

Aerospace Information Guide

Locating Aerospace information

The following is a list of key shelf numbers for the aerospace subject area. If you are looking for a particular book please check the library catalogue.

Aerodynamics 629.1323	Aircraft structures & materials 629.134
Aerospace engineering 629.1	Aircraft systems 629.133
Aircraft – fixed wing 629.13334	Airships 629.13324
Aircraft – rotary wing 629.13335	Aviation safety 614.869
Aircraft engines 629.13435	Crashworthiness 656.04
Aircraft fuels 629.134351	Flight mechanics 629.132
Aircraft history 629.1309	Jet engines 629.134353
Aircraft instruments 629.135	Space vehicles 625.4

Useful Books

Armstrong KB, Barrett RT and Cole WF, Care and repair of 629.1342 ARM
advanced composites
Cutler J, Understanding aircraft structures 629.1341 CUT
Fielding JP, Introduction to aircraft design 629.133 FIE
Hancock GJ, An introduction to the flight dynamics of rigid aeroplanes 629.1323 HAN
Howe D, Aircraft loading and structural layout 629.13431 HOW
Jackson P and Jane's Information Group, Jane's all the world's aircraft 629.333
(Directory)
Jukes M, Aircraft display systems 629.135
Leishman JG, Principles of helicopter aerodynamics 629.13335 LEI
Mattingly JD, Elements of gas turbine propulsion 629.134353
Megson THD, Aircraft structures for engineering students 629.1341 MEG
Moir I and Seabridge A, Aircraft systems: mechanical, electrical, 629.133 MOI
and avionics subsystems integration
Raymer DP, Aircraft design- a conceptual approach 629.1341 RAY
Rolls-Royce Ltd, The jet engine 629.13435
ROL(Oversize)
SAE, SAE dictionary of aerospace engineering 629.103 SOC
Schmitt VR, Fly-by-wire: a historical and design perspective 629.134384 SCH
Sutton GP and Biblarz O, Rocket propulsion elements 629.134354 SUT
Oversize shelved on the bottom two shelves

E-books

Available via the Knovel service in the IMechE Virtual Library

Howe, Denis Aircraft conceptual design synthesis

Hyder AK, Spacecraft power technologies
Military Handbook - MIL-HDBK-17-4A: Composite Materials Handbook, Volume 4 - Metal Matrix

Available via the Books24x7 service in the IMechE Virtual Library

Aircraft engine design, AIAA, 2002
Aircraft engineering principles, Elsevier Science and Technology Books Inc, 2005
Aircraft engines and gas turbines, MIT Press, 1992
Aircraft landing gear design: principles and practice, AIAA, 1988
Aircraft structures for engineering students, Butterworth-Heinemann, 2007
Elements of propulsion: gas turbines and rockets, AIAA, 2006
Flight control systems, IET, 2000
Gas turbines: a handbook of air, land and sea applications, Butterworth-Heinemann, 2008
Introduction to aeronautics: a design perspective, AIAA, 2004
Introduction to aircraft flight mechanics: performance AIAA, 2003
Modelling and simulation of aerospace vehicle dynamics AIAA, 2000

Recent IMechE aerospace conferences and seminars

These are shelved alphabetically by year in the Conference/Seminar section of the library.

[Advanced aerospace joining](#), IMechE seminar 2007
[Advanced metallic manufacturing methods - the need for speed](#), IMechE seminar 2006
[Aerospace transmissions technology in to the 21st century](#), IMechE seminar 2004
[Ageing structures: growing old gracefully](#), IMechE seminar 2008
[Airworthiness: what is safe enough?](#) IMechE seminar 2004
[Appropriate testing of transmissions and mechanical systems](#), IMechE seminar 2006
[Design and manufacture for next generation composites applications](#), IMechE seminar, 2007
[Designing aircraft for high operational dependency](#), IMechE seminar 2005
[Emerging concepts in military aviation support](#), IMechE seminar 2003
[Novel propulsion systems for the 21st century](#), IMechE seminar, 2007
[Performance enhancing technologies for transmissions systems](#), IMechE seminar 2006
[Structural health monitoring and damage prognosis of metallic and non-metallic structures](#), IMechE seminar 2006
[Why not let it fail? The need for health monitoring](#), IMechE seminar, 2008

Useful Journals

Please check the library catalogue to see if the library subscribes to your required journal. Current issues of key journals are held on the journal display rack. The back copies of these journals are stored in the basement. Please ask a member of staff if you wish to view any and they will be retrieved for you. This generally takes 10-15 minutes.

