SAE Aerospace
An SAE International Group

AEROSPACE RECOMMENDED PRACTICE

SAE ARP5560

Issued 2008-11

Safety Considerations for High-Intensity Lights (HIL) Directed into the Navigable Airspace

RATIONALE

High-intensity lights (HIL) (e.g., searchlights and handheld spotlights, see examples in Appendix A) may impair a pilot's visual function and affect aviation safety. Handheld spotlights, flashlights where the manufacturer specifies a high candlepower (>0.25 million candlepower), are becoming more available. Guidance is needed to assist aviation authorities (both domestic and international) with the safe use of these light sources.

The Federal Aviation Administration (FAA) requested that the SAE provide guidance for evaluating the effects of bright lights on aircraft operations in the navigable airspace. The information in this ARP may be used by the FAA and other authorities. Additionally, the guidance presented in this ARP may be incorporated into future FAA documents such as FAA Order 7400.2 (Procedures for Handling Airspace Matters) and Advisory Circulars (ACs).

INTRODUCTION

On March 26, 1999, the FAA submitted a written request to the SAE for assistance in developing standards and regulations concerning outdoor laser operations. Since December 1999, the SAE has developed several documents, including: AS4970, "Human Factors Considerations for Outdoor Laser Operations in the Navigable Airspace," and three Aerospace Recommended Practices: ARP5535, "Observers for Laser Safety in the Navigable Airspace," ARP5572, "Control Measures for Laser Safety in the Navigable Airspace," and ARP5293, "Safety Considerations for Lasers Projected in the Navigable Airspace" in support of this request. Although the number of aviation incidents involving high-intensity lights have been much less than with laser light sources, such incidents have occurred and the FAA has little guidance on the use such devices in the aviation environment. As a result, the FAA has asked the SAE to develop guidance of high-intensity light devices.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2008 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
http://www.sae.org

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/ARP5560

Copyright SAE International
Provided by IHS under license with SAE
No reproduction or networking permitted without license from IHS

Not for Resale

TABLE OF CONTENTS

--`,,```,,,,````-`-`,,`,,`,`,,`---

Copyright SAE International
Provided by IHS under license with SAE
No reproduction or networking permitted without license from IHS Not for Resale

Copyright SAE International
Provided by IHS under license with SAE
No reproduction or networking permitted without license from IHS Not for Resale