VOLUME 6 SURVEILLANCE

CHAPTER 11 OTHER SURVEILLANCE

Section 13 Surveillance of Ultralight Vehicle Operations

6-2461 REPORTING SYSTEM(S). Use Safety Assurance System (SAS) Activity Recording (AR) and use activity code 1688.

6-2462 OBJECTIVE. The objective of this task is to determine that the operation of an ultralight vehicle adheres to the applicable Title 14 of the Code of Federal Regulations (14 CFR) parts and safe operating practices. Successful completion of this task results in an indication of satisfactory or unsatisfactory in the airman's or operator's file.

6-2463 GENERAL. Operation of ultralight vehicles has increased in recent years. In a short period of time, these craft have advanced from gliding down hillsides to sustaining flight at altitudes above 10,000 feet and a range of 100 miles or more. The concept of one-person sport flying vehicles has also expanded to include balloons and rotorcraft. The presence of these vehicles in the nation's airspace continues to be a factor in aviation safety.

A. Title 14 CFR Part 103. Part 103 became applicable to the operation of ultralight vehicles on October 4, 1982. These regulations are primarily operating rules similar to those for aircraft. The rules in part 103 are intended to ensure the safety of those not involved in the sport, including persons and property on the surface and other users of the airspace. The safety record of ultralight vehicles will be the foremost factor in determining the need for further regulations. Therefore, ultralight vehicle users should be encouraged to adopt good operating practices and programs. The regulations regarding aircraft certification, pilot certification, and aircraft registration are not applicable to ultralight vehicles or their operators when ultralights are operating in compliance with part 103.

B. Ultralight Vehicles vs. Aircraft. The most persistent misconception about ultralights is that they are all subject to part 103. Some ultralight models cannot operate under part 103 because of weight or speed limitations. These models must be certificated as aircraft before they can be operated. All ultralights meeting part 103, § 103.1 criteria may be operated as ultralight vehicles in accordance with part 103, or may be certificated as aircraft and operated under the applicable regulations.

C. Ultralight Operator Responsibilities. Operators of ultralight vehicles are expected to know, understand, and comply with part 103 requirements before operating the vehicle. This includes ensuring that the ultralight meets all applicable criteria of § 103.1 and obtaining documents to provide the evidence required by § 103.3 for the ultralight vehicle. All operators should also be aware that their ultralight may differ significantly from the advertised weight of the particular model, and may not qualify for operation under part 103. This difference may be because of construction methods, configuration, or additional equipment. It is also the operator's responsibility to determine, or have a reputable independent party (such as a recognized technical standards committee) determine, whether the ultralight meets the part 103 weight criteria. Ignorance of part 103 requirements is not an acceptable excuse for avoidance of enforcement action.

D. Inspector Considerations. There are four major considerations for Federal Aviation Administration (FAA) personnel to remember when dealing with ultralight operations:

1) Ultralight vehicle operation is a sport or recreational activity.

2) Users of ultralight vehicles, like participants in any sport, are responsible for assessing the hazards involved and ensuring their own safety.

3) The FAA's responsibility is to ensure the safety of other airspace users and persons and property on the ground.

4) The FAA's enforcement policies apply to part 103 as they do to other regulations.

E. Ultralight Inspection Authority. The FAA has the legal authority to inspect any ultralight, whether it is operated as an aircraft under 14 CFR part 91 or as an ultralight vehicle under part 103. In the case of an ultralight vehicle operated under part 103, this authority is usually exercised only when an inspector has reason to doubt the validity of the evidence provided by the operator, or has reason to doubt that the vehicle conforms to that evidence. Other reasons for inspecting an ultralight vehicle include the following:

- Accident;
- Incident;
- Complaint;
- Airport, ramp, or other scheduled inspection; and
- Airshow event.

6-2464 OPERATION OF ULTRALIGHT VEHICLES FROM AIRPORTS.

A. Aeronautical Activity. Ultralight vehicle operators usually require the approval of airport authorities before conducting operations from an airport. Operation of ultralight vehicles is considered an aeronautical activity much the same as parachute jumping.

