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Assistant Editor Tom Hamill
Air Transport Editor David Learmount
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Defence Editor Mike Gaines
Defence editorial Simon Beavis
Technical Editor Graham Warwick, BSc
Technical editorial Julian Moxon BSc
General Aviation editorial Ian Goold, Ian Parker BSc
Prod-jetton Editor Philip Jarrett
Sub-editor Graham Cowell
Art Editor Colin Paine
Layout Rita Molineux
Technical Artists Frank Munger, John Marsden
Paris correspondent Gilbert Sedbon 825 5261
US West Coast correspondent Norman Lynn (213) 377 8485
Tel Aviv correspondent Charles Fleming (03) 4813 43
Publishing Director James Weymouth
Editor-in-Chief J M Ramsden
Advertisement Manager Trevor Barratt
Assistant Advertisement Manager Clive Richardson
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Advertisement Sales—France Pierre Mussard, 18,20 Place de la Made-leine, Pans 75008, France Telephone Paris 2655014, Telex: 215334F BISPRSF

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' Front cover: As its certification approaches, Israel Aircraft Industries' Astra business jet is examined on pages 22-28.

'LIGHT International, 5 January 1985

EDITORIAL

Cold reality O

f all the people in aviation who deserve good wishes for 1985, the neediest must be the general-aviation community—those private and business aircraft manufacturers who struggle manfully to inject new life into moribund sales charts. While the commer-cial aircraft manufacturers are experi-encing a vigorous surge in sales, and the military aircraft manufacturers have the perennial requirements of national defence programmes (and budgets) to sustain them, the manufacturers and merchants of light-aviation equipment face an apparent resistance of their product (mournfully charted in Flight) to do anything other than bump along the bottom.

A small selection of figures will illus-trate the problem. In the United States alone—and the position must be much worse in Europe—shipments of all general-aviation aircraft have slid precip-itately during the last five years from 17,055 in 1979, to 11,881 in 1980, through 9,457 and 4,266, to 2,691 in 1983. That is a drop of nearly 85 per cent in a period of five years.
The biggest suppliers have seen the biggest losses. Cessna shipped 8,400 units in 1979, compared with 1,219 in 1983. Piper shipped 5,255 units in 1979, but only 661 in 1983.

Even the rotary-wing industry, seen only a couple of years ago as the oasis of promise in the continental desert, has felt the decline. Only 401 civil helicopters were sold in 1983. That was the lowest figure for 20 years, and followed shipments of 587 in 1982 and 1,072 in 1981.

Any self-respecting business executive, exerting the requisite amount of positive thinking and refusing to allow defeatist gloom to cloud his obligatory optimism, would assert confidently that these figures were merely symptomatic of the western world's economic recession; that we are now vigorously climbing out of that recession; and that a return to an upward trend will follow once "pre-owned" aircraft sales have mopped up the slack in the market.

It would be comforting to share that view, but it is worth looking at another set of figures which throw further light on the trend in general-aviation usage. The figures are published by Aerospace Indus-tries of America, Inc, and concern only US experience. It is reasonable to read across from them to the rest of the world, allow-ing European drag to compensate for Pacific Basin thrust.

Consider firstly the number of active private pilots. It has remained remarkably consistent, as follows: 343,276 in 1979, 357,479 in 1980, 328,562 in 1981, 322,094

in 1982, and 318,643 in 1983. More prob-lematical, and rather disturbing, is a steady decline in student pilot numbers, from 210,180 in 1979, through 199,833, 179,912, and 156,361, to 147,197 in 1983. If people are not starting pilot tuition at the flying schools, the prospects for general aviation in the future cannot be good. Equally revealing is the number of "personal" aircraft on the active register, which has varied hardly at all. The avail-able figures run from 1978 for five years to 1982, as follows:- 96,209, 94,427, 96,222, 95,510, 94,820. The story is similar for the number of hours flown in those aircraft, showing a slight decline, from 9,601 through 9,471, 8,894, 8,241, to 8,182 in 1982. Figures are in thousands of hours. If these indicators are as we read them, they show a picture that the general-aviation manufacturers may not like to see. The use of aircraft, and the entry of men and women into the ranks of private flying, is dropping back slightly. The number of aircraft in use has stabilised, and since aeroplanes, once built, are lovingly maintained and only reluctantly scrapped, new ones are not required in the numbers they once were. The market has stabilised; growth is at an end; and only limited replacements will provide sales in the foreseeable future. The numbers have been falling not because of the recession. They have fallen because there are as many aeroplanes around as people want.

That is the cold reality.
Unless... If this interpretation is correct, then the only way that the indus-try can grow again is to generate new interest in private flying. It cannot be done through the glamour appeal of flying; there are too many alternative calls on discretionary income, and the mystique of flying has long ago expired in the face of universal air travel. It can only come from the demonstration that private aircraft represent a reasonably inexpensive, cost-effective, flexible, fast, comfortable, and safe means of transport, with distinct advantages over cars, trains and commer-cial aircraft. Proving that is no small prob-lem, and cannot be achieved using 1950s airframe designs with 1930s engines. It will only be achieved by a massive act of faith supported by considerable invest-ment. If the industry can produce a range of fast-cruise aircraft, manufactured from composite materials using automated production techniques, powered by new fuel-efficient engines (the Japanese motorcycle industry might hold the secret) and using a new range of low-cost avionics to promote safer, simpler flying, then the industry may look towards a new dawn. If not, private flying has seen the last of its great years.