for personal recreation, if they are put into a newly created Experimental aircraft category.

As one can see from the overview above, the Sport Pilot NPRM is very complicated, and requires extensive reading from any seriously interested party. The Proposal introduces an entirely new approach for the FAA to approach pilot and aircraft certification. Here are some of the innovative features:

1. With certain limitations, an ultralight pilot would be credited his ultralight flight time toward issuance of a Sport Pilot license.
2. Using specified FAA procedures, ultralight pilots would be able to transform their ultralight aircraft into Experimental aircraft without having to conform to the so-called 51% rule normally applicable to amateur-built aircraft. These Experimental ultralights could be used for commercial pilot training for three years, after which they could only be used for personal flying.
3. After the three-year transitional period expires, training in ultralight-type aircraft would be provided by ready-to-fly quasi-certified factory-built aircraft. Manufacturers would have to build the aircraft to a specific "industry consensus standard" yet to be determined.
4. Pilots who obtain a "basic" Sport Pilot certificate would receive certain privileges and restrictions. Some of the restrictions (such as flying a faster aircraft or a different type of aircraft) could be removed with additional training and a logbook endorsement from a Sport Pilot Instructor. A Sport Pilot need not take another flight check from a pilot examiner.
5. The Sport Pilot Instructor (SPI) would not have to meet the qualifications normally met by



FAA Certified Flight Instructor (CFI.) That is, an airplane SPI would not need an instrument rating, a Commercial pilot's license, or so-called "complex" airplane flight time. The SPI's entire flight experience could be in an ultralight-type airplane.



6. The NPRM introduces two new categories of aircraft in which one can obtain a private pilot license: "weight-shift" (trike,) and "powered parachute (PPC)." Trikes and powered parachutes are commonly seen in the ultralight community, but rarely in general aviation.

7. Both Sport Pilots and Private Pilot weight-shift/power parachute would be allowed to fly in congested areas. They would not be relegated to rural areas, as ultralight pilots are. The trike and PPC Private Pilots would also be allowed to fly at night. It appears that powered parachutes might even be allowed to operate at general aviation airports, although FAR 91.126 would be amended to proscribe that a PPC must "avoid the flow of fixed wing aircraft" at an airport in Class G airspace. Watch out, Cessna pilots. At towered controlled airports you may be "number two behind a PPC" which is flying at 25 knots.



8. Pilots would be able to fly without taking an FAA medical exam. All that would be required would be a driver's license. While flying, a pilot would have to adhere to any limitations that were on their driver's license, such as wearing glasses or not operating a vehicle at night.

9. Pilots could attend a school to learn how to maintain their aircraft. After graduation they would receive a "Repairman's Certificate." The required class time is 16 hours for a pilot to maintain his own airplane for his own recreational use. The class time would be 80 hours if an individual wanted to work on someone else's airplane, or if an SPI were going to use his airplane for commercial flight training and wanted to maintain it himself. The location of the 16-hour maintenance course and the curriculum are yet to be determined. It is also not clear if A&F mechanics will be required to attend a special school. Brian Finnegan, President of the Professional Aircraft Maintenance Association has dubbed the 80-hour graduate a "Sport Mechanic."

The Sport Pilot NPRM starts with a lengthy Preamble, explaining the overall objective and the NPRM. The Preamble is followed by a detailed outline of the method of obtaining a pilot license, and the privileges and limitations of the Sport certificate.

For some unknown reason, the FAA refers to the subject aircraft as "light-sport aircraft" (LSA) instead of just "sport aircraft." There is no indication that light-sport aircraft will be followed by "medium-sport aircraft," or "heavy-sport aircraft," so the "light" designation seems superfluous. Throughout this article, I'll just refer to "sport" aircraft or "LSA".



To qualify as a "sport" aircraft the flying machine can weigh no more than 1,232 pounds (560 kilograms,) have one or two seats, a 39-knot stall speed, and a maximum operating speed of 109 knots. Student pilots may not solo a sport aircraft with an operating speed more than 87 knots. A Sport Pilot (but not a student) may receive a logbook endorsement to fly up to 115 knots. A sport aircraft may not have retractable gear (except for a seaplane,) nor more than one engine.

