

JANUARY 1965 **AD614594**

DEPARTMENT OF ENGINEERING

an aerosonics bibliography:  
supplement no. 2

REPORT NO. **65-3**

ALAN POWELL  
LOUIS SOLOMON

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SUPPLEMENT NO. 2

Alan Powell  
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AEROSONICS LABORATORY  
DEPARTMENT OF ENGINEERING  
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## FOREWORD

The research described in this report, *An Aerodynamics Bibliography, Supplement No. 2*, by Alan Powell and Louis Solomon, was carried out under the technical direction of Alan Powell and is part of the continuing program in Fluid Motion and Sound.

This study is conducted under the sponsorship of the Fluid Dynamics Branch, Department of the Navy, Office of Naval Research.

Submitted under Contract Number Nonr 233(62), Project Number RR-009-01-01, Authority Number NR 062-229/11-19-62.

  
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## INTRODUCTION

This supplementary bibliography is to be used in conjunction with the University of California, Los Angeles, Engineering Reports No. 63-51 and No. 64-20, and contains available references to the open literature on aerosonics up to January 1965, not included in the first two volumes. In addition, the scope of the bibliography has been enlarged to include references to the fluid dynamics of supersonic jet flows.

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**ABBREVIATIONS OF TITLES OF JOURNALS AND ORIGINS  
OF REFERENCES CONTAINED IN THE BIBLIOGRAPHY**

**A.A.S.U.**

Department of Aeronautics and Astronautics,  
University of Southampton, U. K.

**AD**

Armed Services Technical Information Agency,  
Document Number

**Aero. Engr. Rev.**

Aeronautical Engineering Review

**Aero. Quart.**

Aeronautical Quarterly

**AFCRC**

Air Force Cambridge Research Center,  
Cambridge, Mass.

**AFOSR**

Air Force Office of Scientific Research

**AGARD**

Advisory Group for Aeronautical Research  
and Development, North Atlantic Treaty  
Organization

**AIAAJ**

American Institute of Aeronautics and  
Astronautics Journal

**Akust. Z.**

Akustische Zeitschrift

**AMRL**

Aerospace Medical Research Laboratory,  
Wright-Patterson AFB, Ohio

**Ann. Physik**

Annalen der Physik

**ARC**

Aeronautical Research Council,  
Air Ministry, U. K.

**ASD**

Aeronautical Systems Division, Air Force  
Systems Command, Wright-Patterson AFB, Ohio

**ASHRAEJ**

American Society of Heating, Refrigerating and  
Air-Conditioning Engineers Journal

**BRL**

Ballistic Research Laboratories,  
Aberdeen Proving Ground, Maryland

**Bull. J.S.M.E.**

Bulletin of the Japan Society of Mechanical  
Engineers, Tokyo

**CARDE**

Canadian Armament Research and Development  
Establishment, Valcartier, Canada

**Chem. Engr.**

Chemical Engineer, London

**Chem. Engr. Prog.**

Chemical Engineering Progress

**C.I.T.**

California Institute of Technology,  
Pasadena, California

**Compt. Rend.**

Comptes Rendus hebdomadaires des séances de  
l'Académie des Sciences, Paris

**DRML**

Defence Research Medical Laboratories,  
Canada

**DTMB**

David Taylor Model Basin,  
Washington, D. C.

**FTD**

Air Force Systems Command,  
Wright-Patterson AFB, Ohio  
Foreign Technology Division

**IAS**

Institute of Aerospace Sciences

**Ind. Engr. Chem.**

Industrial and Engineering Chemistry

**Izh. Fiz. Zh.**

Izhenenoy Fizicheskiy Zhurnal,  
Minsk

**I.R.E.**

Institute of Radio Engineers

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**Izv. Akad. Nauk SSSR**

Izvestia Akademii Nauk, SSSR

**J. Aero. Sci.**

Journal of Aeronautical Sciences

**J. App. Mech.**

Journal of Applied Mechanics

**J. App. Meteor.**

Journal of Applied Meteorology

**J. App. Phys.**

Journal of Applied Physics

**J.A.S.A.**

Journal of the Acoustical Society of America

**Jet Prop.**

Jet Propulsion

**J. Fluid Mech.**

Journal of Fluid Mechanics

**J. Inst. Fuel**

Journal of the Institute of Fuel, London

**J. Meth. Phys.**

Journal of Mathematical Physics

**J.P.L.**

Jet Propulsion Laboratory, California Institute of  
Technology, Pasadena, California

**J. Phys. Soc. Japan**

Journal of the Physical Society of Japan

**J.R.As.S.**

Journal of the Royal Aeronautical  
Society, London

**M.I.T.**

Massachusetts Institute of Technology,  
Cambridge, Mass.

