TATC File No. P-3460-59
MoT File No. 5802-174943

TRANSPORTATION APPEAL TRIBUNAL OF CANADA

BETWEEN:

Gerhardt Meintjes, Applicant

- and -

Minister of Transports, Respondent

LEGISLATION:
Aeronautics Act, R.S.C. 1985, c. A-2, s. 7.1

Review Determination
Franco Pietracupa

Decision: March 30, 2009

Citation: *Meintjes v. Canada (Minister of Transport)*, 2009 TATCE 6 (review)

Heard at Winnipeg, Manitoba, on January 20, 2009

Held: I confirm the decision of the Minister of Transport to suspend the applicant's group 4 instrument flight rating.

File nos.: O-3458-59 (Phylippe Lambert)

P-3460-59 (Gerhardt Meintjes)

I. BACKGROUND

[1] On December 17, 2007, following a flight test, the Minister of Transport issued a notice of suspension to the applicants, Phylippe Lambert and Gerhardt Meintjes, informing both pilots that they no longer demonstrated the required standards for a group 4 instrument flight rating (IFR) on a SK 76 aircraft, pursuant to section 7.1(1)(b) of the *Aeronautics Act* (Act). It is alleged that during a flight test (in simulator) conducted by a qualified approved check pilot (ACP), Messrs. Lambert and Meintjes, operating as a crew, descended below the decision height (DH) during an instrument landing system (ILS) approach.

[2] Both files were heard together. It is alleged that, during an ILS approach the crew became preoccupied with an engine malfunction and, coupled with a lack of standard operating procedures (SOPs) callouts from the pilot not flying (PNF), the crew descended below the DH.

[3] As such, the determination that will be rendered by the Tribunal is two fold:

1. Did the crew fail to apply the performance criteria of section 10.5.1 of the *Approved Check Pilot Manual* (TP 6533E, ACP Manual, 8th edition, February 2006) in regards to the tolerances for the ILS approach?

2. Did the crew initiate the missed approach (MA) procedure at DH, and drop below the DH due to aircraft inertia?

II. *AERONAUTICS ACT*

[4] Section 7.1(1)(b) of the Act provides as follows:

> **7.1** (1) If the Minister decides to suspend, cancel or refuse to renew a Canadian aviation document on the grounds that
>
> . . .
>
> *b*) the holder or any aircraft, airport or other facility in respect of which the document was issued ceases to meet the qualifications necessary for the issuance of the document or to fulfil the conditions subject to which the document was issued.

[5] Section 8i) of the *Flight Test Guide* (TP 9939E, 7th edition, December 2007) provides the following performance criterion:

> Assessment will be based on the candidate's ability to:
>
> . . .
>
> i. on the intermediate and final segments of the final approach course:
>
> . . .
>
> ii. fly the approach in a stabilized manner without descending below the applicable minimum altitudes depicted on the approach chart (+as required/ –0 feet);
>
> iii. descend to and accurately maintain the Minimum Descent Altitude (MDA) and track to the Missed Approach Point (MAP) or to the recommended minimum visibility that would permit safe completion of the visual portion of the approach with a normal rate of descent and minimal manoeuvring**.**

III. EVIDENCE

A. Minister of Transport

(1) Christophe Heusler

[6] Christophe Heusler is the ACP who conducted the pilot proficiency check on the crew of Mr. Meintjes, the pilot flying (PF) and Mr. Lambert, the PNF. Mr. Heusler explained and confirmed that the pre-flight briefing had been conducted prior to the check ride, and that the flight crew concept (or crew resource management) had been evaluated. He commented on the IFR script that he used during the evaluation (exhibit M-9).

[7] Further testimony indicated that the check ride was uneventful until the crew was to commence an ILS approach to runway 12, as per the scenario. Mr. Heusler testified that after the hold and into the approach, an engine oil pressure anomaly was introduced. As the PNF began the checklist, the standard operating callouts were omitted. At the DH of 980 feet, the crew continued to descend to 910 feet, and then the missed approach was carried out. From Mr. Heulser's recollection, no minimum callout was made nor was the missed approach call done.

[8] In cross-examination, Mr. Heusler confirmed that he was being monitored by Transport Canada during the check ride, and that the simulator can fly differently than the actual aircraft. He also indicated that Inspector René Boudreau of Transport Canada was operating the instructor operator station (IOS) panel in the simulator. Some doubt as to Inspector Boudreau's qualification to operate this panel was clarified with a written and signed statement from Flight Safety International (exhibit M-10).

