



REPUBLIC OF NAMIBIA

MINISTRY OF WORKS AND TRANSPORT

DIRECTORATE OF AIRCRAFT ACCIDENT INVESTIGATION

CIVIL AIRCRAFT ACCIDENT REPORT

ACCID/12518/01-01

OPERATION : PRIVATE

AIRCRAFT : V5-HTM

LOCATION : OUTJO AIRFIELD

DATE : 25 JANUARY 2018



REPUBLIC OF NAMIBIA



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Date: 16 December 2019

To : Minister of Works and Transport
Deputy Minister of Works and Transport
ED: Ministry of Works and Transport

From : Director: Aircraft Incident Investigation



RE: CIVIL AIRCRAFT ACCIDENT REPORT

Please find attached the final report on the above subject accident. In accordance with the International Civil Aviation Organization Annex 13 – Aircraft Accident and Incident Investigation – Standard 6.13, final reports shall be published as soon as possible in the interest of accident prevention.

It is recommended that copies of these final reports be made available to the public and other interested parties upon request. Your approval is therefore sought to release the said reports.

Theo Shilongo

ACTING DIRECTOR: AIRCRAFT ACCIDENT INVESTIGATION

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17 DEC 2019 2

Namibia
Ministry of Works and Transport

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FOREWORD

This report presents the factual information, data analysis, conclusions, and safety recommendations reached during the investigation. The purpose of the investigation was to establish the circumstances surrounding this accident.

In accordance with the provisions of Annex 13 to the convention on International Civil Aviation Organization, and Civil Aviation Act, (act No 6 of 2016) , the accident's analysis, conclusions, and safety recommendations contained therein are intended neither to apportion blame nor to single out any individual or group of individuals. The main objective was to identify the systematic deficiencies and draw lessons, from the occurrence, which might help to prevent accidents and incidents in the future. To this end, many a time, the reader may be interested in whether or not an issue was a direct cause of the accident (that has already taken place), whereas the investigator is mainly concerned with the prevention of future accidents/incidents.

As a result, usage of this report for any purpose other than (the latter and spirit of Annex 13 and Civil Aviation Act (Act No. 6 of 2016 or other relevant statutes) prevention of similar occurrences in the future might lead to erroneous interpretations and applications.

ABBREVIATIONS

AMO	-	Approved Maintenance Organization
SPL	-	Student Pilot License
AMSL	-	Above Mean Sea Level
NCAA	-	Namibian Civil Aviation Authority
°C	-	Degrees Celsius
ATO	-	Approve Training Organization
C. of .A	-	Certificate of Airworthiness
C. of .R	-	Certificate of Registration
CVR	-	Cockpit Voice Recorder
DAAI	-	Directorate of Aircraft Accident Investigation
FDR	-	Flight Data Recorder
ICAO	-	International Civil Aviation Organization
ILS	-	Instrument Landing System
UTC	-	Universal Time Coordinated

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**Ministry of Works and Transport**

ACCID/012518/01-01

DIRECTORATE OF AIRCRAFT ACCIDENT INVESTIGATIONS
ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	V5-HTM	Date of Accident	25 January 2018	Time of Accident	11:30 UTC
Type of Aircraft	R44 RAVEN11 HELICOPTER		Type of Operation	Private	
Pilot-In-Command License Type		Student Pilot Helicopter License	Age	44	License Valid Not valid as it was not signed by the holder as per the Regulation.
Pilot –in-Command flying experience		Total Flying Hours	23.3 hours	Hours on Type	23.3 hours
Last point of departure		Outjo Airfield (FYOJ)			
Next point of intended landing		Farm Aruchab			
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
Outjo Airfield, 20°04'40"S 016°07'30"E					
Meteorological Information	Wind: East, Wind speed 1 knots: Visibility: >10km, Temperature: 37°C Cloud cover: 40%, Cloud base: N/A, Dew point: Not known				
Number of people on board	1 + 3	No. of people injured	0	No. of fatalities	0
Synopsis					

On the 25th January 2018 at 11:30 UTC, a Helicopter Robinson R 44 type with Registration V5-HTM, crashed few seconds after liftoff at Outjo airfield. There were one pilot and three passengers on board. The flight was planned under Visual Flight Rules (VFR) conditions that were prevailing at the time. There was no injuries sustained by the pilot and passengers but the Helicopter was substantially damaged. Few second after lift off the pilot lost control of the helicopter and it impacted the ground with the landing skid first, it flipped and it came to rest on the port side.