**NACA**

National Advisory Committee for  
Aeronautics

**NAMC**

Naval Air Materiel Center, Philadelphia, Pa.

**NASA**

National Aeronautics and Space  
Administration

**NAVORD**

Naval Ordnance Laboratory Report,  
Washington, D. C.

**NOTS**

Naval Ordnance Test Station,  
China Lake, California

**NP<sub>L</sub>**

National Physical Laboratory,  
Teddington, Gt. Britain

**ONR**

Office of Naval Research

**Phil. Mag.**

Philosophical Magazine

**Phil. Trans. Roy. Soc.**

Philosophical Transactions of the Royal Society,  
London

**Phys. Rev.**

Physical Review

**Phys. Z.**

Physikalische Zeitschrift

**Prikl. Mat. Mekh.**

Prikladnaya Matematika i Mekhanika,  
U.S.S.R.

**Proc. Phys. Soc.**

Proceedings of the Physical Society, London

**Proc. Roy. Soc.**

Proceedings of the Royal Society, London

**Quart. J. Mech. App. Math.**

Quarterly Journal of Mechanics and  
Applied Mathematics

**RAE**

Royal Aircraft Establishment, Farnborough, Ministry  
of Aviation, London

**Rev. Sci. Instr.**

Review of Scientific Instruments

**R.P.E.**

Rocket Propulsion Establishment,  
Westcott, Gt. Britain

**Trans. Roy. Soc.**

Philosophical Transactions of the Royal Society,  
London

**UTIA**

University of Toronto, Institute of  
Aerophysics, Canada

**WADC**

Wright Air Development Center

**Z. angew. Math. Mech.**

Zeitschrift für angewandte Mathematik und  
Mechanik, Berlin

**Z. Flugwiss**

Zeitschrift für Flugwissenschaften,  
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## INDEX

The following index chart is intended as a guide to the major sub-divisions into which the references contained in this bibliography fall. Each vertical column corresponds to a particular subject or group of subjects listed below, and the presence of a cypher in any of these columns indicates that the reference, whose number is given in the first column, is mainly of a theoretical (T) or experimental (E) nature, or a review (R). Any reference covering more than one aspect of the subject is listed by the appropriate combination of these three letters, or is included under several sub-headings, or both.

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	Aero. sound Analogy Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo- Waves Hydro-
105905/Rn						T
47017/Kr					T	
52009/Hn			E			
53149/Ao					T	
53150/As			E	E		
55172/Ms					T	
56175/An			E			
56176/Sv	T					
57206/As					T	
57207/Ls				TE TR		TE
57208/Ms	T T					
58249/Bl		T			T	
58250/Bn			T		T	
59304/Bo					T	T
59305/Ps	T					T
60363/Bl					T T	
60364/Sb	T	T		T	T T	T T
61299/AL				E		
61300/LP		TE				TE
61301/Rr	R		R			
62200/An		E				E
62209/An		E	E			
62210/Bo						T
62211/Br	T				T	
62212/Bl				T		T
62213/Co					T	
62214/Dr					T	T
62215/LU		E			E	
62216/Md				T	T	
62217/Ss					T	
62218/Sb		T				T
62219/TH	T			T		
63177/AR		E				E
63178/Am				TE TE		
63179/AC			E			
63180/AC			E			E

	Aero. sound Analogy Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo- Waves Hydro-
63181/An						T
63182/An	E					
63183/An						TE
63184/An						T
63185/An			R R			
63186/An			R R			
63187/Br	TE					
63188/BL		E E				
63189/By						E
63190/BM				T		T
63191/Br				TE		TE
63192/Br		T				T
63193/Br						T
63194/Br						T
63195/Bl						T
63196/Bo						T T
63197/BP	TE		TE			
63198/Bw			E			E
63199/Bm	E					T
63200/BS			TE			
63201/BI		E E				
63202/BI		T				
63203/Co						T
63204/CP						T
63205/CR			T			T
63206/Co						T
63207/CY						T
63208/CP			T			
63209/Co	R		R			
63210/Ch		T	T			
63211/CT						T
63212/Cl						T
63213/CL		T				
63214/CH			TE TE			
63215/Bm		R				
63216/DS			E			E

