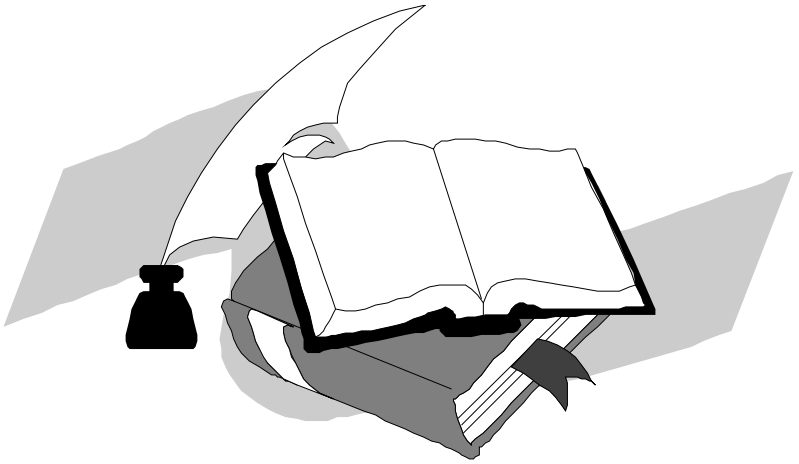
PPL Air Law

Study guide for Validations
NAMIBIA 2003



Notes to Text

These notes have been compiled to assist you with study for your Namibian PPL validation and to provide you with important practical information for safe operation within Namibia.

Current Namibian Law
The Namibian Air Law follows the international system of parts. This text is aimed at the fixed wing, VFR Private Pilot, the following parts have been covered in detail:

Part 1: Definitions and Abbreviations
Part 61: Flight crew licensing
Part 91: Flight Operations

AIP:
Some references have been included from the Namibian Aeronautical Information Publication (AIP).

Useful information to be found in the AIP includes:
Units of measurement and standard conversions, Abbreviations, Chart symbols
Location indicators
Sunrise and Sunset times
ATS information and contact numbers
VFR operating minima (as included)
Airspace classifications and standards
Information on special airspace: danger, restricted, prohibited and training areas, their nature and limitations
Obstacles and hazards to air navigation
Aerodrome Plates and information (licensed airfields)

The integrity of the AIP information is guaranteed by the director for operational use. There are many other useful aviation publications available, for obtaining information not contained in the IAIP (eg. unlicensed airfield data), however it should be remembered that the information is not guaranteed and should be confirmed before using wherever possible.

Layout
Generally the chronological layout of the parts has been followed. Some text has been grouped in order of subject where is was seen to be more relevant, for example fuel, weight and balance etc, where all related references have been included.

The text has been abbreviated for ease of reference and only that applicable to a pilot flying under a validation has been included. Text in capitals has been used for emphasis of importance, text included in italics is author opinion provided for clarification.

Part 1: ABBREVIATIONS AND DEFINITIONS		
Included are abbreviations used in this document and definitions nescessary for understanding the Namibian law. Most will already be known to you.		
AGL	above ground level	Refers generally to a height
AMSL	above mean sea level	Refers generally to altitude on QNH
	advisory route	A route where advisory service is available, implemented to assist flow (not controlled)
AFIS	aerodrome flight information service	air traffic service assistant providing information for the assistance of safe flight operation
ATA	aerodrome traffic area	Area around an aerodrome established for protection of the traffic where a flight information service is provided
AIC	aeronautical information circular	Information pertinent to aviation that does not qualify for inclusion in an AIP or NOTAM, relating to flight safety, air navigation, technical, administrative or legislative matters
AIP	aeronautical information publication	Information issued by the director essential to air navigation of a lasting character
AIP SUP	aip supplement	temporary changes to the information in the AIP, these issues always have an expiry date
ATC	air traffic control	An aerodrome, approach or area control service for preventing collisions and maintaining expeditious and orderly flow of aircraft
ATS	air traffic services	Air traffic control, flight information, alerting, or air traffic advisory services provided to aircraft
ATZ	air traffic zone	Controlled airspace around an aerodrome for the protection of aerodrome traffic
	alerting service	service to provide notification for search and rescue
	altitude	the vertical distance of an object/level/point above mean sea level *(altimeter set to QNH)*
	approved	Approved by the Director
	ceiling	Height above ground or water of the lowest layer of cloud below 20,000ft covering more than half the sky
	child	2 years of age but not yet 12 years
CAR	civil aviation regulations	The Civil Aviation Law issued in 2001 comprising Parts 1 to 187 in accordance with international standards
CATS	civil aviation technical standard	Technical standards are operating instructions issued by the director, they are not law, but the law (CAR) requires compliance with the technical standards
	clearance	Clearance from air traffic control

