

## INTERIM STATEMENT

GAL/2020/07/16/INTR/01

## **Accident Investigation Bureau**

Interim Statement on the serious incident involving a British Aerospace BAe 125-800B Aircraft with nationality and registration marks 5N-BOO operated by Gyro Aviation Limited, which occurred at Port Harcourt; Nigeria on 16th July, 2020.

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On 16th July, 2020 at 15:41 h, a BAe 125-800B aircraft with nationality and registration marks 5N-BOO, operated by Gyro Air Limited, departed Sultan Abubakar International airport, Sokoto (DNSO) for Port Harcourt International airport (DNPO) on an Instrument Flight Rules (IFR) flight plan for a positioning flight, with three crewmembers on board. The Pilot was the Pilot Flying (PF) while the Co-pilot was the Pilot Monitoring (PM).

At 16:41 h, 5N-BOO made contact with Port Harcourt Approach Control (APP) and reported estimates for Port Harcourt VOR (POT) as 17:03 h. Weather report for 16:30 h was passed to the crew as wind: 260/07 kt, visibility: 10 km, weather: nil, cloud: broken 240 m, QNH: 1012, temperature 25 °C, dew point: 23 °C.

At 16:55 h, 5N-BOO was cleared to descend flight level (FL) 070.

At 17:00 h, 5N-BOO was further cleared to descend 2,400 ft on QNH 1013 hPa; and on reaching was cleared for ILS approach runway 21. 5N-BOO reported established on the extended runway centre line and continued the approach.

At 17:00:15 h, about 20 NM to POT, ENG 1 FIRE<sup>1</sup> warning (aural and visual) came ON. The flight crew stated in the post-occurrence interview that the engine parameter indications were normal, including Inter-stage Turbine

<sup>&</sup>lt;sup>1</sup> ENG 1 FIRE: Annunciation that is illuminated red indicating fire in engine number 1. This annunciation is accompanied by red master warning flashers on the glare shield. The flight crew is expected to acknowledge and to cancel the aural warnings.

Temperature (ITT<sup>2</sup>) and Exhaust Gas Temperature (EGT<sup>3</sup>).

Cockpit voice recordings indicated that memory items and then ENGINE FIRE IN FLIGHT checklist procedures as contained in the Hawker 800XP Pro Line 21 Emergency Checklist were executed (throttle was retarded and fuel was shut as part of the procedure, fire extinguisher bottle was also discharged). The ENG 1 FIRE warning went OFF. A minute and forty seconds later, while still executing the ENGINE FIRE IN FLIGHT checklist, the ENG 1 FIRE warning came back ON.

At 17:03 h, 5N-BOO declared; *bravo oscar oscar we're declaring MAYDAY* we have a single engine out. The message was not copied by Air Traffic Control (ATC) and the flight crew continued with the checklist.

The flight crew then discharged the second fire bottle onto the engine. The ENG 1 FIRE indication went OFF and then came ON again. This indication came ON once more and then OFF. The flight crew stated that at that point, they suspected that the ENG 1 FIRE warning was spurious.

At 17:04 h, APP requested to know if operations were normal to which the flight crew said that they declared MAYDAY on account of "engine troubles". Emergency procedures were then activated by ATC.

At 17:06 h, 5N-BOO reported its position to APP as 10 NM and declared intention to land. 5N-BOO was then handed over to Tower. The Aerodrome Rescue and Fire Fighting Service (ARFFS) positioned on standby.

At 17:11 h, 5N-BOO landed on runway 21 without any further incident.

<sup>&</sup>lt;sup>2</sup> ITT: Inter-stage Turbine Temperature, is the temperature of the exhaust gases between the high pressure and the low-pressure turbines. (Source: Skybrary).

<sup>&</sup>lt;sup>3</sup> EGT: Exhaust-gas temperature, measured immediately downstream of turbine[s] or exhaust valve. (Source: Cambridge Aerospace Dictionary, Second Edition).

After landing, the flight crew requested Tower to cancel the MAYDAY declaration. The crew disembarked the aircraft uninjured.

The serious incident occurred in daylight.

## **ACTION**

The investigation is concluded and the draft final is ready for final technical review. Upon completion, the report will be sent to stakeholders for their substantial comments in line with the requirements of section 6.3 of the International Civil Aviation Organization (ICAO) Annex 13 to the convention. This interim statement is being issued on the 1<sup>st</sup> anniversary of the serious inccident in accordance with ICAO Annex 13.

In accordance with Annex 13 to the Convention on International Civil Aviation, Civil Aviation Act 2006, Civil Aviation (Investigation of Air Accident and Incidents) Regulations 2019, the sole purpose of this Investigation is to prevent Aviation accidents and serious incidents. It is not the purpose of any such investigation and the associated Investigation report to apportion blame or liability.