NWL ADMINISTRATIVE REPORT AR-124
12 June 1973

LIGHTNING PROTECTION DOCUMENTATION

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NWL Administrative Report No. AR-124
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FOREWORD

The Safety Research Branch (Code ESR) of the Weapons Safety Division, Naval Weapons Laboratory, Dahlgren, Virginia, was tasked by ORDTASK No. 048004090 21773 of 1 July 1972 to locate and review literature concerning lightning theory and lightning protection so as to evaluate present navy lightning protection techniques that appear in "AMMUNITION AND EXPLOSIVES ASHORE" NAVORD OP 5, Vol. 1, Chapter 12.

This report has been reviewed for technical accuracy by S. H. McElroy.

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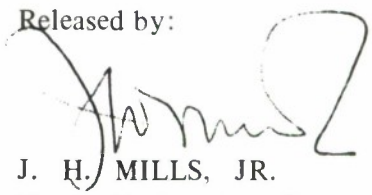

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ABSTRACT

Approximately two hundred (200) documents on various aspects of lightning theory, instrumentation, and protection are cited as an up-to-date, cross-referenced bibliography which should prove beneficial to others engaged in lightning research.

These references were compiled from DDC, NTIS, Engineering Index, Index to Science and Technology, Library of Congress, International Aerospace Abstracts, NASA, and Personal Communications.

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I. INTRODUCTION

The contents of this report represent the literature reviewed in a study of lightning protection techniques currently used by the Navy and documented in *"Ammunition and Explosives Ashore" NAVORD OP-5, Vol. 1, Chapter 12.*

The literature survey resulted in a substantial collection of sources on the subject which could prove very bencficial to other researchers with similar interests.

Material in the Bibliographic Section of this report is in the following order: title, author, affiliation, date, locator number, subject abbreviations. Two other sections have been included for user convenience – a listing by authors and a listing by general subject.

The references listed do not contain all available articles. Other excellent articles may be available but did not come to the attention of the authors.

A continuing effort in th's area will result in additions to the bibliography. Any articles which the user feels would be appropriate for inclusion are requested so that they may be included in future updates.

A. Key to Subject Abbreviations

EEH	Electrical Effects on Humans
EI	Electrical Interference
EG	Electrical Grounding
EMS	Electromagnetic Shielding
LM	Lightning Measurements
LP	Lightning Protection
LPR	Lightning Prediction
LS	Lightning Simulation
LSA	Lightning Strikes to Aircraft
LT	Lightning Theory
LTE	Lightning Testing
SI	Spark Ignition

One or more of these abbreviations appears in the last line of each entry in the bibliography as an indication of the subject of that entry.

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(Corporate author)	UNCLASSIFIED
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LIGHTNING PROTECTION DOCUMENTATION

(Type of report and inclusive dates)

(First name, middle initial, last name)

R. Vaselich
J. Dixon

June 1973	58	
	NWL AR-124	

(Any other numbers that may be assigned this report)

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