The Directorate of Aircraft Accident Investigation that carried out the investigation was informed telephonically about the accident on the 25th of January 2018 by the pilot. The Minister of Works and Transport was responsible for the release of the official final accident report.

The weather was fine with good visibility.

The pilot was a holder of a student Pilot Helicopter License which was not valid because it was not signed by the holder on the space provided as per the requirement in NAM-CARS part 61.02.3 see [Appendix 01](#) and a valid medical certificate without restrictions. The privilege of a student pilot helicopter license does not permit or authorized him to undertake any flight alone without the authorization of an instructor nor does it permitted the pilot to board passengers on the aircraft to transport them from point A to B. The student pilot's license was not signed, therefore it was not valid. All activities by the pilot prior and on the day of the accident flight are in violation of the Regulations.

The import inspection was carried out on the 26th of May 2017 at 2431.6 airframe hours. The regulatory authority audited the AMO that certified the last Import inspection on the aircraft prior to the accident, it granted the AMO a temporary extension approval issued on 28 February 2017 with expiry date 27th May 2017. It was in possession of a valid Aircraft Maintenance Organization, Approval No #78. The aircraft had flown a further 62.5 hours since the last import inspection.

Contributing factors

Lack of helicopter flying qualifications, experience and knowledge pertaining to helicopter performance data.

Probable cause

Loss of Control due to the aircraft operated outside the manufactures specification



AIRCRAFT ACCIDENT REPORT

Name of Owner/Operator:	Jaco Muller
Manufacturer:	Robinson Helicopter Company
Model:	2007
Nationality:	Namibian
Registration Marks:	V5-HTM
Place:	Outjo airstrip
Date:	25 January 2018
Time:	11:30 UTC

All times given in this report is Co-ordinated Universal Time (UTC).

Disclaimer:

This report is given without prejudice to the rights of the Directorate of Aircraft Accident Investigations, which are reserved.

Purpose of the Investigation:

*In terms of the Aviation Act (act No.6 of 2016) and ICAO13, this report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents and **not to apportion blame or establish legal liability.***

This report contains fact relating to aircraft accidents or incidents which have been determined at the time of issue.

The report may therefore be revised should new and substantive facts be made available to the investigator(s).

1. FACTUAL INFORMATION

1.1 History of Flight

- 1.1.1 On the 25th January 2018, at 11:30 UTC, a Helicopter, R44 type with Registration V5-HTM, crashed seconds after lift off from Outjo airfield, Kunene Region on a flight to farm Aruchab located approximately 30 km North of Outjo town. The nature of operation was private. There was one pilot and three passengers on board.
- 1.1.2 The aircraft took off from the west to East direction at Outjo airfield and few seconds after takeoff, the pilot lost control of the aircraft and crashed.
- 1.1.3 According to the pilot the helicopter took off in a vertical direction and hovered for a few seconds. As soon as the pilot pushed the cyclic forward to start going through transition, the low RPM light came on, start losing height and crashed.
- 1.1.4 The distance from take- off point to the first point of impact was 60 meters.

1.2 Injuries to Persons

Injuries	Pilot	Crew	Pass.	Other
Fatal	0	0	0	0
Serious	0	0	0	0
Minor	0	0	0	0
None	1	0	3	0