B. Use of Airports. Federally funded airports must accommodate ultralight operations if this can be done safely. This does not mean that airport authorities must allow ultralights to operate from the runways; rather, the airport should set aside a special location for ultralight operations. It is acceptable for airport authorities to establish policies, including reasonable training requirements, that they believe are necessary to provide safe accommodations to ultralight vehicles. If an airport's authorities believe it is unsafe to accommodate ultralights at the facility, they may request Flight Standards' input in the assessment of the safety of proposed operations.

1) When assessing the safety of ultralight vehicle operations from airports, the inspector should bear in mind the operating characteristics of ultralight vehicles, the lack of pilot certification standards, and the fact that these vehicles must yield right-of-way to aircraft under all circumstances. If the safety of conventional aircraft operations would be compromised, the inspector should give a negative finding to the Office of Airports (ARP). When possible, inspectors should assist in developing alternative methods to accommodate ultralight operations.

2) Non-federally funded airports are not required to accommodate ultralight operations. The FAA has no authority in these situations; however, inspectors should encourage ultralight operators and airport management to consider alternative methods.

6-2465 DETERMINING PART 103 APPLICABILITY. The FAA has provided fairly simple methods for the individual operator to use in determining whether an ultralight meets all of the applicable elements of § 103.1. Advisory Circular (AC) 103-7, The Ultralight Vehicle, provides instructions regarding these methods and what constitutes "satisfactory evidence."

A. Part 103 Criteria. The inspector can often determine whether part 103 applies to specific ultralight operations by the answers to the following questions:

1) Is the flight for the purpose of accomplishing a task, such as patrolling a fence line or advertising a product? If so, part 103 does not apply.

2) Is the vehicle equipped for some purpose other than recreation or sport, such as banner towing or agricultural spraying? If so, part 103 does not apply.

3) Is the pilot advertising to perform any task using an ultralight? If so, part 103 does not apply.

4) Is the pilot receiving any form of compensation for performing a task using an ultralight? If so, part 103 does not apply.

B. Other Operations. Operations which are not sport or recreational uses, as well as those that do not meet the criteria, are discussed in AC 103-7.

6-2466 SAFETY CONSIDERATIONS AND RESPONSIBILITIES. For the most part, pilots of ultralight vehicles do not receive information regarding special use airspace such as military training routes, military operating areas, and other complex airspace.

A. FAA Responsibilities. Inspectors should provide appropriate briefing programs and materials concerning special use airspace. Inspectors should disseminate this information at ultralight fly-ins, conventions, aviation events, safety programs, flying club meetings, and any other gathering of airspace users.

1) Whenever possible, offices should provide information packets on special use airspace to meetings of individual user groups. These packets may be developed locally to address the operating areas of the user group. The Airman's Information Manual (AIM) is a good source for basic information on airspace for operators of ultralight vehicles.

2) Aviation safety program managers and counsellors should develop and disseminate this material during the safety meetings they conduct.

3) The inspector may ask the operator to show compliance with § 103.1 by measuring the capacity of the fuel tank; weighing the vehicle; measuring the wing, stabilizing, and control surface areas; and showing that any artificial means required to restrict the maximum

airspeed are installed, operative, and cannot be bypassed. Further checks may be made in situations when the inspector has reason to doubt the restriction of maximum airspeed.

4) A refusal by an operator to permit inspection of an ultralight is considered a violation of Title 49 of the United States Code (49 U.S.C.) and the applicable 14 CFR parts, which would result in enforcement action.

B. FAA Guidance on Ultralight Vehicle Operation. The primary guidance to the public on the operation of ultralight vehicles is contained in AC 103-6, Ultralight Vehicle Operations—Airports, Air Traffic Control, and Weather. This AC includes information on where to operate ultralights; airspace, air traffic control, and traffic patterns; weather information; availability of publications; and part 103 requirements. Inspectors may find this AC a good primary reference in providing advice to ultralight vehicle operators.

C. Operator Responsibilities. The operator of an ultralight who states that they are operating under part 103 should be able to present, on request, the satisfactory evidence outlined in AC 103-7. If the inspector has reason to doubt that evidence, any enforcement action initiated should allow for a discussion of the inspector's concerns and should provide an opportunity for the operator and the inspector to verify the evidence. If an operator cannot provide this evidence, or if the evidence provided is not satisfactory, the ultralight shall be considered an aircraft subject to all requirements applicable to the operator. It is the responsibility of the operator to prove that the ultralight and any related operations meet the requirements of part 103.

