

 <p>SOUTH AFRICAN CIVIL AVIATION AUTHORITY</p>	<p>REPUBLIC OF SOUTH AFRICA</p> <p>CIVIL AVIATION AUTHORITY</p>	<p>CAA Private Bag x08 Waterkloof 0145</p>
<p>Tel: (012) 346-5566 Fax: (012) 346-6059 E-Mail: mail@caa.co.za</p>	<p>AERONAUTICAL INFORMATION CIRCULAR</p>	<p>AIC 6415 04-02-20</p>

AIRWORTHINESS

CAUTION

USE OF SUPPLEMENTARY ADDITIVES TO FULLY FORMULATE ENGINE OILS

☞ Indicates changes.

☞ This AIC replaces AIC 64.15 dated 99-05-15.

1. Exhaustive tests have been conducted by the South African Bureau of Standards, the results of which are fully acceptable to the Commissioner and we quote as follows:

"Engine lubricating oils which comply with national specifications eg. SABS 1361 and SABS 400A and other international specifications eg. MIL-L-2104D adequately meet the engine service requirements. As such there is little to be gained by commenting on any benefits which are claimed from the use of supplementary additive use.

It should be remembered that current engine oils as formulated could contain up to 25% (m/m) additive to give protection against eg. sludging, corrosion, oxidation, excess wear, piston scuffing, effects of acidity etc.

Problems which could arise from supplementary additive addition to balanced formulations include:

- (1) Possible incompatibility of additives.
 - (2) Possible chemical interaction and dilution effect could reduce engine protection efficiency.
 - (3) Changes to the formulation and/or physical and chemical properties of the formulation oil which could adversely affect engine protection.
 - (4) The addition of supplementary additives could invalidate engine manufacturers' warranty, and they do not recommend or support this practice.
 - (5) Engine lubricating oils complying with the relevant specifications as specified by the engine manufacturers will give adequate engine protection and do not need the addition of supplementary additives, which may improve one property of the oil, but could have a deleterious effect on other properties."
2. Any authority previously granted for the use of oil additives by the Commissioner is hereby cancelled.

COMMISSIONER FOR CIVIL AVIATION