U.S. Department of Transportation
Federal Aviation Administration

**Small Airplane Directorate**
**601 E. 12th Street, ACE-100**
**Kansas City, Missouri 64106**

JUN 0 4 1998

Mr. Earl Lawrence
Executive Director, Government Programs
Experimental Aviation Association (EAA)
EAA Aviation Center
P.O. Box 3086
Oshkosh, Wisconsin 54903-3086

Dear Mr Lawrence:

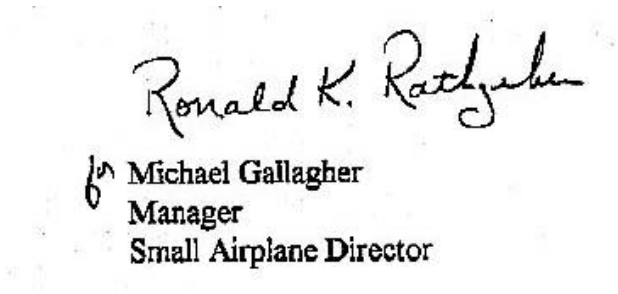
This letter is in response to your letter dated May 28, 1998, concerning a recent Federal Aviation Administration (FAA) Aviation Safety Program Newsletter that highlighted autogas use in a negative way. Several comparisons between autogas and avgas were cited in the newsletter that infer airplanes and engines that have Supplemental Type Certificates (STCs) approved for autogas use are not as safe as airplanes or engines that use avgas exclusively. This is not an accurate representation of the operational service history for these products that use autogas. The sixteen year service history for airplanes and engines using autogas is good.

The newsletter cites a 1976 Textron Lycoming service information document and a Teledyne Continental Engine Technical Bulletin that defines certain concerns with autogas use. At that time, there were questions and issues that needed to be answered. However, since that time a tremendous amount of airplane, engine, and fuel testing has been accomplished among EAA, FAA, and other organizations. Autogas use has been extensively compared, tested, and analyzed. Autogas has been shown to be an acceptable alternative to avgas for the airplanes and engines approved for such use. Airplanes and engines approved for autogas use have met the FAA certification requirements for engine detonation, engine cooling, fuel flow, hot fuel testing, fuel system compatibility, vapor lock, and performance. The newsletter also cited a report about aggravated engine valve seat recession (wear) with the use of autogas. Extensive FAA Technical Center testing concluded that valve seat recession with autogas use is not significantly different from avgas use

In summary, there are numerous studies and technical reports available comparing autogas to avgas for use in certificated airplanes and engines. The service history for airplanes and engines using autogas has been good and is comparable to avgas.

We thank you for bringing this issue to our attention and we hope this clarifies the Small Airplane Directorate's position on approved autogas use in 14 CFR part 23 airplanes.

Sincerely,



for Michael Gallagher
Manager
Small Airplane Director