INTERNATIONAL

Week ending 4 April, 1987
Number 4056, Volume 131
ISSN 0015-3710

IN THIS ISSUE

1REED
BUSINESS
1 PUBLISHING

World News

Air Transport
Defence

General Aviation

Technology

Spaceflight

2

4

8

13

16

19

PORSCHE: THE WARM-UP LAP
IS OVER 21

Robin Blech samples the Porsche PFM.3200 engine in the company's Mooney 231.
THE GROWING PAINS OF
EXPRESS PARCELS 28
Ian Dormer describes how Dutch express-parcel carrier XP is facing up to American competition.
CFM56 MEETS THE CHALLENGE 33

The best-selling CFM56 turbofan is being developed for the 1990s. Graham Warwick reports.
TILT-ROTOR TAKES SHAPE 35
Graham Warwick and Ian Goold describe progress with the V-22 Osprey programme.
Avionics 37

Industry 38
Letters 40

Straight and Level 42
Published in association with Airline Business by Reed Business Publish-ing Ltd, Quadrant House, The Quadrant, Sutton, Surrey SM2 5AS, England.
© Copyright Reed Business Publishing Ltd. 1987
Founded 1909
Second-class postage paid at RAHWAY, New Jersey, and additional entries.
Postmaster: Send Address Corrections to "Flight International", c/o Mercury Airfreight International Lid. Inc., 10B Englehard Avenue, Avenel. N.J. 07001.

EDITORIAL

Editor David Mason
Associate Editor Peter Middleton
Assistant Editor Tom Hamill
Air Transport Editor David Learmount
Air Transport editorial Ian Dormer, Julia Hayley
Defence Editor Mike Gaines
Technical Editor Graham Warwick, BSc
General Aviation Editor Robin Blech
General Aviation editorial Ian Goold, Alan Postlethwaite
Photographer Janice Lowe
Production Editor Philip Jarrett
Sub-editor Graham Cowell
Art Editor Colin Paine
Technical Artists Ira Epton, Tim Hall, John Marsden
Washington correspondent Julian Moxon (202) 547 2624
Israel correspondent Arte- Egozi 03 945326
Pans correspondent Gilbert Sedbon 825 5261
US West Coast correspondent Norman Lynn (213) 377 8485
Wes Publishin t Germa g Directo n orresponden r Murray Johnston t Stefan Geisenheyne e r 061 21 526894 Editor-in-chief J M Ramsden
Advertisement Sales Manager Joanna Macpherson
Regional Manager, Continental Europe Linda Raabe
Regional Manager, UK/Southern Europe Mike Spray
Regional Manager, UK/Scandinavia Nicholas Wilcox
Advertisement Production Howard Mason
Advertisement Sales—France Pierre Mussard, 18,20 Place de la Made-leine, Paris 75008, France. Telephone: Pans42655014. Telex: 215334F BISPRSF.

Advertisement Sales—USA {East Coast) Clive Richardson, Business Press International USA, 205 East 42nd Street, New York, NY 10017 Telephone: (212) 867 2080. Telex: 238327
Advertisement Sales—USA (Mid-West) & Canada Gene Glendinning, Business Press International (USA), Cahners Piaza, 1350 East Touhy Avenue, P0 Box 5080, Des Plaines, Illinois 6001B. Telephone: (312) 635 9920.

Advertisement Sales—USA (West Coast) John Tidy, Business Press International (USA), 3700 Campus Drive, Suite 203, Newport Beach, CA 92660. Telephone: (714) 756 1057. Telex: 238327
Subscriptions Manager A. Walden
Telephone: England (0444) 459188 (UK and overseas subscription rates and agents can be found in this issue)
Telephone: 01-661 3315 (Display Advertisement Sales)
01-661 8877 (Classified)
01-661 3267 (Advertisement Production)
01-661 3321 (Editorial)
Telegram/Telex 892084 REEDBP G Access code: (TRP)
Facsimile (Group 111/11). Telephone: 01-661 3305
JA$C\ Member of the Audit Bureau of Circulations

Front cover: Porsche's PFM.3200-powered Mooney 231 poses for Flight photographer Janice Lowe during Robin Blech's appraisal. See pages 21-24.