(2) René Boudreau

[9] Inspector Boudreau is an experienced pilot and inspector with Transport Canada. He testified that he was operating the IOS panel when he introduced the engine malfunction to the crew. In his testimony, no callouts, standard operating calls, were made during the ILS approach. As the crew approached the DH of 980 feet, no callouts were made, and the crew descended to an altitude of 910 feet before the PF initiated the missed approach manoeuvre. At that time, he glanced at the ACP and the decision was made to freeze the simulator. Inspector Boudreau recalled that the engine malfunction was inserted during the approach sequence prior to the final approach fix, as his script indicated (exhibit M-9).

(3) Martin Faucher

[10] Martin Faucher testified mainly on the requirements and standards of the ACP and the role of the Transport Canada's inspector during the monitor of the ACP.

B. Applicant

(1) Phylippe Lambert

[11] Mr. Lambert testified that although he did confirm an altitude of 910 feet prior to the missed approach, the actual missed approach did commence at 980 feet, because the inertia of the aircraft may have caused the loss of 70 feet. Further testimony centered on when the engine malfunction had been inserted. As such, the situation may have resulted in the crew being preoccupied by checklist procedures during the critical phase of the approach.

IV. DISCUSSION

[12] The Minister's case is based on the specific fact that the crew had descended below the prescribed DH. It is further alleged that the PF's (Mr. Meintjes) situational awareness was limited due to the absence of standard operating callouts from the PNF (Mr. Lambert).

[13] From the documentary and oral evidence submitted, it is clear from the final approach fix (FAF) inbound that the PF and the PNF were handling an engine malfunction while conducting an ILS precision approach.

[14] From the FAF inbound, the crew was required to descend to a DH of 980 feet above sea level (ASL), as per the landing minima provided in sections 602.128(2)(a) and (3)(a) of the *Canadian Aviation Regulations*, SOR/96-433, (CARs, exhibit M-7):

> **602.128 (2)** No pilot-in-command of an IFR aircraft shall, unless the required visual reference necessary to continue the approach to land has been established,
>
> *(a)* in the case of a CAT I or CAT II precision approach, continue the final approach descent below the decision height; or
>
> . . .
>
> **(3)** Where the pilot-in-command of an IFR aircraft conducting an instrument approach does not establish the required visual reference referred to in subsection (2), the pilot-in-command shall initiate a missed approach procedure
>
> *(a)* in the case of a CAT I or CAT II precision approach, at decision height.

[15] The tolerances for the DH are set out in sections 10.5.1(d)(ii) and (iv) of the ACP Manual (TP 6533E, 8th edition, exhibit M-2):

> 10.5.1 The tolerances for instrument flight sequences must be respected by all ACPs. Each candidate must demonstrate aircraft control to maintain:
>
> . . .

(d) altitude

. . .

(ii) during approach and for minimum IFR altitudes associated with the intermediate and final segments (e.g., FAF, beacon crossing or step-down fixes) within + as required and / - 0 feet,

. . .

(iv) for operators exercising the exemption to use MDA as DA, the altitude loss below the MDA shall not exceed 50 feet during a missed approach.

[16] It is clear from all documentary and oral evidence that the crew had descended through hard altitude. It is also important to discuss the critical need for the crew to adhere to proper SOPs. Amendment 3 of the *Standard Operating procedures Manual* for the SK 76 aircraft (March 15, 2007) provides standard company callouts for precision approaches (sections 2-2-13 and 2-2-14, exhibit M-5):

(PNF)	**(PF)**
Final approach fix. Altimeters and Instruments cross checked	ROGER
500 feet above minimums	NO FLAGS
100 feet above minimums	APPROCHING MINIMUMS
. . .	. . .
Minimums or Missed Approach Point; Go around	GOING AROUND

Oral evidence indicated that these situational awareness calls were not heard and, as such, played a key role in the crew descending below DH.

[17] A final point to address would be the "dip" which may have resulted in the SK 76 aircraft starting the missed approach at 980 feet as required, but not having a positive rate of climb until 910 feet due to inertia.

[18] The ACP Manual allows an exemption only for operators with a letter of authorization, and where the maximum limit is 50 feet below the DH of 980 feet. As "no missed approach" call was made, it is impossible to confirm in any circumstances that the descent was initiated at 980 feet. In a multi-crew aircraft, it is the responsibility of the crew to monitor its DH at all times.

V. DETERMINATION

[19] I confirm the decision of the Minister of Transport to suspend the applicant's group 4 instrument flight rating.

March 30, 2009

Franco Pietracupa

Member