

CANCELLED
14/96

SAE
AERONAUTICAL INFORMATION
REPORT
No. 883

A METHOD OF GROUND RESONANCE TESTING
FOR HELICOPTERS

INACTIVE FOR NEW DESIGN; MAINTAINED FOR HISTORICAL INFORMATION ONLY.



April 20, 1965

PREPARED BY

Committee S-2, Helicopters

SOCIETY OF AUTOMOTIVE ENGINEERS, INC.
29 West 39th Street New York, N. Y.

(This document supersedes and cancels AIR 12, issued 9-1-46.)

Section 7C of the SAE Technical Board rules provides that: "All technical reports, including standards approved and practices recommended are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."

A METHOD OF GROUND RESONANCE TESTING
FOR HELICOPTERS

INTRODUCTION

There have been a number of serious accidents on rotary wing aircraft which can be attributed to the phenomena called "ground resonance" and it was felt that it would be of substantial benefit to the helicopter industry if this phenomena could be brought to the attention of prospective helicopter manufacturers with sufficient emphasis and a satisfactory means could be determined which would detect "ground resonance" in its incipient stages. Remedial measures might then be taken in time to avert serious damage during this very critical phase of rotary wing development.

It is, therefore, the purpose of this subcommittee to prepare a recommended procedure for testing helicopters for "ground resonance" prior to flight. The subcommittee consists of the following members:

R. A. Wolf, Chairman - Bell Aircraft Corporation
R. A. Wagner - Kellett Aircraft Corporation
C. A. Moeller - Sikorsky Aircraft

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

Committee S-2, Helicopters

R. H. Prewitt, Chairman

Commander R. E. Doll Bureau of Aeronautics Navy Department	Frank Piasecki Piasecki Helicopter Corp.
Michael E. Gluhareff Sikorsky Aircraft	Stephen H. Rolle Civil Aeronautics Administration
W. Laurence LePage Platt-LePage Aircraft Co.	Lt. Colonel K. S. Wilson Air Materiel Command
J. P. Perry G & A Aircraft, Inc.	R. A. Wolf Bell Aircraft Corporation

APPROVED BY SAE AERONAUTICS COMMITTEE

Arthur Nutt, Chairman
Packard Motor Car Co.

Arthur E. Raymond Douglas Aircraft Co., Inc.	Erle Martin Hamilton Standard Propellers
J. B. Johnson Air Materiel Command	C. E. Mines Packard Motor Car Co.
R. D. Kelly United Air Lines, Inc.	Wright A. Parkins Pratt & Whitney Aircraft
W. C. Lawrence American Overseas Airlines, Inc.	Peter F. Rossmann Curtiss-Wright Corp.