Boeing's airliner launch criteria

Boeing says that the criteria for launching a completely new
product are not what they used to be. Chris Birkett presents
Boeing's market study.

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he rules of the game have changed,
according to Joe Sutter, Boeing Commercial Airplane's executive vice-president.* The commercial environ-ment of the 1960s, when large airlines dominated the skies and manufacturers were confident that handsome returns would outweigh initial development risks, has passed. Then, as airlines replaced their piston-powered fleets, it was largely a question of what share of a secure market each manufacturer could win.

Today's manufacturer is a gambler in a turbulent, high-risk marketplace. The rewards, says Boeing, go to the companies which adapt in an industry that has changed dramatically in the past few years, and will continue to change in the future.

Only big markets will justify Boeing's enormous research and development costs on a new design. The smaller, more diverse and often transitory requirements of a partly deregulated and recession-hit air transport industry require adapted versions of existing models. Flexibility is the key to success in limited markets, says Sutter.

Rival McDonnell Douglas has already proved that fact with its DC-9 line. Four separate fuselage stretches, wing and cockpit changes, and a succession of higher-gross-weight and higher-thrust engines have enabled MDC to capitalise on discrete market opportunities. The installation of an advanced technology propfan engine could see Boeing's rivals producing the DC-9 (MD-80 series) into the 21st Century, according to Sutter.

"Marketworthiness will receive equal billing with airworthiness", says Sutter. This premise is at the core of Boeing's plans for the 1990s. Its strategy, aimed at increasingly cost-conscious carriers, is to develop derivatives—an extended and long-range 767, a 100-seat 737 LITE, a stretched 737-300, and a 747 Advanced with a two-man crew. Boeing's next all-new project, a 150-seat aircraft to rival the A320, will probably not roll-out until the next decade (see Flight, February 16).

Sutter says: "Only when a large market is clearly identified, and the tenure of the market is justified by the incorporation of economically beneficial technological advances into the design, can the imple-mentation of an all-new programme be justified. Launching all-new designs for each emerging and perhaps transient market niche represents an unacceptable financial risk in today's environment of

•Joe Sutter. 64. was honoured last month when he was awarded the National Medal of Technology by President Ronald Reagan. The medal, which recognises those who
have contributed to technical developments which help
mankind, was established in 1980 as a companion to the
National Medal of Science. Sutter joined Boeing as an
engineer in 1945, and was formerly vice-president of the
company's 747 division.
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