	communication failure procedure	A procedure published in the AIP and prescribed by ICAO procedures for loss of communications
CRP	compulsory reporting point	Designated point where a position report must be made
CTA	control area	Controlled airspace extending upwards from a specified limit above the earth
CTR	control zone	Controlled airspace extending from surface to a defined upper limit, normally established around an airfield
	controlled airspace	airspace of defined dimensions which air traffic control is provided
	critical phase of flight	all operations below cruise altitude or 10,000 *(the lower of implied)*
	day	The time between 15 minutes before sunrise to 15 minutes after sunset
	designated	Designated by the director
DE	designated examiner	person appointed by the commissioner for air crew examinations or tests
DCA	directorate of civil aviation	The State authority for civil aviation
ETA	estimated time of arrival	Estimated time at which the aircraft will arrive OVERHEAD an airfield, and for IFR from a point at which the approach may be commenced
FIS	flight information service	Service provided for the purpose of providing advice and information useful for safe and efficient conduct of flights.
FL	flight level	A surface of constant atmospheric pressure referenced to the pressure datum 1013.2 and separated from other such surfaces by specific pressure intervals *(Altimeter set to 1013.25HPa or 29.92"Hg standard setting or QNE)*
FIR	Flight information Region	Airspace of defined dimensions which flight information and alerting services are provided.
GFA	general flying area	Area in the vicinity of an airfield used for flight training and other manoeuvres, *uncontrolled* airspace
	height	Vertical distance above a specified datum, point or surface
IAS	indicated airspeed	The airspeed "indicated" on the airspeed indicator
	infant	A child who has not reached his/her 2nd birthday
IAIP	integrated aeronautical information package	Includes: AIP, AIC, AIP supplements, NOTAM

	international flight	A flight that passes over the AIRSPACE OVER THE TERRITORY of more than one state, *however applied as any flight crossing a different countries FIR.*
MCM	Maximum certified mass	Maximum mass of the aircraft as certified in the approved flight manual mass and balance documentation.
	night	Hours outside those specified under day
NOTAM		notices distributed by telecommunications containing information of which timely knowledge is essential to flight operations
PIC or PI (P1)	pilot in command	person responsible for operation and safety of the flight regardless of the manipulation of controls
	psychoactive substance	Includes alcohol, cannabinoids, optoids, sedatives and other psycho- stimulants, excludes coffee and tobacco
	QDM	Magnetic bearing to a station
	QDR	Magnetic bearing from a station
	QNE	Standard pressure of 1013.2HPa *Set on Altimeter sub-scale indicates Flight Level or Pressure Altitude*
	QNH	The pressure reduced measured at the field and reduced to mean sea level using standard factors *Set on altimeter sub-scale, to indicate height AMSL*
	release to service	Issuing of a certificate of release, or for line maintenance completing an appropriate entry in the technical log
TMA	terminal control area	A Control area normally established at the confluence of ATS routes in the vicinity of major aerodromes
TAS	true airspeed	The Calibrated Airspeed corrected for density variations
	type of aircraft	All aircraft of the same basic design, including all modifications except those that effect the handling or flight characteristics
VFR	visual flight rules	flight conducted under visual flight rules: at or above the meteorological conditions required for visual flight
VMC	visual meteorological conditions	Meteorological conditions that permit flight under VFR
	wake categories	Weight classifications as specified on flight plan and used as a means of providing standard wake separations Light: below 7000kg MCM Medium: 7000-136,000kg Heavy: above 136,000kgs