1.3 Damage to Aircraft

1.3.1 The helicopter was substantially damaged.

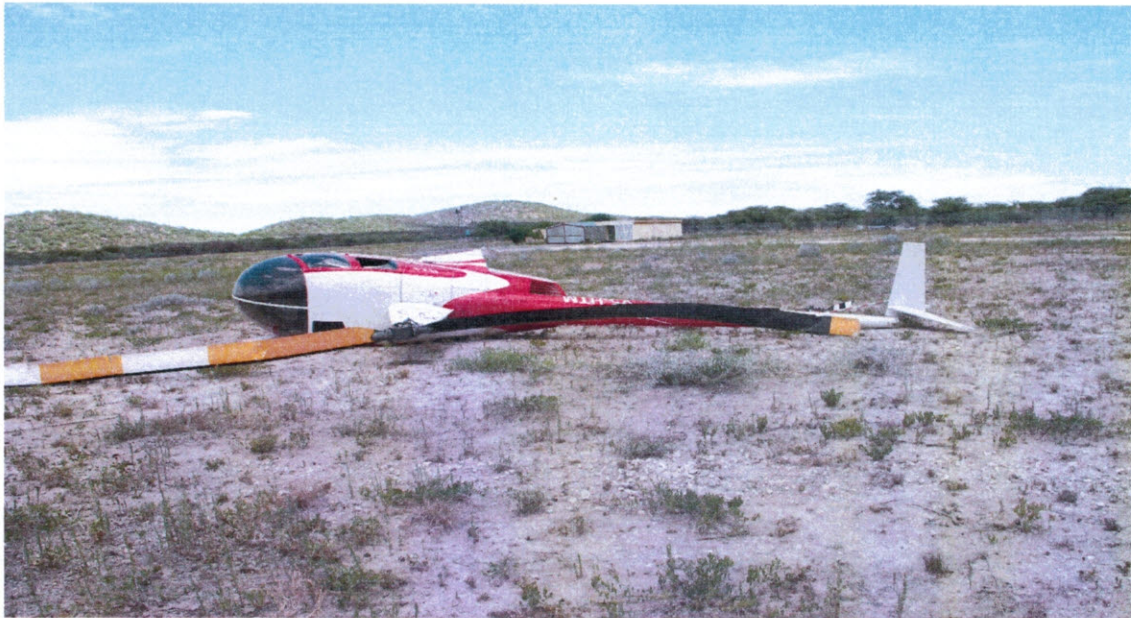


FIGURE 1: Figure showing the helicopter lying on its port side after the crash.



FIGURE 2: Photo showing the damage on the belly, broken off starboard skid and a detached tail rotor system.

1.4 Other Damage

1.4.1 There was no other damage to property, vegetation or surrounding environment.

1.5 Personnel Information

Nationality		Namibian			
Licence No	SPL 73117	Gender	Male	Age	44
Licence valid		No	Type Endorsed	NO	
Ratings		NIL.			
Medical Expiry Date		31 January 2018			
Restrictions		None			
Previous Accidents		Not known			

Flying Experience:

Total Hours	23.3 hours
Total Past 90 Days	23.3 hours
Total on Type Past 90 Days	23.3 hours
Total on Type	23.3 hours

1.6 Aircraft Information

Airframe:

Type	R44 Raven11	
Manufacturer	Robinson Helicopter company	
Aircraft Serial Number	11950	
Year of Manufacture	2007	
Total Airframe Hours (At the time of the accident)	2494.1Hrs.	
Import Inspection (Date & Hours)	26 May 2017	2431.6 Hrs.
Hours since Last Import inspection	62.5Hrs.	
C of A (Issue Date)	01 June 2017	
C of A Expiry Date)	31 May 2018	
C of R (Issue Date) (Present owner)	30 May 2017	
Operating Categories	Standard	

Engine:

Type	Lycoming
Engine Serial Number	L-29504-48A
Hours since New	1725.6
Hours since Overhaul	488.5hrs

WEIGHT AND BALANCE

The helicopter's empty weight is 1568.92lbs/711.6kg and the maximum all up weight is 2500lbs/1134kg. The amount of fuel the aircraft is certified to carry is: Main fuel tank is 29.5 gallons /177lbs/80kg and the Auxiliary tank 17.0 gallons/102lbs/46kg.

