SAFETY ALERT 2020-02
Issue 01
Date of Issue: 18th February 2020

SUBJECT:
CREW DEGRADED PERFORMANCE EVENT

REFERENCE PUBLICATIONS:
ICAO doc 9966

BACKGROUND:
The GCAA would like to bring to the attention of the industry the lessons learned rising from a recent incident. "During the second missed approach, immediately after selecting TOGA at 1900 feet, the aircraft entered into a descent of 9 degrees nose down with a right bank reaching a maximum descent rate of 4000 fpm. According to the FDR reading, the descent was arrested by 1300 feet AGL. The aircraft subsequently entered into a climb of approximatively 30 degrees nose up recording 9500 fpm climb rate. It then levelled off at the assigned altitude after breaching by 400 feet.” The event occurred at the final destination airport where severe weather conditions were reported.

The preliminary investigation disclosed several findings as probable causes/factors that degraded the crew performance. These probable causes/factors, not in the order of priority, are:

a) inadequate workload management.
b) ATC instructions during a critical flight stage.
c) multiple night flight sectors involving operation during the night Window of Circadian Low (WOCL).
d) night standby duty combined with inappropriate in-flight crew rest facility and environment.

This Safety Alert is issued to:

a) draw the attention of UAE Operators towards some of the probable causes/factors involving crew reduced performance;
b) alert operators regarding the possibility of the occurrence of similar incidents involving long duty periods inclusive of night operations, weather conditions and maneuvers.

RECOMMENDATIONS:
a) UAE operators should review their current system to ensure that crewmembers’ performance is not impaired by fatigue.
b) during the review, verify their compliance with CAR-OPS 1 Subpart Q provisions and in particular, verify that:
   1) their Flight Time Limitation scheme including any Variation (if granted) can prevent or
avoid degraded flight crew performance due to fatigue;
2) the established maximum FDP and minimum rest periods are based on the nature of operations undertaken. The limits should be measurable and can be evaluated;
3) crewmembers are appropriately rested and free from fatigue so that they can operate efficiently and safely during normal and abnormal situations; and
4) they are proactively considering fatigue as a hazard in all safety activities conducted within their system.

c) UAE operators should, when deciding the rest periods and rest conditions, correlate all available information to address any emerging risk posed by fatigue such as the frequency and pattern of scheduled FDPs, rest periods, time off, and accumulated effects of long working hours interspersed with minimum rest, rest facilities and environment and complexity of physical or mental work to be conducted.

d) UAE operators should also acknowledge that, despite their commitment and actions for reduction of fatigue in their operational safety environment, fatigue will remain a permanent hazard to safety. Consequently, UAE operators should:
1) develop clear operational policies to assist the flight crew on decision making when in-flight taking into account risks such as fatigue, weather conditions, technical issues, aircraft capabilities, ATC environment, etc.
2) enable and promote reporting of fatigue and safety promotion activities to provide crew with means to understand and manage their own fatigue; and
3) encourage their crew to maximize the use of automation in-flight to reduce their exposure to increased physical or mental work where and when appropriate. When deciding to increase use of automation, a Management of Change process should be initiated to address potential induced hazards.

CONTACTS:
fops@gcaa.gov.ae