The definition of a sport aircraft exceeds the weight and speed limits of an ultralight trainer which has a 35 knot stall speed and 75 knots maximum speed. There is no mention in the NPRM of a maximum fuel limitation. An ultralight or ultralight trainer can fly 30 minutes after sundown if equipped with a strobe light. An LSA cannot. The Sport Pilot may not fly after sundown (civil twilight).

Another difference between the LSA and an ultralight trainer is that the ultralight must have a maximum empty weight of 496 pounds (225 kilograms.) There is no maximum gross weight for an ultralight. A sport aircraft, however, has no specified empty weight, but a maximum gross weight of 1,232 pounds. Throughout general aviation, all aircraft specifications are referred to by maximum gross weight.

Although an LSA may have a higher speed than an ultralight, in some respects an LSA is restricted more than an ultralight. An ultralight can have an in-flight adjustable propeller, retractable landing gear, and even more than one engine, but an LSA cannot. However, an LSA will be allowed to fly over congested areas, *if the operating limitation of the specific aircraft so permits*.

If a person has no flight experience, it will take a minimum of 20 hours flight time to qualify



Sport pilot. The student pilot will have to take an FAA written exam, oral exam, and flight check to receive his pilot's certificate. If a person has ultralight experience, the ultralight flight time may count toward the 20-hour minimum, *if the ultralight pilot is registered with one of the national ultralight organizations*. The ultralight organization will have to send the pilot applicant a notarized copy of his declared flight time in ultralights.

The language of the NPRM that addresses the transition requirements from ultralight instructor to Sport Pilot is indicative of the complexity of the draft. The following is a quote from the NPRM: "you are a registered ultralight pilot with an FAA-recognized ultralight organization not later than 12 months after the effective date of the final rule, and you want to apply for a sport pilot certificate then you must meet the eligibility requirements in sections 3 and 15 of this SFAR, but not the experience requirements in sections 51, 53, and 55 of this SFAR..."

If a person is already an FAA pilot he will be able to fly any Sport plane without an FAA flight check, but he would have to obtain a logbook endorsement from a Sport Instructor for each make and model that he wants to fly. Pilots with just a Sport license would also have to obtain make and model endorsement. So would Sport Instructors. What this means is that if you checked out to fly a Quicksilver GT-500, you would have to find an instructor and get a logbook endorsement to fly a GT-400. This is one of the more controversial provisions of the Sport NPRM.

Another controversial provision is that a Sport Pilot would not be allowed to fly higher than 10,000 feet above sea level, or more than 2,000 feet above ground level, whichever were higher. At present, ultralight pilots have no such restriction. Ultralight pilots also have no cross-country restrictions, and neither would the proposed Sport Pilot.

There are different flight time requirements for gliders, balloons, airships, trikes and power parachutes. The trike category would have provisions for both land and water ratings.

The criteria to become a Sport Pilot Instructor are somewhat ambiguous. Apparently the prospective SPI must hold either a Sport Pilot certificate or a Private Pilot certificate before applying to be a Sport Pilot Instructor. In either case, the instructor applicant for an airplane category must have "150 hours flight time as a pilot, 100 hours flight time as pilot in command of powered aircraft, 50 hours flight in a single-engine airplane, 25 hours cross-country flight time, 10 hours cross-country flight time in a single-engine airplane, and 15 hours flight time as pilot in command of a single-engine airplane that is a light-sport aircraft."

There is a question as to how the first Sport Flight Instructors will be created, since they need 100 hours in "light-sport aircraft," which presently do not exist.

Both Sport Pilots and Instructors would be required to take biennial recurrent training.

The NPRM is silent as to the creation of Sport Pilot Examiners. In the Preamble the FAA states "the FAA presumes" that the first Examiners will come from the present ultralight AFI's (Advanced Flight Instructors,) but most AFI's do not have an FAA pilot's license, so they would be no more than BFI's (Basic Flight Instructors.) In either case, it appears that the person who wishes to become an Examiner will have to conform to FAA Order 8710.3C (the *Pilot Examiner's Handbook*), which requires that a prospective examiner travel to the FAA's Examiner training center in Oklahoma City. Training is presumed to be at the prospective examiner's own expense.