6-2467 SPECIAL CONSIDERATIONS.

A. Single Occupant Requirement. Operations under part 103 are limited to vehicles that "are used or intended for use" by one occupant (§ 103.1(a)). Any provisions for more than one occupant automatically disqualify a vehicle from operations under part 103. An ultralight with provisions for more than one occupant can only be operated as an aircraft, even when operated by only one person.

1) Exemptions have been issued to allow training in two place ultralights without requiring the operator to comply with applicable pilot and aircraft certification regulations. These exemptions contain explicit additional requirements, such as weight, speed, and the stalling speed or the minimum steady flight speed in the landing configuration (V_{S0}) for exempted ultralights. Individuals authorized to perform this training under an exemption must have a copy of the exemption in their possession. Organizations issued such exemptions shall issue an identification number to each individual allowed to conduct training under the exemption.

2) During inspection of two place ultralight operations, the inspector should expect to find either a registered aircraft with an experimental airworthiness certificate and a properly certificated pilot, or a training operation conducted under an exemption. Any other operations are in violation of the applicable aircraft regulations.

3) The inspector should determine whether there is any evidence that passenger-carrying operations are being conducted for hire. Evidence would include advertisements to that effect, students who were not in a specific training program, students who

admit that they were just paying for a sightseeing ride, and free rides or training accompanying the purchase of some other service or item.

4) Enforcement action should be taken if two-place operations are in violation of pilot and aircraft regulations or the terms of an exemption. When violations involve operations under a training exemption, the inspector should notify the Flight Standards General Aviation and Commercial Division (AFS-800) as soon as possible so that action may be taken to rescind the exemption or to suspend the specific authorizations in addition to processing any alleged violations through normal procedures.

B. Maximum Empty Weight. The maximum empty weight of a powered ultralight vehicle is limited to less than 254 pounds, with exclusions for parachutes and floats. Manufacturers and operators are understandably taking advantage of any exclusions allowed by the FAA to increase the capabilities of these vehicles. It now appears that most of the models on the market will press this weight limit. Thus, it will be particularly important that FAA inspectors have a standardized position with respect to the makeup of the maximum empty weight of an ultralight vehicle.

1) During the inspection of an ultralight that operates part 103, determine the weight of the complete craft in the configuration in which it was operated.

2) The weighing should occur immediately after the ultralight has been operated. During a recent fly-in, it was rumored that some participants had lowered the weight on their ultralights by removing pistons from the engine, detaching wing battens and control surfaces, substituting lighter wires and tubing, and attaching empty ballistic parachute containers before the weighing and later had reattached these items before actual operation.

C. Satisfactory Evidence. A certificated aircraft mechanic or repair station may provide a weight document similar to that provided for aircraft, listing the components and attachments of the ultralight when weighed. An FAA-certificated mechanic may also make determinations and provide satisfactory evidence as to maximum fuel capacity and maximum level flight speed, provided that the maximum speeds were determined through the use of graphs provided in AC 103-7, Appendix 1, Determining Maximum Level Flight Airspeed of Ultralights, and Appendix 2, Determining Power-Off Stall Speed of Ultralights.

1) A recognized technical standards committee's documented findings are considered satisfactory evidence. A committee may issue their findings in relation to a given model of ultralight; these findings are then included by the manufacturer in the sale of the ultralight. Operators of that model of ultralight may use those findings as satisfactory evidence in the absence of an inspection, provided that the following conditions are met:

a) There are no changes or modifications to the configuration, components, engine, or propeller arrangements of the basic model originally reviewed by the committee; and

b) Any artificial means of restricting maximum airspeed is installed and operational.

D. Specially Designed Ultralights. For a specially designed craft that may not lend itself to more simple methods of determination, the FAA permits recognized technical standards committees to make the necessary determinations and to provide the evidence required by § 103.3(b) to the operator. This is in keeping with the FAA's self-regulation policy in dealing with the ultralight user community.

6-2468 PROCEDURES. (TBD)

RESERVED. Paragraphs 6-2469 through 6-2485.