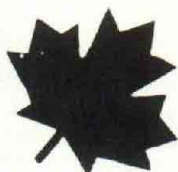


# Experimental Aircraft Association OF CANADA



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## GROUND POWER UNITS

The 125 hp Lycoming ground power unit (0-290G) has been used for many years in the United States and Canada and the reliability of this engine has varied considerably, with some owners having excellent service and others having a good deal of trouble. (The most serious problem has been crankshaft flange failure.)

In Canada, our regulations define an approved engine as one that was designed for use in an aircraft, and the GPU has been considered to be approved only if it has been converted to the same status as an 0290-D. We received a letter from Mr. D. T. Berg, the Regional Airworthiness Inspector in the Ontario Region, and he has asked us to convey the following information to all members:

"This is further to our recent telephone conversation regarding the conversion of Lycoming model 0-290G engine to model 0-290-D for use in ultra light category aircraft:

- (1) A Lycoming engine Model 0-290G which has been fully converted to a Model 0-290-D engine and meets the requirements of FAA TC-229 may be considered an "Approved" engine as defined in the Engineering and Inspection Manual Part II, Chapter I, para. 1.8. (c)
- (2) A model 0-290G engine may be converted to a Model 0-290-D engine by a "D" category A.M.E. or by a company which is approved for such work. The conversion may also be done by the owner; however, in this case the Regional Airworthiness Inspector must be advised before the work is started, and a suitable inspection program will be arranged.

Owners of partially converted engines have been advised in the past that the engine does not qualify as an "Approved" engine unless the conversion to a Model 0-290-D is completed to FAA TC-229. The engine may however revert to non-approved engine conditions, reducing all up weight accordingly."

A conversion such as is called for in the above letter would include a new crankshaft, and the cost of the conversion would make the total cost of the engine rather prohibitive. As a result, it would appear to us that if you are planning on using a ground power unit in an aircraft which has a gross weight in excess of 1200 lbs., that you might be better to dispose of it to another homebuilder who could use it in an aircraft having a gross weight under 1200 lbs. where it could be considered an unapproved engine. It should be noted that there is a wing loading requirement as well, and that with an unapproved engine, the gross weight could not exceed 12 times the wing area if flaps are provided or 10 times the wing area without flaps.

## HOMEBUILT ACCIDENTS AND AIRCRAFT ENGINES

While on the subject of aircraft engines, there has been several serious accidents in the past year or two involving Canadian homebuilt aircraft in which the engines were not in good condition. The faulty engine was not responsible for the accidents in all cases, but nevertheless, M.O.T. investigators are alarmed at the fact that some people are using engines in poor condition. In one case, a new homebuilt was demolished and the two occupants seriously injured due to crankshaft alterations that would never be tolerated in a certificated aircraft.

The fact that we have the freedom to use engines that may be time expired as far as a certificated aircraft is concerned is fine, but this freedom must be accompanied by a sense of responsibility, both to ones family and passengers. There is no justification for using engines that are not in good condition, and the continued use of such engines can only result in engine failure with its many possible consequences. For your own safety, and for the safety of others, keep your aircraft and engine in good condition, otherwise we may be faced with restrictions similar to those imposed on certificated aircraft.

## NOTICE TO ALL BD-5 MICRO BUILDERS

M.O.T. have asked us to advise all prospective BD-5 builders that the BD-5 does not at present comply with our wing loading requirements for aircraft with unapproved engines. We understand that Jim Bede is doing some redesign work to lighten the aircraft and also to increase the wing area, and the Micro in it's final configuration may meet our requirements. In the meantime, we suggest you wait until such time as all changes have been incorporated into the design before becoming too seriously involved.

## CANADIAN CONTENT IN SPORT AVIATION

We would like to see more Canadian content in *SPORT AVIATION*, and Headquarters would like to receive articles from Canadians on their aircraft and activities. Such articles should be accompanied by black and white photographs if possible. We occasionally hear complaints that there is not enough about Canada in *SPORT AVIATION*, and I would like to point out that it is our own fault — EAA will gladly print material but someone has to submit it first.

## CHAPTER NEWSLETTERS

We are pleased to note that most of our active Canadian chapters publish a monthly newsletter, and many are of excellent quality. We appreciate receiving copies at EAAC Headquarters and we read all of them.

In a few instances, we have noticed that some derogatory statements have appeared in chapter newsletters, and that some have contained articles and comments critical of people, events, and organizations. We are not entirely against this practice since constructive criticism has its place and can be useful. We would ask, however, that all of you who edit or publish a newsletter keep in mind the wide distribution such newsletters receive, and be sure of your facts before publishing any article or comment that might be harmful to anyone. It is easy to be critical, and your readers will probably agree with your criticisms, and will remember them. If such criticism turns out to be unjustified, or if there is another side to the story that you didn't know about, it is hard to undo the damage already caused. Nobody minds praise, but if you want to be critical, obtain all the facts first and then, if you still want to write a critical article, do so. Failure to get the facts in advance can often lead to an embarrassing situation and can do nothing but harm the image of our organization.