An especially interesting feature of the Sport Pilot NPRM is the creation of a Private Pilot category for trikes and powered parachutes. Due to the perceived failure rate of two-cycle engines, pilots are taught to always fly within gliding distance of a safe landing spot in case of an engine failure. Therefore, ultralight trike pilots will be surprised to learn that one must make a cross-country flight of 100 miles at **night**, at which time it would be extremely difficult to spot a safe landing site in the dark.

Likewise, PPC students must make a 25 mile cross-country flight at **night**. Nothing in the NPRM which dictates that the night flight may not be conducted over **congested** areas. Of course, the flying machine would have to be equipped with night lights in accordance with 91.205(c).

Speaking of equipment, one might want to take a look at 91.205 (Instrument and Equipment)





Requirements). Although 91.205 applies to "standard category airworthiness certificates," presumably could be adopted by the so-called "industry consensus standard" for the manufacture of light-sport aircraft.

The equipment required under 91.205 for *day* visual flight includes: an airspeed indicator, compass, tachometer, an oil pressure gauge for each engine using a pressure system, an temperature gauge for each air-cooled engine, a temperature gauge for each liquid-cooled engine and a fuel gauge. Please note that the Rotax 503 is an air-cooled engine and the Rotax 582 is a liquid-cooled engine.

The additional equipment required for *night* visual flight includes position lights, an anti-collision light, a landing light (if used for hire), a spare set of fuses, and "an adequate source of electrical energy for all installed electrical and radio equipment."

It appears that many ultralights will require quite an upgrade in equipment if 91.205 is deemed applicable to light-sport aircraft.

Other unanswered questions are these:

1. Since Sport Planes will now carry an FAA registration (unlike ultralights) will they be liable for State personal property tax?
2. Will aircraft insurance companies insure two-cycle LSA to fly over congested areas at night?
3. Will manufacturers raise the price of Sport Aircraft to account for the increased liability and cost of delivering a ready-to-fly aircraft?
4. How will ready-to-fly aircraft be delivered? Presently most ultralights are delivered as kit in a crate, and are assembled by the buyer at his home. However, ready-to-fly airplanes will have to be ferried across the country at a maximum speed of 115 knots.
5. Since there is a movement by Homeland Security to require pilot background checks, fingerprinting, psychological evaluations and other security measures, will Sport Pilots be subject to such scrutiny?
6. In the NPRM, the FAA indicates that it reserves the right to unilaterally change the pilot requirements. As soon as the inevitable accidents occur, will the requirements be continually increased, as has happened to FAR Part 61 pilots (tail wheel endorsements, "high performance" and "complex" aircraft endorsements, etc)? Will the FAA be inclined to take away the "driver's license medical" as soon as the media discovers that "physically unfit pilots" are flying the overhead?
7. Will Sport Aircraft be subject to FAR 91.213 (Inoperative Instruments and Equipment), commonly known as the "Minimum Equipment List?" This controversial provision of the FAR has plagued general aviation pilots since it was adopted a few years ago, since it means that an aircraft can be instantly grounded as soon as a piece of equipment is inoperative, such as a warning horn or even a navigation instrument. Since inexpensive ultralight-type instruments, such as tachometers, are notoriously failure prone, many Sport Planes could be grounded while on the ground or in country flight if no qualified mechanic is available.
8. Will Sport Planes be required to have an ELT (Emergency Locator Transmitter) and a transponder? Not only are these items expensive to buy, but also they must be maintained and inspected regularly. Will Ballistic Recovery Parachutes be required, as they are on the recommended equipment list for certified Cirrus general aviation airplanes? BRS parachutes are common, but not required on ultralights.
9. Will the FAA periodically issue AD notices, which can ground all aircraft until the AD is corrected? This has happened many times to general aviation aircraft.
10. How many ultralight instructors will be willing to go through the time and expense to become Sport Instructors? How many CFIs will check out as Sport Instructors? What will happen if there are not enough instructors?
11. How many FAA pilot employees are willing to check out in ultralight-type airplanes in order to maintain their FAA pilot status?





oversee Sport Instructors and Examiners?