On the day the helicopter crashed, the aircraft was refuelled with 14.75 gallons in the main tank and 4.25 in the auxiliary tank. The three passengers and the pilot had a combined weight of 307 kg/676.8lbs. The aerodrome elevation Above Mean Sea Level {AMSL} is 4344 feet and the temperature during take-off was 37°C. The pilot calculated the weight which was 112lbs below the maximum all up weight. When the investigation calculation was done putting into account the aerodrome elevation above sea level, the temperature, fuel on board the aircraft and the weight of the passenger plus the pilots weight the density altitude at the time of accident was 8040 feet which is ±1400 feet above the manufacture performance graph for hover in ground effect. The above figures make it impossible for the helicopter to take-off.

1.7 Meteorological Information

1.7.1 The following weather information was obtained from the pilot questionnaire.

Wind direction	East	Wind Speed	±1 knots	Visibility	>10 KM
Temperature	37°C	Cloud cover	NIL	Cloud base	NIL
Dew point	Not known				

1.8 Aids to Navigation

1.8.1 The helicopter was equipped with standard Navigation Aids applicable for the type.

1.9 Communications.

1.9.1 The pilot was broadcasting on the unmanned frequency of 124.8 MHz

1.10 Aerodrome Information

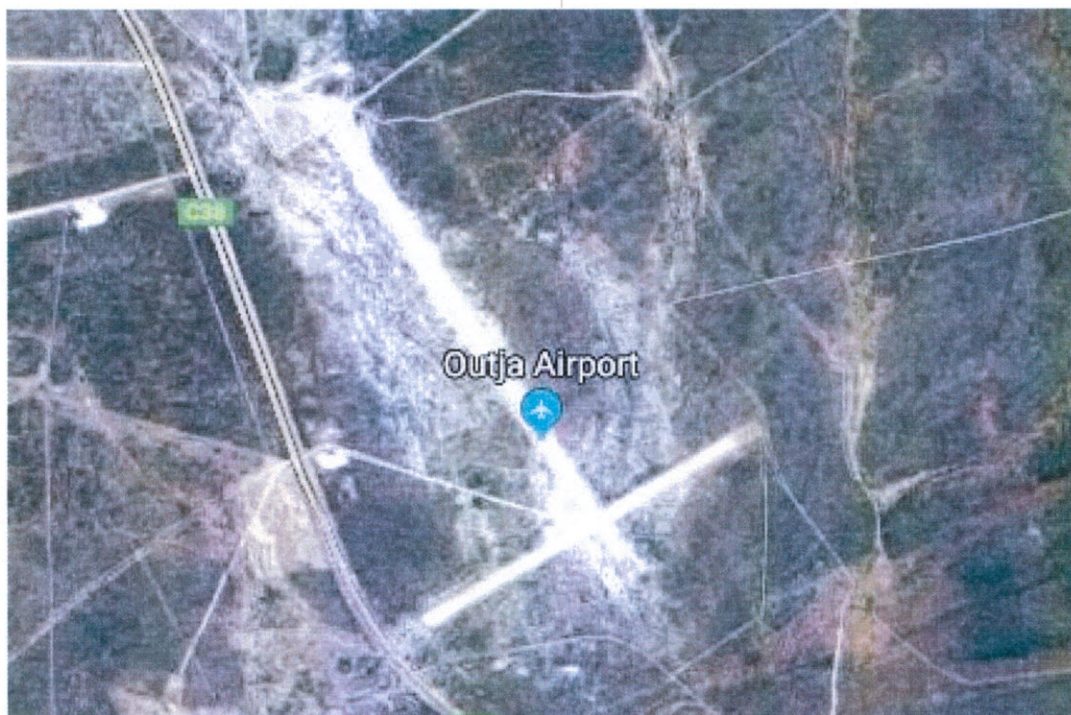


Figure 3: Outjo Airfield, 20°04'40"S 016°07'30"E, there is no navigation aids nor emergency services at the airfield.

1.11 Flight Recorders

- 1.11.1 The helicopter was not equipped with Flight Data Recorders (FDR) or Cockpit Voice Recorder (CVR). Neither recorder was required by the relevant regulation.