Part 61: FLIGHT CREW LICENSING		
01	***GENERAL***	
01.32	**Duties of pilot**	A pilot shall carry the license or rating issued when exercising the privileges of and produce the license or rating to an authorized person if requested
61.03	***Private Pilot License (Aeroplane): Validation requirements***	
AIP	**Validation Requirements**	For validation of a PPL the applicant must • hold a valid civil aviation license • hold a valid Class 2 medical • hold a Namibian radio license or validation • meet the minimum experience requirements • comply with requirements prescribed by the director* *as advised by the training organisation you will deal with,, typically including a flight test and law exam.
03. 2-4	**Experience**	Total flight experience consisting of • 45hours total flight time • 25hours dual instruction • 10hours solo flight time • 5 hours cross country 5hours maximum may be acquired in a simulator Completed the training referred to in NAM CATS Passed the theoretical exams referred to in NAM CATS
03.8	**Validity**	A validation of a private pilot license will be issued for a period of three months.
03.9	**Privileges**	1) A Private pilot may act as PIC or as co-pilot on any aircraft which a valid type rating is held engaged in non revenue flights 2) Exercise the privileges of a rating for special purposes for which a valid rating is held in accordance with 61.01.10 3) Pro-rata sharing or direct operating costs among the occupants of the aircraft is not considered revenue
03.11	**Maintenance of Competency**	A Private Pilot shall not act as PIC of an aircraft under VFR, while carrying passengers unless within the preceding 90 days three take-offs and landings have been completed in the same TYPE OR SIMILAR TYPE as prescribed in the NAM CATS or in a similar TYPE simulator • by day, or • by night if holding a valid night rating, and night privileges are required If (2) (night competency) is complied with the license holder shall be exempt from the requirements of (1)

Part 91: FLIGHT OPERATIONS		
1	***GENERAL***	
01.1	**Applicability**	This part shall apply to all aircraft registered in Namibian operated internationally and all aircraft operating within Namibia
01.11	**Endangering safety**	NO person shall through an act or omission endanger the safety of an aircraft or person therein or cause or permit an aircraft to endanger the safety of any person or property
02	***CREW***	
02.1 02.2	**Crew responsibility**	The number of flight crew shall be not less than that specified in the Certificate of Airworthiness or the flight manual. If a crew member is to operate a radio they must have a radio license. One crew member only shall be assigned as PIC. The PIC shall assign duties, including emergency action to other crew members.
02.3	**Prohibition**	1)No person shall act as a crew member: a) Under the influence of psychoactive drug, or within 8 hours of use of such substance b) Within 24 hours of scuba diving c) Within 48 hours of blood donation d) While knowing to or anticipating fatigue or inability to perform duties 2) No crew member shall e) Engage in any problematic substance use f) use a psychoactive substance within 8hrs prior to commencement of standby or flight duty g) commence flight duty with blood alcohol of 0.04 grams per 100 ml or consume alcohol less than 8 hours prior to reporting for flight duty h) take psychoactive substance within 8 hours of an accident of which they were involved
02.3	**Flight times**	2)No person shall act as a flight crew member for a planned flight time of more than: a) 8 hours on one calendar day b) 100 hours in 30 consecutive calendar days c) 1000 hours in one calendar year d) 6 hours ab-initio instruction in one calendar day
02.6	**Deviation from CARs**	In an emergency INVOLVING the aircraft, (and or occupants), in the interests of safety only, the PIC may deviate from any law or operational procedure. Such deviation shall be reported to the Director, forthwith, and comply with the subsequent requests of the director on information

