Commercial aircraft of the world
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n the commercial aircraft business, 1984-85
will be remembered as a year of strong
traffic growth, good airline profits, and an
upswing in sales—and the year in which the US manufacturers embraced with enthusiasm new design concepts based on advanced forms of propulsion.
Although the industry could not agree whether the correct generic name should be propfan, unducted fan, ultra high bypass engine or ultra bypass fan, the possibility that the first of this "next generation" aircraft could be available as soon as the early 1990s, with fundamentally superior operating costs, had an unsettling effect on the market.
The influence of the new design concept was most noticeable in the 130-160-seat mid-size category. This is where the most active proponents of the concept, Boeing, McDonnell Douglas, General Electric, Pratt & Whitney, Hamilton Standard and Allison, are targetting their research efforts. It is also the category where the US manufacturers are presently strong on the basis of their derivative tech-nology 737 and MD-80 families.

In contrast, the Europeans are still several years away from being able to deliver a turbofan-powered direct competitor.
The airlines were faced in 1984-85 with a difficult choice. Should they buy immediately the fairly conservative 737 or MD-80? Should they wait until 1988 for the all-new A320? Or should they skip a generation and hang on for a propfan/unducted fan powered "wonder-plane"?
Every airline is, of course, something of a unique case. In 1984-85, some topped up with 737-200s, others moved to the 737-300 or MD-82/83. Some opted for the A320—and some

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went for a mixture of 737-300s and A320s. Even if the Boeing and MDC estimates of a 1992 in-service date for the propfan/UDF proves to be a couple of years too optimistic, there is no avoiding the fact that, as each year passes, it will become an increasingly import-ant factor unfluencing airline buying behaviour (provided flight-tests using a modified 727 and a modified MD-80 do not prove noise and vibration are an insuperable Achilles heel). All the debate about the advantages and disadvantages of the propfan/UDF (and the concept has many of each) should not be allowed to obscure several other important events which have taken place in the year since the last Flight Survey of Commercial aircraft of the world.

In the "small jet" category, MDC made news by launching the MD-87 in January on the basis of orders from Austrian Airlines and Finnair. Fokker pulled off two important sales successes with the Fokker 100 selling ten, with five options, to KLM in May and 20, with 20 options, to US Air in July. BAe in the mean-time broke into China with the sale of ten BAe 146s and continued to press ahead with the stretched 146-300. Boeing dropped plans for a Tay-engined 737, but the return of MDC to this small jet category with the MD-87 must have worrying implications for Fokker and BAe.

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Despite the prospects of a certificated "unconventional" propfan/UDF 150 seater appearing, possibly as soon as 1992, sales of the 737, MD-80, and A320 continued to flow in fairly steadily. There were a handful of big orders for the 737 and MD-80, together with a series of "top-up" sales of small numbers. The airlines continued to react to the "small is beautiful" syndrome, resulting from the greater use of frequency as a competitive weapon, and to a shortage of suitable aircraft on the used market.

Both US manufacturers have sold standard body twinjets to China, but MDC consolidated its position by announcing at the Paris Air Show in June details of a co-operative arrange-ment covering the development of propfan/ UDF technology. , The lengthy negotiations between Pan Am and Airbus covering the sale of 28 aircraft were finally concluded in May. The deal involved 16 A320s and, together with large orders from Lufthansa (15) and Ansett (eight), helped Airbus to double the A320 orderbook. More recently came the Indian Airlines break-through.

The success of the smaller standard body jets was, to a certain extent, at the expense of the 757 and the widebodied twins. But the placing of many used aircraft, the sale of whitetails, and the re-appearance of airport runway congestions, helped to stimulate interest in the larger aircraft types.
This interest has not yet led to a decisive breakthrough for the 757, or a new round of orders for the 767. Airbus Industrie, however, won significant orders for seven A310-200s from THY in December, for two A310-200s from Thai Airways and for three A310-200s

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