12th Anglo-American Aeronautical Conference

Following the Anglo-American Aeronautical Conference held in Calgary in July 1971 the Society has a supply of the papers given at the Conference for sale. A set of the 21 papers cost £8. Individual papers are also available price 40p to 60p depending on the size.

The papers given were:----

- 1. The Third London Airport—The Process of Decision—Professor D. Keith-Lucas, Cranfield Inst. of Technology.
- 2. Siting of a Major Airport-D. R. Hemming, Canadian Air Transportation Administration.
- 3. Greater Utilization of Today's Airport System-N. R. Montanus, Port of New York Authority.
- 4. The Sonic Boom—Weighing its Implications for Policy Considerations—P. L. Eggleton, Transportation Development Agency.
- 5. Community Noise Levels of the DC-10 Aircraft—A. L. McPike, McDonnell Douglas Corporation.
- 6. Aircraft Wake Turbulence Avoidance-W. A. McGowan, NASA.
- 7. Some Meteorological Problems of Supersonic Flight-G. H. Gilbert and R. Lee, Canadian Meteorological Service.
- 8. Transonic Transports-L. T. Goodmanson, The Boeing Company.
- 9. Concorde Navigation System-H. Hill, BAC Filton.
- 10. Trends in Aircraft Propulsion-G. Rosen, United Aircraft Corporation.
- 11. Hydronautics in Canada—M. C. Eames and T. G. Drummond, Defence Research Establishment Atlantic.
- 12. Some Aerospace Technology Applications to Ground Transportation—S. I. Gravitz, The Boeing Company.
- 13. Wind Tunnel Investigations in Industrial Aerodynamics-R. L. Wardlaw, National Research Council of Canada.
- 14. All Weather Operations-Present Achievements and Future Prospects-K. W. Smith, RAE Bedford.
- 15. Automation in Air Traffic Control-G. A. Gilbert, Glen A Gilbert and Associates.
- 16. Mediator, a Programme for a British Advanced ATC System—Air Vice Marshal E. D. Crew, Ministry of Defence. (Published in this issue of the Journal.)
- 17. Synchronized Time and Frequency for Aeronautical Collision Avoidance, Communication, Navigation and Surveillance-J. E. Blouin, McDonnell Douglas Astronautics Company.
- 18. V/STOL Developments in Hawker Siddeley Aviation Ltd.—M. J. Brennan, HSA Kingston. (To be published in the Aeronautical Journal.)
- 19. Engines for Civil V/STOL-E. A. White and G. L. Wilde, Rolls-Royce (1971) Ltd.
- 20. The Aerodynamics of High Lift Illustrated by Augmentor-Wing Research—D. C. Whittley, The de Havilland Aircraft of Canada Ltd.
- 21. V/STOL Certification—J. F. Rudolph, Federal Aviation Administration.

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The Aeronautical Journal RAeS January 1972

MORGAN, SIR MORIEN

924000042172 Published online by Cambridge University Press

A New Shape in the Sky 60th Wilbur and Orville Wright Memorial Lecture

"Virtue in her shape"—this is the text of a lecture centring around the aerodynamic form of Concorde, with special reference to the role of the aerodynamicists at the Royal Aircraft Establishment in forcefully pushing the slender wing forward as the answer to economical supersonic civil flight.

Early thoughts on design themes—current fifteen years or so back—are outlined and the hardening of opinion in favour of the long slender shape during the work of the Supersonic Transport Aircraft Committee is described; the parallel approach being evolved across the Channel at that time is touched upon. From the subsequent 50/50 venture with France, Concorde has emerged with quite remarkable technical success—suggesting that a combination of Gallic fervour and British phlegm produces impressive results by any standards.

The Aeronautical Journal RAeS January 1972

ELLIOT, Professor H.

International Collaboration in the Next Generation of World Space Projects. Scientific Deep Space Probes.

Our knowledge of the processes occurring in the atmospheres of the sun and stars and in interstellar and interplanetary space is derived almost entirely from the spectrum of electromagnetic radiation arriving at the earth. By making use of balloons, rockets and satellites the spectrum available for study has been extended to cover a wide range of wavelengths extending from gamma rays at one extreme to long radio waves at the other. Some additional information is provided by meteorites, by cosmic rays and by the high energy solar particles emitted from flares.

The region of space that has been explored so far is confined to a tiny fraction of the solar system lying close to the ecliptic plane between the orbits of Mars and Venus. It is certain as we proceed farther afield that new and unsuspected phenomena will be encountered and at the same time our understanding of the situation as we know it at present will be increased.

In the next few years the area explored will be extended inward to Mercury and outward to Jupiter. The latter may well turn out to be scientifically the most interesting object in the solar system.

The Aeronautical Journal RAeS January 1972

MATHEWS, CHARLES W.

International Collaboration in the Next Generation of World Space Projects. The Space Shuttle and its Uses.

The paper centres on the discussion of a major forward step in the utilisation of space. This step involves a highly efficient means of transport of payloads to and from earth orbit. The space shuttle is a re-usable space vehicle which lifts off vertically under rocket power, and after its on-orbit tasks have been accomplished, enters and lands horizontally on a runway in the manner of an aeroplane. The multiplicity of uses of the shuttle are described, as well as the expected reductions in the costs of space payloads resulting from shuttle-type operations. These and other economic factors associated with the shuttle are compared with expendable systems and show a very favourable rate of return on the shuttle investment. Some of the interesting technical challenges are described.

The Aeronautical Journal RAeS January 1972

ARB Technical Notes

In 1957 the Air Registration Board initiated a series of Technical Notes to provide a permanent record of technical work performed by members of ARB staff. This series has never been publicised and circulation has been small and only to selected persons and organisations. A greater use which has been made of some recently produced Technical Notes has suggested that there could be wider general interest in current and future Notes, and possibly in some earlier ones. A list is attached of those Notes available from the ARB to those having a bona fide interest in the subject matter.



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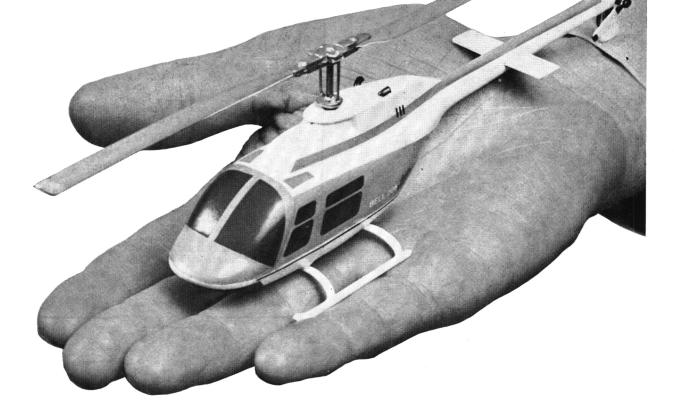
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