12. Will aircraft A&P mechanics be upset about the creation of "Sport Mechanics" in 16-hr 80-hour maintenance schools? How often will the classes be available? Who will qualify as instructors? How much will the maintenance courses cost?

13. Will Sport Pilots be subject to increased FAA enforcement actions and violations (such as forgetting to take your logbook with you on a flight)? At present, ultralight pilots enjoy relative immunity from FAA enforcement action.

14. Why is the FAA mandating that the two-seat ultralight training Exemption be extinguished three years? Why cannot the Exemption (or an FAA SFAR similar to the Exemption) continue to co-exist alongside the Sport Pilot initiative? What will happen to the value of two-seat trainers three years when they cannot be used as either ultralight trainers or as Sport Pilot trainers?

15. Will pilots be able to modify their aircraft after the design is "frozen" by the manufacturer? Will a trike pilot be able to change wings, as is done commonly with ultralight trikes? Will a pilot be able to add a windshield in winter? Can a pilot switch between wheels, skis, and floats? Every time a change is made will he have to modify the aircraft Weight and Balance document? Will a pilot be able to make such a change if he has not attended the "Sport Mechanic" maintenance school?

16. Will a pilot be able to order replacement parts from the popular ultralight catalogs, such as CPS, LEAF and Lockwood? Or will all parts have to be ordered from the manufacturer so that the factory can maintain "quality control" over the inventory?

17. How will general aviation airports accept the proliferation of ultralight-type aircraft in their pattern, especially powered parachutes? Many airports have gone to great lengths to keep ultralights away. Will these airports suddenly welcome Sport aircraft, or will the air traffic controllers be hostile?

18. In many respects, Sport Pilots will have privileges which exceed those granted to pilots with a Recreational certificate. For example, Recreational Pilots are prohibited from cross-country flight in excess of 50 miles. Will the FAA modify the Recreational restrictions to conform to the Sport Pilot provisions?

19. Why is there a 10,000-foot altitude limit? Ultralight pilots do not have such a restriction, yet ultralights have been falling out of the sky due to pilot hypoxia? Private pilots do not have such a restriction, yet the private pilot training requirements do not include any more knowledge of high altitude flight than a Sport Pilot could be exposed to. FAR 91.211 doesn't even require supplemental oxygen until exceeding 12,500 feet. How will the Sport glider pilots maintain soaring and safety in the vicinity of tall mountains, as general aviation glider pilots do regularly?

20. Why does the NPRM prohibit aircraft towing by Sport Pilots? What will happen to the very successful schools such as Wallaby Ranch and Quest Air which tow hang gliders behind their airplanes? What will happen to tandem paramotors and tandem hang gliders, which are currently excluded from becoming Sport Aircraft?

21. Why are professional "salesmen" not allowed to demonstrate an LSA to a prospective buyer? Many ultralight pilots are also dealers for a manufacturer. Will these dealers be considered "professional salesmen?" If so, how will manufacturers maintain their dealerships throughout the country?

22. Why are LSAs limited to single engine and fixed gear? The Lazer is a very successful ultralight with two 20 h.p. engines. The Moyes "Silent Racer" is a beautiful trike with an enclosed cockpit, folding propeller, and a simple retractable gear system. The Aventura amphibious seaplane also has landing gear that retracts with the simple movement of a lever.

An in-flight adjustable propeller is also not allowed. This would preclude the famous in-flight adjustable Ivoprop, which is used by thousands of ultralighters. Ivoprop has recently marketed a simple \$300 electronic *constant speed* propeller governor. It was the ultralight community's birth to such simple and effective systems. Why prohibit such innovation with the Sport Pilot initiative?

23. What is the estimated cost to become a Sport Pilot and purchase and maintain a Sport

after the Sport provisions are in place, and the ultralight Exemption is extinct?

Will ultralight pilots embrace Sport Pilot, despite the cost and complexity, or simply drop or flying? Will the Sport Pilot initiative attract new pilots, who seek the privileges not now available to ultralight pilots? These questions and many more remain to be seen as time unfolds. Be sure to make your views known to the FAA.

Comments may also be made at sportpilot@aero-news.net