02.7	**Duties of PIC: Pre-flight action**	The PIC must ensure a) The aircraft is airworthy, b) Instruments and equipment required serviceable c) a release to service is issued in accordance with Part 43 d) Loading is compliance with the aircraft flight manual mass and balance requirements, e) Part 92 dangerous goods, and properly secured f) A flight plan has been completed and filed with ATS if required g) All required documentation, current maps and charts required are on board h) Performance is in compliance with 91.09 i) the external surfaces are clear of deposits that may affect controllability j) The required search and rescue information from 91.01.5 is available on board k) Fuel, oil, oxygen, minimum safe altitudes and alternate availability has been checked and complied with l) NOTAM's, AIC, AIP, and ATS information must be checked, and all necessary facilities are operational m) The weather at the aerodromes to be used has been checked and ascertained above the required minimum's n) Before takeoff, landing and when deemed necessary, crew, passengers and equipment are properly secured and exits unobstructed
2.8	**Authority**	The PIC has the authority over any person, to disembark or restrain, posing a hazard to safety of the flight
02.8	**General duties**	The PIC shall ensure: a) The pre-flight inspection has been completed b) decide whether or not to accept unserviceability permitted by the minimum equipment list c) Passengers are briefed prior to flight d) During take-off, landing and during turbulence or other emergency requiring safety harnesses or belts are worn
02.8	**Reporting incidents**	The pilot in command must in accordance with the appropriate regulations: a) Report any Dangerous goods incident in accordance with part 92 b) Report any unserviceable facilities to nearest ATC/S c) Report any accident or incident involving the aircraft d) Report any ATS incident near miss, or potentially dangerous condition e) Record any technical defect in the flight folio f) Report any occurrence of an unlawful interference with operation of the aircraft or the PIC to the director

	Critical Phase	The PIC shall a) Ensure the flight crew members are not required to do other than essential duties during critical phases of flight b) Not permit any activity that may distract flight crew during critical phases of flight c) shall not continue beyond the nearest suitable aerodrome should a flight crew member become incapacitated
04	***DOCUMENTATION***	
03.1	**Documents to be carried**	Documents to be carried at all times: a) Certificate of registration b) Certificate of airworthiness c) Certificate of safety or maintenance release d) Aircraft radio station license e) Aircraft mass and balance data (91.07.11) f) Crew licenses, ratings and medical certificates g) A technical log, Flight folio or similar document h) Approved aircraft flight manual (AFM) or pilot operating handbook (POH) (91.03.2) i) A list of visual interception signals j) A minimum equipment list If applicable k) Noise certificate if applicable For cross border additionally: l) Journey log book, and general declaration m) Passenger manifest (if carried and not included in Gen-Dec) n) Cargo manifest (if carried)
03.2	**Aircraft flight manual**	Every owner or operator shall have an Approved Aircraft Flight Manual for each aircraft owned or operated.
03.3	**Checklists**	The owner operator shall make available where applicable for use in all phases of flight
03.4	**Flight plans**	The operator or PIC shall ensure a flight plan is filed for: a) flights into or through controlled or advisory airspace except for: i. a flight that takes off and lands at the same aerodrome without an intermediate landing and remains within a 50nm radius ("a local flight") ii. VFR flights into or out of an ATZ or CTZ from or to unmanned aerodromes without entering any other control or advisory airspace iii. flights crossing an airway or advisory route at right angles iv. flights exempted by the director b) International flights c) Flights requiring alerting services Flight plans shall be filed 30 minutes prior to departure, or if airborne 10 minutes prior to entering controlled airspace, and will be canceled 1hr after ETD if not activated. Variation of greater than 5% of flight planned TAS, and 3 minutes on reported ETA, ATS shall be notified.

03.5	**Tech logs**	The owner, operator or PIC shall ensure that the aircraft carries a technical log or similar document (as per NAM-CATS). The technical log shall be legible and up to date, all entries made after completion of the relevant occurrence. Rectification of defects shall be certified by the person responsible for the maintenance. Technical logs shall be maintained by the owner or operator for a period of two years
03.6	**Fuel and oil records**	The PIC shall enter the fuel and oil records in the technical log (or similar document). Fuel and oil records shall be maintained by the owner or operator for a period of two years
03.7	**Release to service**	No owner, operator, or Pilot in Command shall operate a Namibian registered aircraft without a valid release to service signed by an appropriately rated engineer or an approved Aviation Maintenance Organisation. Certificate of release to Service shall be retained for a period of 12 months
91.04	***INSTRUMENTS AND EQUIPMENT***	
04.1	**Use of Equipment**	Instrument required to be used shall be readily visible from his/her station with minimum deviation from the line of sight along the flight path Instruments required by more than one pilot must be readily seen from both pilot stations. Instruments shall have a means of indicating power supply *(ie. suction gauge, Turn Indicator flag etc)*
04.2	**Circuit protection**	The greater of 3 or 10% of each rating must be carried Fuses and circuit breakers must be readily reset or replaced during flight
04.3	**Lights**	By day: anti collision lighting *(no definition given)* By night: (additionally) a) instrument lights b) passenger compartment lights c) one torch per crew member d) navigation lights in accordance with 91.06.10 e) two independent landing lights or two separate filaments
06.10	**Navigation lights**	The navigation or position lights must be as follows: Left: RED indicating from directly ahead through an angle of 110 degrees Right: GREEN indicating from directly ahead through an angle of 110 degrees Rear: WHITE indicating 70 degrees either side of the fore-aft

