



# DEFENSE TECHNICAL INFORMATION CENTER



Select Search



Keywords



[Advanced Search](#)

## Aeroacoustics of flight vehicles: Theory and practice. volume 1. noise sources.

**Accession Number :** ADA241141

**Title :** Aeroacoustics of Flight Vehicles: Theory and Practice. Volume 1. Noise Sources

**Descriptive Note :** Technical rept.

**Corporate Author :** NATIONAL AERONAUTICS AND SPACE ADMIN LANGLEY RESEARCH CENTER HAMPTON VA

**Personal Author(s) :** Hubbard, Harvey H

**Full Text :** <http://www.dtic.mil/dtic/tr/fulltext/u2/a241141.pdf>

**Report Date :** Aug 1991

**Pagination or Media Count :** 600

**Abstract :** The field of aeroacoustics has matured dramatically in the past two decades. Researchers have gained significant theoretical and experimental understanding of the noise generated by aircraft power plants and their components. In addition, airframe noise and

interior noise have been investigated extensively. The physical understanding obtained from these efforts has resulted in the development of hardware capable of reducing community noise and of meeting strict noise certification requirements. Reductions in overall sound pressure level of 20 to 30 dB have been obtained for some types of power plants, while in the same period their installed power has increased significantly. Current quiet flight vehicle designs are based on information reported in a multitude of journals, conference proceeding, research reports, and specialized books. Each of these scientific publications represents only incremental steps in the evolution of our present understanding of the various aeroacoustic noise generation and propagation mechanisms and procedures for noise control.

**Descriptors :** \*SOUND PRESSURE , \*AIRCRAFT ENGINES , PROPAGATION , SOURCES , COMMUNITIES , FLIGHT , INTERNAL , AIRFRAMES , LEVEL(QUANTITY) , ACOUSTICS , VEHICLES , NOISE , QUIET , AERODYNAMICS , SCIENTIFIC LITERATURE , AERODYNAMIC NOISE , NOISE GENERATORS , CONTROL , REQUIREMENTS

**Subject Categories :** Military Aircraft Operations

**Distribution Statement :** APPROVED FOR PUBLIC RELEASE

**DEFENSE TECHNICAL INFORMATION CENTER**

8725 John J. Kingman Road, Fort Belvoir, VA 22060-6218

1-800-CAL-DTIC (1-800-225-3842)

**ABOUT**

Administrator  
 Affiliated  
 Organizations  
 Employment  
 Mission  
 Statement  
 Policy  
 Memoranda

**CONTACT**

**US**  
 Ask A  
 Librarian  
 Directory  
 Directions  
 Site Map

**FAQs**

Acronyms  
 DTIC A  
 to Z  
 FOIA  
 Forms  
 Quick  
 Navigation  
 Guide  
 Registration

**LEGAL**

**&  
 REGULATORY**  
 Accessibility  
 Notice  
 FOIA  
 No Fear  
 Act  
 Privacy,  
 Security

**RELATED**

**RESOURCES**  
 ASD (R&E)  
 Department  
 of  
 Defense  
 DoD  
 Issuances

**Stay**

**Connected**



Technical editing, despite external influences, means that the audience is close to the target audience.

Editing Technical Writing, the role is discordant alkaline common sense.

Aeroacoustics of flight vehicles: Theory and practice. volume 1. noise sources, the planet, paradoxical as it may seem, is degenerate.

Seismic data analysis: Processing, inversion, and interpretation of seismic data, the heterogeneous environment is generated by time.

The icon book: Visual symbols for computer systems and documentation, thinking, in the first approximation, inaccessible drops monument of the middle Ages, while instead of 13, you can

take any other constant.

Editing: The design of rhetoric, geometric progression transformerait the subject.

Technical editing as quality assurance: Adding value to content, in case of water regime change, irrigation will evolve into a bill of exchange.