

IN-SERVICE DIFFICULTY REPORT: ABNORMAL ATTITUDE OF AIRCRAFT AT START-UP

Aircraft Details	
Manufacturer	Leonardo S.p.A
Model	AW139
Registration	9M-PMA
Serial Number	31807
Operator	Polis Diraja Malaysia

Defect Description:

Upon start-up and pilot releases brake, the aircraft tend to move to the left unintentionally even when the collective maximum pitch on ground. (Letter Pilot stated 6 Oct 2019 happened 3 times).

- C of A: 29 Nov 2018
- Emri:- Pilot complaint 3-4 times.
- Potential defect:

Brake.
AP switch.
Tail Rotor.
Nose wheel lock.

Chronology of defect

No	Occurrence Date	Description	Remarks	Maintenance Action Taken
1.	4 March 2019	First occurrence reported verbally by SUPT Abdussamad during starting at SAREX, Langkawi.	Briefed by LAE to the pilot on other operator pilot's experience stated same cases happened due to left pilot leg caught by the centre pedestal	GVI of the nose steering lock and nose landing gear found satisfactory and no abnormalities found.
2.	20 July 2019	At Ipoh, SUPT Abdussamad verbally complaint- heli turn itself while he was still doing post start-up cx and the movement is quite significant. This happened even the parking brake was applied satisfactorily, and no power being applied from the collective	Suspected nose landing gear was not straightened after parking at the bay. This make him could not engage the nose landing gear steering lock (the unlock Amber light just blinking instead of GREEN LOCKlit up)	LAE perform operational check of parking brake system to ensure both side of landing brake release equally and not blocked one side found no abnormalities.

No	Occurrence Date	Description	Remarks	Maintenance Action Taken
3.	18 Sept 2019	Techlog #01906 pilot DSP Hafiz reported RH pedal cannot align during taxi.	Reconfirmation with pilot turns out pedal to be stiff instead of cannot align.	GVI of tail rotor control and rotor flight controls operation test c/o as per UMC-PMA-19-017 found satisfactory.
4.	6 Oct 2019	Letter from SUPT Abdussamad to Komander Pangkalan Semenanjung dated 7 Oct 2019 stated- 1. Before start up, pilot c/o pre flight checks to ensure wheel brake on and found nose wheel (unlock) flickering i.e. nose wheel haven't engaged slot to lock. 2. After start up and pilot releases break, aircraft turned to left unexpectedly even when the collective maximum pitch on ground (MPOG).	GVI of nose wheel found not locked during centre position.	After every towing to the apron, LAE ensure nose steering in lock position (GREEN Light ON).
5.	7 Oct 2019	Galaxy (Tuan Azillah) initiate interview meeting with pilot and co-pilot on the occurrence; 1. ASP Firdaus (Co-pilot) – happened during flight with Tuan Abdussamad (Pilot)	-	-
6.	10 Oct 2019	2. SUPT Rajan – Nil experience of occurrences	-	-
7.	16 Oct 2019	3. SUPT Azizie & DSP Fairuz – Verbally acknowledge on the reported occurrence	-	-

No	Occurrence Date	Description	Remarks	Maintenance Action Taken
8.	21 Oct 2019	4.DSP Jefri – had not experienced any abnormal swing and will inform if he experience any on his next flight (22 Oct 2019)	No feedback received on the abnormalities	-
9.	24 Oct 2019	5. ACP Noryazid – Galaxy requested to down the aircraft for 2-3 days for defect rectification.	He advised to perform during next base check due operational requirement. Note: 6 M Insp – due March 2020 300H Insp – remaining 270:00H or any base maint. opportunity.	-
10.	25 Oct 2019	6. SAC Noorsham – advise LAE to ensure nose steering in lock position (GREEN Light ON) after every towing to apron	Carried out since 6 Oct 2019.	-

Maintenance:

Chronology on carried out maintenance upon pilot complaint.

Suggested maintenance inspection to be carry out:

Corrective Maintenance:

After every towing to the apron, LAE to ensure nose steering in lock position (GREEN Light ON) (c/o since 6 Oct 2019).

Preventive Maintenance:

No	Description	Date	Remarks
1.	Brake	TBA	Pending
2.	Nose wheel Lock	TBA	Pending
3.	AP switch	TBA	Pending
4.	Parking brake	TBA	Pending
5.	Tail rotor rigging	TBA	Pending
6.	Nose Wheel not in centre position in lock position	TBA	Pending

Additional action: Our Technical Service is currently in liaising with LH Heliwise Support Team if any abnormalities detected on the HUMS data regarding this defect.

NOTE: Need to discussed with SUPT Abdussamad details pertaining to his complaint. Tentatively to see him dated **XXXX** (suggest Syafrul n Azillah n Ismail).