SOUTH AFRICAN CIVIL AVIATION AUTHORITY

INTERIM STATEMENT

The information provided herein is of an interim nature. Readers are advised that new information may become available that may alter this interim statement prior to the publication of the final report.

1. The South African Civil Aviation Authority (SACAA) is conducting a safety investigation into a ferry flight involving ZS-HXS, a Robinson R22 Beta which crashed immediately after take-off on 23 March 2016 at Rand Airport (FAGM).

2. The investigation is being conducted in accordance with the international protocol set out by the International Civil Aviation Organisation (ICAO). The occurrence is investigated by a team of two investigators from the South African Civil Aviation Authority.

3. History of flight

a) The pilot accompanied by a passenger on-board a Robinson R22 Beta helicopter took-off from the front of hangar 56 at Rand airport (FAGM). The purpose of the flight was to ferry the helicopter to Newcastle aerodrome (FANC). The flight was conducted under visual flight rules (VFR). The pilot stated that he contacted the Air Traffic Control (ATC), requested clearance for take-off with 3 hours of fuel endurance and planned 2 hours flight time to FANC. The pilot was given QNH of 1026, wind as light and variable, and temperature was 16 degrees. The FAGM ATC cleared the pilot to cross all runways to the south below 6000ft above mean sea level (AMSL).

b) During take-off the pilot noticed that the helicopter was not producing enough power for take-off, he landed the helicopter and asked the passenger to re-position to the helipad in front of the tower. The pilot then requested from the tower to do a circuit around the lake for power checks. After the circuit, the pilot proceeded to the front of hangar 56 and landed safe. The pilot contacted the ATC again and requested to reposition to the helipad in front of the tower to collect his passenger. Once the passenger was on-board, the pilot took-off again for FANC. During take-off the helicopter experienced low rotor revolutions per minute (RPM). The pilot noticed the

needles on the tachometer gauge dropping. The pilot stated that he rolled the throttle to increase power to the engine, went back slightly on the cyclic to gain height and then moved the cyclic forward to increase airspeed. The helicopter started losing height rapidly and the skids contacted the ground. The main rotor blades severed the tail boom into pieces and the helicopter came to rest on its right hand side.

c) The aerodrome aircraft's rescue and firefighting (ARFF) vehicles were dispatched to the accident side. The helicopter wreck and debris were found on the vicinity of runway 35 grassy areas.

d) The accident occurred during daylight conditions at a geographical position determined to be 26°14'23.3" South 028°09'06.0" East, at 0600Z, elevation 5482 ft, Rand Airport.

Figure 1: Google map showing position of accident site.

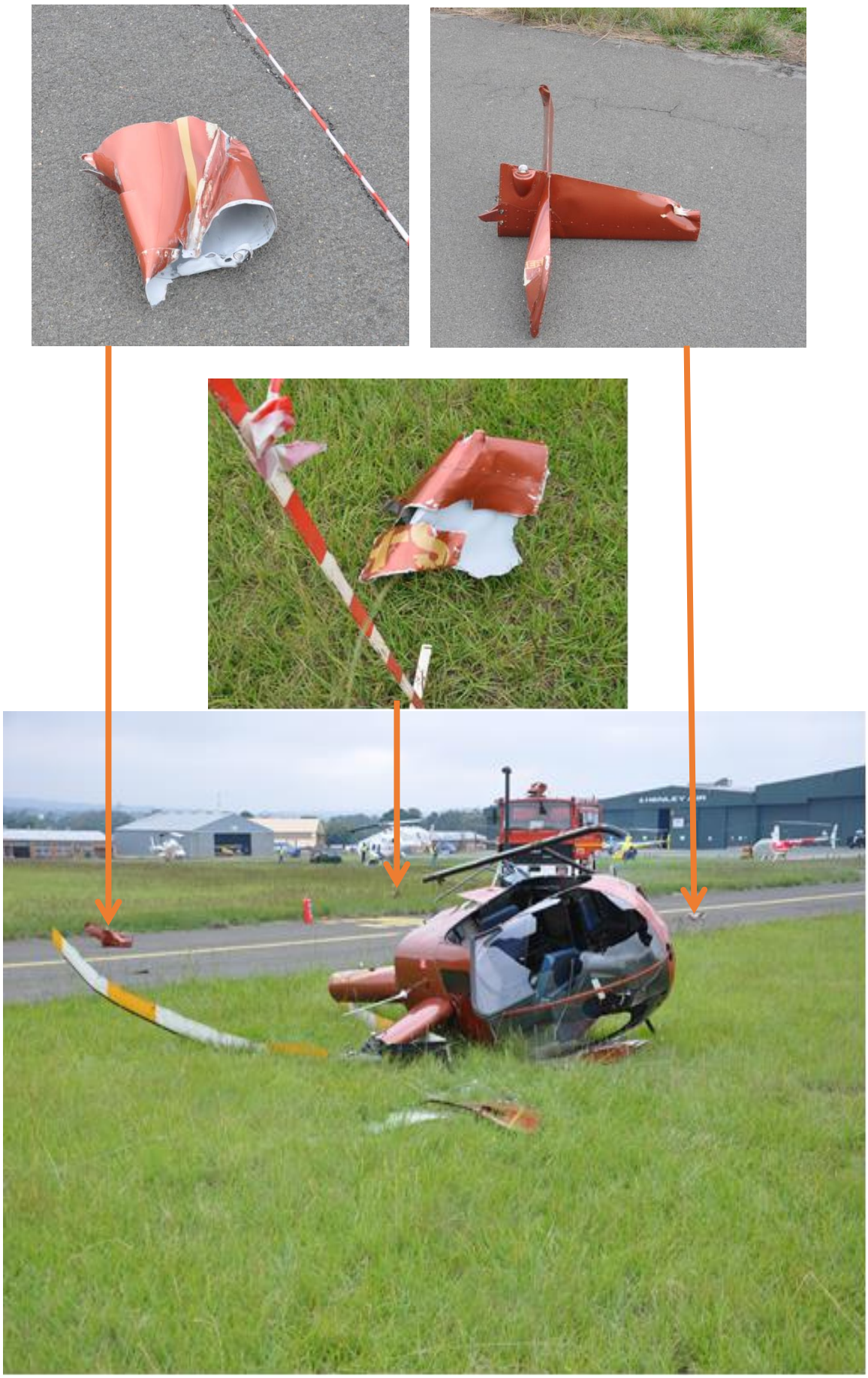

FIGURE 2: Other parts of the wreckage as found at the accident site.

4. **Although the investigation is ongoing, the following findings have been made:**

a) The pilot was qualified and licenced for the flight in accordance with the existing regulatory procedures and he had a valid medical certificate.

b) The helicopter was maintained and equipped in accordance with regulatory procedures; this was done by an approved AMO with a valid certificate of airworthiness.

c) The helicopter was being ferried to New Castle, KwaZulu Natal at the time of the accident.

d) The ambient air temperature was not considered to be a contributing factor to the accident.

e) The helicopter experienced low rotor RPM after take-off. The pilot stated that he rolled the throttle to increase power to the engine, went back slightly on the cyclic to gain height and then moved the cyclic forward to increase airspeed. According to the pilot operating handbook, if RPM drops below 102%, lower collective. The pilot was supposed to immediately roll throttle on; lower collective and apply aft cyclic to restore RPM.

f) The weight of the helicopter during the operation was not considered to be a contributing factor to the accident.

5. The SACAA investigation is on-going and we will be looking into other aspects of this accident which may have safety implications.

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