The library has an extensive collection of historical journals including *Engineer* from 1856-, *Engineering* from 1866-

The aeronautical journal	1968-	Jane's defence weekly	2 years
Aerospace international	2005-	Jane's international defence review	2 years
Aerospace professional	2003-	Proceedings of the IMechE part G:	
Flight international	5 years	journal of aerospace engineering	1989-
International journal of engine research	2001-	Transactions of the Japan Society for	

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Aeronautical and Space Sciences 1988-

A number of journals are available electronically via EBSCOhost which is available in the IMechE Virtual Library. Click here to see a list of [titles](#) or to see [titles by subject](#).

Databases

- **IMechE Library Catalogue**

This contains details of all the books available in the library and title and abstract information for all papers and articles published in IMechE's conference, seminar, proceedings and journal publications back to 1984, and from 1847 to 1996.

- **Knovel**

This electronic books database is available in the Virtual Library pages of the IMechE website (members only). Search and download chapters of key engineering handbooks, including:

US Department of Transportation, Metallic Materials Properties Development and Standardization (MMPDS) (2003)

- **EBSCO Business Source Corporate**

This business database contains full-text articles from industry, trade and academic journals and is fully searchable for Members of the IMechE through the Virtual Library. It also contains substantial UK and global industry and market reports from Datamonitor (covering industries such as Airlines and Aluminium) as well as company profiles and economic reports for over 10,000 companies.

- **ESDU**

The library holds the **ESDU (Engineering Science Data Unit) datasheets** which contain validated data and design methods, principles, worked examples, programs and related equations on over 1,200 specific aerospace, process, structural and mechanical engineering topics. The ES DU database can be viewed in the library. Datasheets are available for week loan to members and cannot be photocopied.

Useful links

Aeronautics and Space Engineering Board	www.nationalacademies.org/aseb
Aerospace News	www.aerospacenews.com
Aerospace Partnership	www.aero-partnership.org.uk
Aerospace Technology	www.aerospace-technology.com
Airship Association	www.airship-association.org
American Institute of Aeronautics and Astronautics	www.aiaa.org
Association for Unmanned Vehicle Systems International	www.auvsi.org
BERR Aerospace, Marine and Defence	www.dti.gov.uk/sectors/aerospacemarinedefence/index.html
British Association of Aviation Consultants	www.baac.org.uk
British National Space Centre	www.bnsc.gov.uk/
Civil Aviation Authority	www.caa.co.uk
European Aeronautics Science Network	www.easn.net/
European Aviation Safety Agency	www.easa.eu.int
European Space Agency	www.esa.int/esCP/index.html

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Federal Aviation Administration www.faa.gov
Hoovers list of aerospace companies
www.hoovers.com/aerospace-&-defense/--HICID_1001--/free-ind-factsheet.xhtml
IMEchE Aerospace Industries Division www.imeche.org.uk/aero
International Civil Aviation Organization www.icao.int
International Federation of Airworthiness www.ifairworthy.com
Joint Aviation Authorities www.jaa.nl
NASA www.nasa.gov
NASA History Division <http://history.nasa.gov/on-line.html>
NASA Langley Research Centre www.nasa.gov/centers/langley
NASA Scientific Technical and Information Programme
www.sti.nasa.gov/STI-public-homepage.html
National Air and Space Museum www.nasm.si.edu
NATO Research and Technology Organisation (AGARD reports) www.rta.nato.int
Royal Aeronautical Society www.raes.org.uk
Society of Automotive Engineers (Aerospace section) <http://aerospace.sae.org>
Society of British Aerospace Companies www.sbac.co.uk