1.12 Wreckage and Impact Information

- 1.12.1 The airfield where the accident occurred was flat ground and had a gravel runway. The airfield is at elevation (AMSL) of 4344ft with two runways. The runways direction and measurements are as follow: 15/33 measuring 1788 meter and 06/24 measuring 1244 meters both runway surfaces are gravel. The helicopter did not take-off from either runway it took off from the helicopter parking close to the hangar facing East direction. The distance from take-off point to the first impact is about 60 meters. The helicopter impacted the ground with the starboard skid first, overturn and finally rested on the port side. Parts that detached from the wreckage were found along the flight path direction and were distributed within 20 meters radius from the main wreckage. The helicopter was in a take-off configuration. There was no engine or mechanical defect prior to the accident. The impact with the ground damaged the aircraft carbon fibre structure, landing skids, the main rotor and tail rotor blades.



Figure 4. A photo showing where the helicopter finally came to rest lying on the port side.

1.13 Medical and Pathological Information

- 1.13.1 The Medical Certificate was valid at the time of accident with no restrictions, and expiry date of 31 January 2018.
- 1.13.2 There was no evidence that physiological factors or incapacitation may have affected the performance of the pilot.

1.14 Fire

1.14.1 There was no pre or post impact fire.

1.15 Survival Aspects

1.15.1 There was no Search and Rescue carried out.

1.15.2 This was a survivable accident because the impact forces were not beyond human body tolerance and there was no compression of the cabin compartment.

1.16 Tests and Research.

1.16.1 There was no test carried out.

1.17 Organizational and Management Information

1.17.1 The aircraft was privately owned by the pilot.

NOTE: Although the training school was not responsible for the accident flight, there were findings on how the training School conducted training in this case before the accident, hence corrective measures are required by the Regulator on those findings which were not done as per relevant Regulations.

1.17.2 Training School:

The training school that conducted the out of base training for the pilot at Outjo has an Aviation Training Organisation Approval with certification number NCAA/ATO/002/12 {Temp}, issued on the 18 December 2017 and expiring on the 18 June 2018.

The Temporary Approval that was granted to the school by the Regulatory Authority {NCAA} to do out of base training was valid from the 01-31 December 2017, however the school conducted the out of base training on the 09 -15 November 2017 before the approval was granted.

1.17.3 The School (ATO) does not hold any evidence and records of ground training and theoretical knowledge examination conducted on the student.

1.17.4 The Training of the student was not conducted as per the laid down Regulations. Both NAM-CARS Part 61.02.4 and 61.02.5 was not followed during the training process. See appendix 02.

1.17.5 There is no section in the training school's Training Manual that deals with Out of Base training.

1.17.6 Certification and Licensing authority (NCAA):

Both Certificates (C of A and C of R) and the Operating Certificate were valid at the time of the accident.

1.17.7 The Regulatory Authority issued a student pilot license {helicopter} to the student but during the investigation the license was found not to be a valid document because it was not signed by the holder on the space provided as a requirement in the Regulation.

1.17.8 The student pilot license copies in his file at the licensing section of the Regulatory Authority (NCAA) were also not signed by the license holder on the space provided as per the requirement in the Regulation 61.02.3.

1.17.9 Operator/owner:

The pilot who was the owner of the helicopter, was issued with a student pilot license helicopter by the Regulatory Authority (NCAA) on the 30 June 2017 but the license was found not to be valid because it was not signed on the space provided as per the Regulation NAM-CARS part 61.02.3.

The pilot loaded three passengers on board the aircraft to transport them from Outjo Airfield to his farm. The student pilot license privilege does not permit the pilot to fly without supervision nor fly passengers.

The student pilot who acted as the pilot in command (PIC) did that without the knowledge of the ATO (Approve Training Organisation) and knowingly acted as a pilot in command whilst not being qualified to do so.