	Aero. sound Acoustics Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo- Waves Hydro-
63217/DI		T T				
63218/Dr					T	
63219/DR						E
63220/Dc			T			
63221/Ec		E				E
63222/FC						TE
63223/FP		T				
63224/Gr		T	T			
63225/GK					T	
63226/GH		E E				
63228/GH	ER			ER		
63229/GL					T	
63230/Gc		T	T			
63231/Gz			R			
63232/GL					T	
63233/GV		T				
63234/Go			E			E
63235/Gc		R				
63236/Gz					T	
63237/Gb		T				
63238/NK			T		T	
63239/Nc	T					
63240/NE		E		E		
63241/II	E					
63242/Js		T				
63243/Js		R				
63244/Js		T T			T	
63245/KM					T	
63246/Kv			T			T
63247/KB	E		E			
63248/Kc					T	
63249/Kc					T	
63250/KD		R R				
63251/KB					T	
63252/Kc			E			
63253/Kc			T			

	Aero. sound Acoustics Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo- Waves Hydro-
63254/Kc			T			
63255/Kv	T				T	
63256/KI		TE TE				
63257/KE			T			
63258/Kc						T
63259/LI	T		T			T
63260/Lo					T	
63261/Lo						E
63262/LR			T			T
63263/Lm				T		
63264/LM	T					
63265/LI	R		R			
63266/Ly		T T				
63267/Lo	T T					
63268/Lo					R	
63269/MP					E	
63270/Mb			T		T	
63271/My	T				T	
63272/Mc						T
63273/Mc			T			T
63274/MN		T			T	
63275/MM		TE			TE	
63276/MN					T T	
63277/Mm	T				T	
63278/Mc		T				
63279/Mc			T			
63280/Mc				T		
63281/Mc			E			
63282/MS					T	T
63283/Mv						T
63284/MG						R
63285/OM		TE TE				
63286/OL			E			
63287/Pc	T					T
63288/Pv		T				T
63289/Rc					T	

	Aero. sound Analogies Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo-Waves Hydro.
63290/Ro					R	R
63291/Rr			T T			
63292/RD		E				
63293/Ro			T			
63294/RK		E	E			
63295/Rv					T	
63296/SJ		T				
63297/Sr			E		E	
63298/So					T	T
63299/Si		T	T			
63300/Sv		T				
63301/SS				T	T	
63302/Sr					T	
63303/SH					R	
63304/So				TE		
63305/So			T			
63306/So				E		E
63307/So					T	
63308/So						T
63309/Si				T		
63310/So	TE			TE	TE	
63311/So			E			
63312/Sv					T	
63313/TB					T	
63314/To		T			T	
63315/TS					T T	
63316/TC				T	T	
63317/VG					TE	
63318/Vo			E			E
63319/Wd					T	
63320/Wb						E
63321/WL	T	T				
63322/WW			TE			
63323/Vv					T	T
63324/Vb					T	
63325/Vo			T			

	Aero. sound Analogies Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo-Waves Hydro.
64027/Am						T
64028/AC						T
64029/Am	T					
64030/Am	R			R		
64031/Am	R					R
64032/Am	R		R			R
64033/Am		E		E		
64034/Am						T
64035/Am	R		R			R
64036/Am	R		R			R
64037/Am						T
64038/Am		T		T		
64039/Am						T
64040/AB						T
64041/Bv						T
64042/Bl						T
64043/Br		T				T
64044/Br						E E
64045/BB			T			T
64046/Br						T
64047/Br						T
64048/Bo			E			E
64049/Bo			E			E
64050/BW						T
64051/BN		T				T
64052/Bl						T T
64053/BB						T
64054/Bl						T
64055/Bo						T
64056/BE						T
64057/Br						T
64058/Bo			R			R
64059/BN						T
64060/Bo				T		T
64061/BN		E E				
64062/BW	T	T				