04.4	**Equipment for VFR**	For flight under VFR the aircraft must be equipped with: a) a magnetic compass b) a sensitive altimeter with an adjustable subscale calibrated in Hpa for barometric pressure c) a time piece with hours, minutes and seconds d) an airspeed indicator
04.9	**Icing**	No PIC shall operate in known or forecast icing conditions unless: 1) The aircraft is certified for icing conditions 2&3) by night unless there is a means to detect or illuminate ice formation that does not cause any distracting glare or reflection
01.10	**Electronic devices**	The PIC shall not permit the use of any electronic devices that may adversely affect performance The director may identify devices that are allowed to be carried in the NAM CATS
CATS 01.10		Electronic devices that do not intentionally transmit any radio signals may, with the prior permission of the PIC be operated in cruise flight only. Examples of such are: laptops, electronic games, cameras, calculators, tape recorders.
04.27-28	**Flight over water**	1) Life jackets with a light, accessible from the seat must be carried for: a) An aircraft not capable of maintaining flight following a critical power failure flying greater than 10nm from shore (b) At an aerodrome where the take off or approach is over water
04.29	**Survival equipment**	Survival equipment (as prescribed in NAM CATS) is required when operating over areas where rescue would be difficult
91.05	***COMMUNICATION AND NAVIGATION EQUIPMENT***	
05. 1-2	**Communication** **Navigation**	Unless with prior approval of the director aircraft shall be equipped with one two way radio capable of communication with an ATS unit and on 121.5MHz Navigational equipment shall not be required by flights operated under VFR providing they can be accomplished by VISUAL REFERENCE TO LANDMARKS Navigational equipment shall be carried enabling the aircraft to proceed according to flight plan for the route including one redundancy

CAT 05.1	**Navigation Equipment**	Navigational equipment required where no visible landmarks: • Two independent radio communication systems • One VOR, ADF, DME and Marker Beacon receiving system • Two VOR's if the route is dependent on VOR's • Two ADF's if the route is dependent on ADF's • An ILS or MLS if required • An area navigational system if required • SSR transponder equipment as required
91.06,91.07: RULES OF THE AIR AND FLIGHT OPERATIONS		
	Rules of the Air: General	
06.1	**Roads**	Landing or taking off on public roads is allowed only: a) In an emergency involving the aircraft or occupants b) For purposes of saving human lives c) For law enforcement or civil defense
07.3	**Use of Aerodromes**	No person shall use an aerodrome unless it is suitable for the type of aircraft and operation.
07.3	**Night flights**	Except in an emergency, no person shall use an aerodrome at night unless it is equipped with night flying facilities
06.2	**Dropping objects**	No objects shall be dropped out of an aircraft except: a) sand or water used as ballast b) agricultural spray
06.3-4	**Picking up and Towing**	No objects shall be picked up or towed by an aircraft unless: a) with prior approval by the director b) if certified to do so in terms of the regulations
06.5	**Towed aircraft**	(excepting gliders) Shall not be higher than 150ft above the surface, not closer than 5nm from an airfield boundary, and not above a public road
6.6	**Formation flight:**	Not in such proximity to cause hazard and Only by prior arrangement of the PIC of both aircraft
06.7	**Right Of Way**	1) Power driven heavier than air aircraft shall give way to: a) Balloons, gliders, airships and non powered aircraft b) Aircraft approaching or crossing from the right c) Aircraft lower if approaching to land d) Non power driven aircraft or tow aircraft e) Aircraft compelled to land or in a n emergency situation f) Airborne aircraft if on the ground 2) Where avoiding action is required: a) Always alter heading to the right for avoidance b) Always pass to the right unless in a right hand circuit, where you should pass on the left *(ie. the outside)*