1.18 Additional Information

1.18.1 None

1.19 Useful or Effective Investigation Techniques

1.19.1 None

2 ANALYSIS

- 2.1.1 On the 25th January 2018, the R44 helicopter type with registration number V5-HTM, intended to departure outjo Airfield to Farm Aruchab but crashed seconds after taking off with a pilot and three passengers on board.
- 2.1.2 Although the weight and balance of the helicopter was within limit the helicopter could not sustain the flight for the given temperature on the given day. According to the performance graph provided by the manufacture the calculated density altitude on the day of accident was 1400 feet above the performance limit of the helicopter.
- 2.1.3 The flight was conducted illegally because the pilot did not have the legal qualification to conduct the flight.
- 2.1.4 If the licensing section at the Regulatory Authority had a check list that complied with all the requirement of the Regulations during issuing and collection of licenses then a situation were by pilots and the section are found with non-signed licenses and copies could have be avoided.
- 2.1.5 It is the view of the investigator that the laid down training procedure in NAM-CARS Part 61.02.4 and 6102.5 were not followed.
- 2.1.6 Lack of Out of Base Training procedure in the (ATO) training manual makes it difficult for the (ATO) to carry out supervisory and oversight on how the training is conducted hence leaving the standard of training compromised.

3 CONCLUSION

3.1 Findings

- 3.1.1 The pilot was issued with a student pilot license {helicopter}, but the license was found not valid because it was not signed by the holder on the space provide as per the Regulation.

- 3.1.2 The pilot medical certificate was valid.
- 3.1.3 The checklist for issuing and collection of licenses at the licensing section does not state that the pilot shall sign the license on the space provide for the holder as per the requirement in the Regulation hence all activities taken by the pilot without the knowledge of the (ATO) were in contraventions of the Regulations.
- 3.1.4 The training instructor that did the training on behalf of the (ATO) did not follow normal procedure in making sure that the student pilot had all relevant documents in his training file before proceeding with the flight training.
- 3.1.5 There is no section in the (ATO) Training Manual that deals with Out of Base Training procedures and at what standard the training should be conducted.
- 3.1.6 The pilot's training was not conducted in accordance with NAM-CARS Part 61.02.4 and 61.02.5. The failure to conduct theoretical examination on the student neither a flight test by another instructor before first solo flight was in breach of the Regulations.
- 3.1.7 The out of base training was not conducted within the approval time frame that was granted to the school by the Regulatory Authority.
- 3.1.8 The aircraft's Airworthiness Certificate(C of A) and Certificate of Registration (C of R) were valid at the time of the accident.
- 3.1.9 The aircraft weight and balance while putting into account the density altitude on the on the place of the accident made the operation unsafe.

3.1 Contributing Factors

- 3.1.2 Lack of helicopter flying qualifications, experience and knowledge pertaining to helicopter performance data's.

3.2 Probable Causes

- 3.2.1 Loss of Control due to the aircraft operated outside the manufactures specification.

4. SAFETY RECOMMENDATIONS

4.1 Regulatory Authority (NCAA): 01/01/2019

It is recommended that the Regulatory Authority take appropriate action on the training school to develop the Out of Base training procedures in their training Manual, how it will oversight the procedure and adhere to laid down procedure of Student pilot training as prescribed in NAM-CARS part 61.02.4 and 61.02.5.

Regulatory Authority (NCAA): Number 02/01/2019

It is recommended that the Regulatory Authority take appropriate measures against the pilot whom did not exercise the limitation and privilege granted on the type of the license that was issued.

Regulatory Authority (NCAA): Number 03/01/2019

The Licensing Section at the Regulatory Authority should revise its check list and procedures for issuing and collection of licenses to comply with all the requirements in the Regulation NAM-CARS 61.02.3.

Compiled by:

T.H.Herman
Investigator-in-Charge

Date: 17/12/2019

Released by:

John Mutorwa, MP

Date: 17/12/2019

MINISTER: MINISTRY OF WORKS AND TRANSPORT



SUBPART 2**STUDENT PILOT LICENCE****Requirements for student pilot licence**

61.02.1 An applicant for the issue of a student pilot licence shall -

- (a) be not less than 16 years of age;
- (b) in case of a glider student licence be not less than 14 years of age provided that the holder of a glider student pilot licence may not fly solo until he or she attains the age of 16; and
- (c) hold at least a valid Class 2 medical certificate issued in terms of Part 67.

