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WATER COMPATIBILITY OF AIRCRAFT GREASES



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PREPARED BY

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TABLE OF CONTENTS

	<u>Page</u>
Introduction	
Objective	1
Summary and Conclusions	1
Discussion	1

	<u>Tables</u>
Characteristics of the Test Greases	I
Service Experience	II
AN-G-5a Water Resistance Test	III
AN-G-5 Navy Water Absorption Test	IV
Consistency of Worked Grease-Water Mixture	V

WATER COMPATIBILITY OF AIRCRAFT GREASES

INTRODUCTION

Certain military aircraft grease specifications which were promulgated during World War II emphasized low-temperature performance requirements. Later, when emphasis had changed from military to commercial flying, airframe manufacturers and commercial operators found that some of the greases were deficient in service life. It became apparent that stability, load support and other desirable characteristics had been sacrificed in favor of extreme low-temperature performance in certain formulations with the result that failure of so-called "permanently lubricated" anti-friction bearings was a major problem of aircraft maintenance.

Representatives of the airframe manufacturers enlisted the support of the bearing industry, air-transport companies and petroleum refiners in SAE Committee S-5 to study the problem. Aircraft Lubricants Subcommittee S-5C was formed for the specific purpose of investigating test methods which might be of value in predicting lubricant performance.

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