

CIVIL AVIATION AUTHORITY PAKISTAN **FLIGHT STANDARDS DIRECTORATE**



This Information Bulletin, adopted by Flight Standards Directorate aims to keep members of Pakistani Civil Aviation community updated on latest items of common interest and developments within the aviation industry. It is anticipated that, the bulk of material would be of relevance to AOC, Training, Standards and helpful to the Safety Managers who implement their policies.

The Bulletin is designed to serve the objective of Flight Standards Directorate that is "To improve upon Safety Standards".

INFORMATION BULLETIN

AEROPLANE OPERATIONS IN X-WIND CONDITION

INTRODUCTION

Many pilots have encountered situations in which the crosswind conditions at an aerodrome were close to the limits contained in the applicable Operations Manual (OM).

Crosswind or tailwind component has been a casual factor in a significant number of occurrences investigated since 1990. These occurrences typically resulted in wingtip strikes, tail strikes, hard landings and runway excursions. The wind in these occurrences was frequently accompanied by gusty conditions.

PURPOSE

To raise awareness on the risks associated with operations in strong and / or gusty crosswind conditions, with the purpose of adding emphasis to the relevant positions of Pilot Training and providing flight crews with unambiguous information to support their decision making processes.

CONSIDERATIONS AND RECOMMENDATIONS

- Manufacturers when publishing demonstrated X-wind values, should specify if the gust factor is included or not.
- Operators and training organization should consider publishing operational X-wind limitations which take into account their operational experience and the operating environment (e.g runway width and state, prevailing weather condition). These limits should be based on the AFM maximum demonstrated X-wind values, when more limiting values are not published in the limitation section of the AFM. Operators should also carefully consider including the gust factor in the operating limitations, following the manufacturer recommendations if any.

RECOMMENDATIONS

Training and experience play a significant role in determining a pilot's ability to cope with challenging crosswind conditions.

Operators and training organizations are encouraged to emphasize, in their initial and recurrent training programmes, crosswind take-off and landing techniques relevant to the specific type as published in the AFM / FCOM / FCTM, taking into account applicable operational limitations. Full Flight Simulator (FFS) scenarios should make use of realistic crosswind and gust conditions.

The effects of the implementation of operating procedures and training programmes should be closely monitored through the management systems, and training programmes should be tailored based on the operational data collected.