Application for student pilot licence

61.02.2 An application for a student pilot licence shall be -

- (a) made to the Director on the appropriate form as prescribed in Document NAM-CATS-FCL 61.

Issuing of student pilot licence

61.02.3 (1) The Director shall issue a student pilot licence if the applicant - complies with the requirements referred to in regulation 61.02.1.

(2) A student pilot licence shall be issued on the appropriate form as prescribed in Document NAM-CATS-FCL 61.

(3) Upon the issuing of a student pilot licence the holder thereof shall forthwith affix his or her signature in ink in the space on the licence provided for such purpose.

Training

61.02.4 The holder of a student pilot licence shall have successfully completed the appropriate training as prescribed in Document NAM-CATS-FCL 61, prior to his or her first solo flight.

Theoretical knowledge examination

61.02.5 The holder of a student pilot licence shall have passed the appropriate written examination as prescribed in Document NAM-CATS-FCL 61, prior to his or her first solo cross-country flight.

Certificate of competency

61.02.6 (1) If, on going solo, the holder of a student pilot licence is not the holder of a restricted radiotelephony operator's certificate, he or she may nevertheless exercise the privileges of the licence: Provided that he or she is the holder of a certificate of competency issued by a flight instructor, wherein it is certified that -

- (a) the applicant has undergone basic training in the use of the radio apparatus installed in the aircraft in which he or she is being trained; and
- (b) the applicant is considered capable of operating such radio apparatus satisfactorily to undertake solo flights -
 - (i) within the circuit area of the aerodrome where the training flights originate and terminate;

- (b) the dual progress check flight must be conducted by the chief flying instructor or by an appointed Grade II or Grade I instructor.
- (c) Each dual progress check flight must be endorsed by the checking instructor in the logbook of the student in accordance with these Technical Standards.

61.02.2 APPLICATION FOR STUDENT PILOT LICENCE

1. Application

The application for Student Pilot Licence shall be made on Form FSS PEL 61-01.

61.02.3 ISSUING OF STUDENT PILOT LICENCE

1. Form of licence

The form of a Student Pilot Licence shall be determined by the Director.

61.02.4 TRAINING FOR STUDENT PILOT LICENCE

1. Training requirements

- (1) a student pilot shall undergo theoretical (classroom) training as well as dual and solo flight training in accordance with a structured training programme approved for use by a Part 141 approved aviation training organisation.
- (2) Each dual and solo training flight must be authorised by the holder of an appropriate and valid flight instructor rating or a person appointed by the Chief Flying Instructor for the specific flight or sequence required by these regulations prior to it being undertaken;
- (3) Each authorised flight must be entered in the flight authorisation book;
- (4) Each solo training flight must be personally supervised by the holder of an appropriate and valid flight instructor rating or a person appointed by the Chief Flying Instructor;
- (5) Dual flight instruction must include –
 - (i) a dual flight check prior to each solo flight during the first 3 hours of solo flight; and
 - (ii) a minimum of 1 hour dual instruction for every 5 hours' flight time until a private pilot's licence is obtained;
- (6) A dual competency check must be conducted before the student pilot is permitted to undertake his first solo flight and the instructor who conducts the solo competency check flight must endorse the student's logbook;
- (7) Before a student pilot is authorised to leave the circuit area on a solo flight to the general flying area or on a solo navigation flight, a flight instructor has to endorse the student's logbook;
- (8) The standard of ground instruction shall comply with the standards required for the licence to be obtained as per the syllabi contained in the Appendices to these Technical Standards;
- (9) No student pilot is allowed to conduct a flight below a height of less than 500 feet unless accompanied by a holder of an appropriate and valid flight instructor rating.

(10) A training record must be kept and is the property of the student. The training organisation is required to keep a copy for a minimum of 60 months.