06.11	**Taxi rules**	1) Taxiing aircraft give way to: a) Aircraft taking off or landing, b) aircraft being towed by vehicles, 2) Vehicles not towing aircraft shall give way to other aircraft 3) The landing area should be cleared as soon as safely possible 4) For avoiding action: a) Slow or stop, b) alter heading to right and pass on right, c) avoid crossing ahead, 5) Vehicles keep to the right side of runway or taxiway
06.8	**Line features:**	Below 1500, within 1nm of a line feature (such as a road, railway or coastline) should keep to the right of the line feature unless otherwise instructed by an ATS unit
06.9	**Speed restrictions:**	1) Outside controlled airspace below FL100 unless authorized or required by director: Not greater than 250kts 2) In a CTZ or ATZ unless authorized or required by ATS: Not greater than 200kts for turbine or 160kts for piston OR the minimum safe speed should it be greater than the above
06.12	**Operation in the vicinity of an Aerodrome:**	Aircraft operating in the vicinity of an aerodrome shall: a) Observe other traffic b) Conform with or avoid the traffic pattern c) Make all turns to left unless a right hand pattern, otherwise instructed by ATC or a helicopter for the interests of safety d) Land and take off into wind where possible e) If not joining pattern fly across at not less than 2000AGL or if less than 2000 conform with the pattern f) maintain listening watch on appropriate frequency and comply with all ATC instructions
AIP	**Vicinity**	In the vicinity of an aerodrome applies to aircraft within a 5nm Radius and up to 2500ft AGL
06.19	**Prohibited Areas**	Prohibited areas are designated by the director, in NOTAM, AIP, AIP SUP or AIC in terms of a height or altitude above the surface. Prohibited airspace MAY NOT be flown into.
06.20	**Restricted areas**	Restricted areas are designated by the director, in NOTAM, AIP, AIP SUP or AIC. The nature of the restriction will always be stated, flights into restricted areas are only IN COMPLIANCE WITH terms of the RESTRICTION

06.21	**Danger areas**	Danger areas are designated by the director, in NOTAM, AIP, AIP SUP or AIC. The nature of the danger will always be stated, Danger Areas MAY NOT be flown into.		
	Communication			
06.13	**Signals**	The PIC upon receiving any of the signals prescriged in the NAMCATS shall act accordingly		
CAT 06.13	**Light signals**	**Light**	**Air:**	**Ground**
		Steady Green:	Cleared to land	Cleared to take-off
		Flashing green:	return for landing	cleared to taxi
		Steady red:	Give way (continue circling)	stop
		Flashing Red:	aerodrome unsafe (do not land)	Clear runway
		Flashing White:	Land at this aerodrome and return to the starting point	return to starting point
		Steady Red on Final approach	Notwithstanding any previous instructions do not land for the time being	
CAT 6.13	**Pyrotechnic Signals**	A series of projectiles at 10 second intervals each showing red or green lights or stars will indicate the aircraft is about to enter a restricted, prohibited or danger area and remedial action should be taken		
06.15 06.16 06.17 06.32	**Mandatory Radio Communication** **Priority**	It is the responsibility of the PIC to ensure in controlled airspace, advisory airspace, at Compulsory Reporting Points, where an alerting service is provided, at intervals requested by ATC, or published by the director (IAIP) the appropriate position reporting is carried out, giving: passing level and time and any other meteorological or required information In controlled airspace a continuous listening watch, and two way radio communications is maintained, unless prior arrangement has been made, or in compliance with the radio failure procedures ATS may permit non radio equipped aircraft in airspace at their discretion and conditions In advisory airspace where two way radio cannot be maintained blind transmissions shall be made, until it can be re-established ATC may give priority to aircraft to aircraft operating under a flight plan		