FLIGHT INTERNATIONAL, 4 April 1987

Airbus at the brink S

hort-term thinking is becoming the
plague of the western economy. It
could also be the factor that changes
the shape of the civil aerospace industry
within the coming year.
There are two sides to the problem. One is British Aerospace's application for project funding from the British Govern-ment for wing development and pro-duction for the Airbus A330/340, for introduction in 1993-94. The other is the agonising which the German Government is suffering over its participation in the programme.
The British Government, exercising the traditional British predilection for compromise, has evidently offered £400 million of the £750 million requested by BAe, and expects the company to raise the remainder privately.
The company, in a statement from its chairman, Sir Austin Pearce, has said unequivocally, as it said at the time of the A320 launch, that if the Government does not come closer to meeting the request, then Britain will opt out of the new Airbus programme.
In the case of the A320, the Government was persuaded to come close to the requested amount, and the orders that followed have vindicated that decision handsomely. Unfortunately, orders do not constitute a financial return, and deliv-eries will have to rise above some 600 before a real return on the project funding is likely to be seen.
Logic then begins to exert its own excruciating pressure. No return on total Airbus Government investment is likely to be seen until 30 or 40 years have elapsed following the launch of the Airbus family. That is the nature of civil air transport investment. To continue to have a chance of achieving that return, Airbus cannot risk confining itself to a single market sector; it has to offer a family of aircraft. The family has to be in place over a rela-tively short period, to build up customer-confidence, loyalty, and an infrastructure offering support and spares to sustain further income. Having a family demands investment after investment, before returns begin to show on each tranche of cash. For the three main partner govern-ments to put up new launch aid amounting to $4,000 million, before seeing a real return on earlier investments, is indeed stretching the taxpayer's tolerance.

British refusal to participate in the A330/340 programme will leave Britain out of Airbus—permanently. Continental Europeans have little enough confidence

in British commitment to Europe at present, and that confidence has not been enhanced by Britain's reluctance to support the proposed funding increase in the EEC five-year science research and development programme.
Britain's problems are now parallelled
in Germany. There, the Finance Commit-tee of the newly elected Government is casting a deeply critical eye over the request for further funding, and the Minister of the Economy has taken the unprecedented step of canvassing indus-trial companies for finance, and offering them management participation in Deutsche Airbus in return. It is likely that Germany will produce the funding in some form, not least because 37,000 jobs are involved, and because Germany is unwill-ing to be seen as the partner which collapsed the Airbus edifice, producing problems at MBB, Aerospatiale, and Brit-ish Aerospace.

The British have fewer scruples. The company takes an entirely unsentimental view of Airbus participation, while the Government takes an equally un-sentimental view of the company's prob-lems. And the gap between the two looks too wide to be easily bridged.
Airbus Industrie stands at the point where its self-confidence is being subjec-ted to the ultimate test. Hesitation from both the German and British govern-ments could abort further Airbus programmes instantly, and European aerospace collaboration, already cracking in areas like combat aircraft and military helicopters, could fragment altogether.
If Britain or Germany do pull out of Airbus, all European countries will have to look again to the United States for aero-space collaborative work. There are those who view that option as preferable to European co-operation. British and other European companies already have several active joint programmes with American companies, and it may be no accident that the British Government has again been pressing the suit of McDonnell Douglas in its search for participation in aircraft development.

The question about to be asked may not be whether Airbus Industrie remains exclusively European. It may be, even at this late stage, a matter of whether Airbus embarks on marriage with an American partner as a whole, or whether its partners allow the Airbus consortium to lapse, and become, individually and separately, junior participants in American civilian aircraft programmes.