	Aero. sound Acoustics Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structures.	Thermo- Waves Hydro-		Aero. sound Acoustics Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Rocket noise Resonance	Sonic boom Propagation Structural	Thermo- Waves Hydro-
64063/Cr					T		64099/Hd			E			
64064/CH					T	T	64100/Hy						
64065/Cp	E						64101/HK		T		T		
64066/Cp					T	T	64102/Hh					T T	
64067/Cp					T		64103/Hy			T			
64068/Cr			TE				64104/Hg		T				
64069/Ch		T			T		64105/HS					TE	TE
64070/Cr					T T		64106/HM					E	
64071/Cw					T		64107/Hn				T	T	
64072/Cr			E		E		64108/ID		T			T	
64073/CC		E			E		64109/ID			R			
64074/CK					T		64110/Is					E	
64075/Pe			TE				64111/Js					T	E
64076/DH			TE				64112/Jr					E	
64077/Do		T			T		64113/KK		T		T		
64078/DY						E	64114/Kr		T		T		
64079/Do	T	T					64115/Kn						T
64080/Do	E						64116/KN					E	
64081/EI		E	E				64117/Kv		T		T		
64082/ol			T		T		64118/KO	TE		TE			
64083/ol			T				64119/KL					T	
64084/EC						E	64120/Ko	T		T			
64085/EN						E	64121/Kv				T		T
64086/FH						E	64122/Lo			E		E	
64087/Fn			E				64123/LS		TE		TE		
64088/FK						T	64124/Ln					T	
64089/Fm					T		64125/Lo					T	
64090/Fl							64126/Lo		T			T	
64091/FS	E						64127/Lo		T				
64092/Fv						T	64128/LS					E	E
64093/GI							64129/Lh					T	
64094/GS							64130/LR						T
64095/GL							64131/Ld					T	T
64096/Gv							64132/LJ					T	
64097/GK							64133/Lo					T	
64098/HM						T	64134/Lg		T				

	Aero. sound Analogies Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Recher noise Resonance	Static boom Propagation Structural	Thermo- Waves Hydro-
64135/Lv		T			T	
64136/Lv		T			T	
64137/Lv		T			T	
64138/LM		T				
64139/McB		T			T	
64140/ML					T	
64141/Mg			T			
64142/Ms		T			T	
64143/Ms		T				
64144/Ms	T	T				
64145/MM		T				
64146/MS	T					
64147/Ma					T	T
64148/Mr					T	
64149/Mw				T		T
64150/Ma				T	T	
64151/MW						T T
64152/Ms		T				
64153/MF		T		T		
64154/Mr				T		
64155/My			E			
64156/Mi					T	
64157/Ma					T T	
64158/MK	E		E			
64159/Ma	T					
64160/Ma					T	T
64161/MB			E			
64162/MS					T	
64163/MD					T	T
64164/Ma		T				T
64165/OL					E	
64166/Oi		E				E
64167/Pl					T	
64168/Pe	E					E
64169/Pe					T	
64170/PW					T T	
64171/PI		T				T
64172/PI	T		T			

	Aero. sound Analogies Techniques	Fatigue Boundaries Instability	Jet noise Suppression Noise	Prop. noise Recher noise Resonance	Static boom Propagation Structural	Thermo- Waves Hydro-
64173/Pe					E	
64174/RM					T T	
64175/Rr			T			T
64176/Rr				T		
64177/Rs	T	T				
64178/Ry				T	T	
64179/Rs	R		R			
64180/So					E	
64181/SM		E				
64182/So		T		T		
64183/So		T				T
64184/Sd		T				
64185/Si			T			T
64186/SS			T			T
64187/Sp	T			T		
64188/Sv		T			T	E
64189/SS					E	E
64190/So		E		E		
64191/Sb		T		T		
64192/ST					T	
64193/ST					T	
64194/Sb			T		T	T
64195/So					T	
64196/Sy		T				
64197/TL	E E				E	
64198/TC	T			T T		
64199/Tg			T			
64200/Ty				T		T
64201/Wi		T		T		T
64202/Ws				E		E
64203/Wo		T				T
64204/Wo		T				T
64205/Wi		T				T
64206/Wo		T				
64207/Ws		T				
64208/Wo			E E		E	
64209/WH		T		T		

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