6.32 AIP 6.12	**Loss of communications**	If flight plan filed and activated aircraft may continue in controlled or advisory airspace in accordance with the radio failure procedures Radio Failure Procedures: • Squawk 7600 • In VMC: Land at nearest SUITABLE aerodrome and report to ATC AS SOON AS POSSIBLE *(i.e. Applies to all VFR flights)* When joining an aerodrome circuit, unless in prior contact with ATC make a circuit of aerodrome to observe traffic and visual signals before landing	
06.18 06.31	**Compliance with ATC**	The PIC shall: a) operate in accordance with and not contrary to any ATC clearance OR obtain an amended clearance b) if deviation is required in exceptional circumstances notify ATC as soon as practicable (*eg in an emergency or in interests of safety)*	
06.30	**Interception**	Attempt to establish contact on 121.5, if no contact: Use 2nd series to indicate aircraft to proceed Use 1st then 2nd as appropriate to lead away from restricted or prohibited area Use 1st then 3rd as appropriate to indicate landing area, then interceptor to use 4th if necessary Use distress signals if in distress Signals as prescribed in NAM CATS, currently from AIP as follows below.	
AIP/ CATS	**Series 1**	Rocking wings and at night flashing navigation or landing light:	
		ahead to left	follow me away from prohibited/restricted area
		ahead to right	follow me to landing site
		Followed by a slow turn to desired course	
	Series 2	An abrupt breakaway	proceed
	Series 3	over flying landing site	land here
	Intercepted aircraft	rock wings, steady landing light	acknowledged
		over-flying landing site 1000ft to 2000ft AGL with gear up and rocking wings	landing site not suitable

	VFR: Visual Flight Rules				
06.22	**Visibility and distance from loud**	1) VFR flight shall be conducted: a) By day with visual reference to identifiable objects on the ground b) At night i. 7 days before or after full moon from 15 minutes after moon rise till 15 minutes before moon set OR ii. With visual reference to identifiable objects on the ground c) At no time above more than 3/8 cloud within 5nm radius d) Under flight visibility and distance from cloud as prescribed in NAM CATS *(currently in the AIP as detailed below)* 2)Flight in class G may be authorized by ATC below 1500m in areas of low traffic and at speeds or situations that make collision (aircraft/terrain) unlikely			
6.23	**Special VFR**	SVFR is permitted in a CONTROL ZONE (CTZ) only, and in provision with ATC clearance, clear of cloud, by day, with base not less than 500ft, visibility not less than 1500m			
07.10	**VFR Operating minima**	VFR flights shall be operated according to visual flight rules prescribed in Part 6 SVFR flights: should not be commenced if the visibility is less than 3km, and not continued unless weather above SVFR or VFR minima as applicable			
06.24 -25	**Responsibility to maintain VFR**	Outside a CTZ, ATZ or ATA the PIC shall be responsible for ascertaining whether VFR conditions exist. Above FL200 or below VFR requirements aircraft may continue either in accordance with IFR or not at all.			
AIP	**VFR Met Minima** (Aeroplanes)	**AIRSPACE**	**Visibility**	**Cloud, ↑ / →**	**Ceiling**
		CTZ/ATZ	5km	500ft/2000ft	1500ft
		Entering or Leaving a CTZ/ATZ	5km	Clear	500ft
		Below 1000ft AGL day	1.5 km	Clear	none
		1000ft AGL day/1500ft night to FL 100	5km	500ft/2000ft	none
		Above FL100	8km	1000ft/1.5km	none
07.9	**Met conditions**	No flight operating under VFR shall takeoff unless forecasts/reports or combination indicate along the entire route compliance with VFR is possible			