(11) The training record shall include:

- (i) the full details of the student or pilot trained;
- (ii) the name and licence number of the flight instructor concerned with the training;
- (iii) a training progress report for each individual training session which shall include:
 - the name of the student or trained pilot;
 - the name of the instructor conducting the training session;
 - the description of the exercise/route;
 - detailed de-brief comments related to each training session;
 - records of the dual flying hours;
 - records of the solo hours conducted in the circuit and general flying area;
 - record of the solo hours conducted during navigation flights; and
 - a summary of the hours flown solo and dual;
- (iv) a record of all the theoretical examinations;
- (v) a record of all the briefings and courses attended pertaining to the licence sought;
- (vi) certificates of competency;
- (vii) all reports of passed and failed theoretical examinations;
- (viii) an exercise checklist;
- (ix) whether the training was successfully completed and the duration of the training period;

(12) The chief flight instructor is responsible to ensure that -

- (a) a dual progress check flight is conducted at the latest after a student completed his/her first 15 hours dual flight instruction and then after each completion of 10 hours flight time thereafter.
- (b) the dual progress check flight must be conducted by the chief flying instructor or by an appointed Grade II or Grade I instructor.
- (c) Each dual progress check flight must be endorsed by the checking instructor in the logbook of the student in accordance with these Technical Standards.

61.02.5 THEORETICAL KNOWLEDGE EXAMINATION FOR STUDENT PILOT LICENCE

1. Theoretical Knowledge Course and Examination

1. The theoretical knowledge course and pre-solo theoretical examination shall cover the following aspects:
 - 1.1 Air Law, as appropriate to student pilots; and
 - 1.2 Aircraft Knowledge, covering the aircraft make and model used for training.
2. The written theoretical knowledge examinations shall be conducted at an approved Aviation Training Organisation.
 - 2.1 The examination shall be conducted and corrected by the holder of an appropriately rated Grade I or Grade II flight instructor, Aeroplane or Helicopter, respectively;

- 2.2 The flight instructor referred to in paragraph (2.1) may not be the flight instructor from whom the applicant received his or her theoretical training.
3. The Communications Syllabus can be found in Appendix 1.5 to these Technical Standards.

61.02.8 PRIVILEGES AND LIMITATIONS OF STUDENT PILOT LICENCE

NOTE: ENTRY TO TRAINING

Before being accepted for training an applicant should be informed that the appropriate medical certificate must be obtained before solo flying is permitted.

1. Requirements for, authorisation and supervision of solo training flights

- (a) A student cannot be released for the first solo flight unless he/she:
 - (i) has undergone a minimum of 10 hours of dual flight training;
 - (ii) is holder of a student pilot licence;
 - (iii) proves to possess adequate knowledge of the basic principles of flight;
 - (iv) has undergone training in exercises 1 through 13;
 - (v) has shown proficiency in handling the aircraft in the event of an engine failure during initial climb-out and from downwind position;
 - (vi) has shown proficiency in recovery from a balloon during landing and a bounced landing; and
 - (vii) has shown proficiency in executing a go-around manoeuvre from a full flaps configuration.
- (b) Each solo training flight must be authorised by the Chief Flying Instructor (CFI) or by the holder of a valid flight instructor rating appointed by the CFI for the specific flight or sequence required by these regulations.
- (c) Each solo training flight authorisation must be properly entered in the appropriate flight authorisation book in compliance with the proper format represented in Part 141 of the Regulations.
- (d) Each solo training flight must be personally supervised by the holder of a valid flight instructor rating or a person appointed by the Chief Flying Instructor.

2. Dual competency check flight, dual check flight and dual progress check flight

- (a) A dual competency check flight must be conducted before the student pilot is permitted to undertake his first solo flight.
- (b) The dual competency first solo check flight shall be conducted by the Chief Flying Instructor (CFI) or a Grade II or Grade I instructor appointed by the CFI.
- (c) Before a student pilot is authorised to conduct his first solo flight (exercise 14), the instructor who conducted the dual competency check flight must endorse the student's logbook in accordance with NAM-CATS-FCL 61.
- (d) The dual competency first solo check flight must include but is not limited to –
 - (i) at least 3 take-offs and landings
 - (ii) one glide approach to a landing
 - (iii) one simulated engine failure during initial climb out
 - (iv) one go-around from a full flaps configuration.
- (e) A dual check flight shall be conducted by a suitably rated instructor prior to each solo flight during the first 3 hours of the student's solo flight time –