	Heights and operating levels	
6.33	**Minimum Heights**	Except when necessary for take-off or landing or with prior approval of the director, Not less than: i 1000ft above obstacles within 2000ft Radius over built up area or open air assembly ii 3000ft over open air assembly if circling or repeated passes iii Else where, when not specified not below 500ft above ground or water.
AIC	Reprint of conservation law	v. 3000ft (1000m) over a game reserve vi. 1500ft over a bird sanctuary
AIC	Recommendation	vii. 5000ft recommended when overflying an active firing range or in vicinity of kite fishing
AIP	**Transition Altitude and level:**	Outside 25nm of controlled airfields: Transition Altitude: IN VMC 2000ft AGL or IN IMC Minimum Safe Cruising Altitude, Transition level: IN VMC 3000ft, IN IMC MSCA+500ft, Within 25nm of a controlled airfield transition altitude as published in the AIP; transition level advised by ATC *The transition level is not published as it must be 1000ft above Transition Altitude and so can change when the QNH differs significantly from QNE* Flight above transition altitude shall with respect to flight levels, flight below transition level shall be with respect to altitude. Pilots may change to QNE or QNH on reaching Transition Altitude or Transition Level respectively without notifying ATC.
06.34	**Semi Circular rule:**	Unless otherwise directed by ATS or VFR below 1500ft AGL in accordance with the NAM CATS
AIP/ CATS	**Semi Circular levels:**	Above 1500ft AGL to FL200, outside controlled airspace: 000-170: VFR odd flight levels +500ft, IFR odd flight levels 180-359: VFR even flight levels +500ft, IFR even flight levels *(East odd, West even)* Low level flight (less than 1500ft AGL): at the discretion of the PIC Controlled flight: at the discretion of the controller
AIP		Corridors and routes: 1) When flying within a track approximately directly north of Windhoek or on the R987F: North Even flight levels, South Odd flight levels. The corridor is formed by coordinates approximate to FYWE, FYWH, FYOA and FYOS, 2) When flying approximately directly South of Windhoek or on R987D, incl. FYWH-FYKT: North Odd flight levels South Even flight levels *If in doubt about your flight level check with the Flight Briefing Office.*

	Mass and Balance	
02.7	**Mass and balance**	If mass and balance documentation is required it must be countersigned by the PIC, unless submitted by electronic data transfer, where commencement of the flight is deemed acceptance thereof
07.11	**Mass and balance documentation**	The PIC shall ensure that the loading and center of gravity is within limits specified in the approved flight manual. Load sheet requirements are as prescribed in NAMCATS Aircraft empty weight includes oil and unusable fuel. Aircraft mass shall be established by weighing every 5 years. Additions and subtractions may be calculated if actual mass is known. Passenger, baggage and fuel masses shall be determined by actual weighing or by using standard masses in accordance with the NAM CATS.
CATS 07.11	**Mass and Balance Documentation**	The operatore must establish mass and balance documentation prior to each flight, specifying the load and its distribution. Acceptance of the load by the PIC must be indicated by countersignature or equivalent.
	Fuel	
07.12	**Fuel reserves**	The PIC must carry sufficient fuel and oil to safely complete the flight considering: • meteorological conditions, • EXPECTED delays, *(eg. ATC, traffic, VIP movement)* • fuel and oil requirements of NAM CATS
CATS 07.12	**Fuel and oil**	Sufficient fuel must be carried for the planned flight, and 1) Thereafter for a period of 45 minutes, OR 2) If an alternate is required, hence to an alternate, and thereafter for a period of 45 minutes
07.13	**Refueling and defueling**	Refueling and De-fueling while passengers are on board, embarking or disembarking: May not be completed with AVGAS or wide cut fuel Other types may be permitted if manned by qualified personnel ready to evacuate if necessary
	Carriage of persons	
07.18 -19	**Seating**	The PIC shall ensure 1) Before Take-off, landing and when deemed necessary all passengers must have seat belts fastened 2) No multiple occupancy except by one adult and one infant who is properly secured by a child restraint device. 3) Passengers shall be seated where they may best assist and not hinder emergency evacuation

04.14	**Seat belts**	One seat or berth must be provided for each passenger two years old or more with a safety belt A child restraint device for each infant (less than 2yrs) Safety harness or belt with diagonal strap, with torso restraint under rapid deceleration for every flight crew member A means of indicating to passengers that safety belts must be fastened if seats cannot be seen from flight deck
07.2	**Passenger Briefing**	Passengers shall be briefed on: a) safety matters And before take off and before landing: b) prohibition of smoking c) when to put seat upright and stow tray table d) location of escape markings and emergency exits e) stowage of baggage f) restrictions of electronic devices g) seat belts If applicable: h) oxygen i) life jackets
01.7	**Method of carriage**	No person shall be carried in an area not designed for accommodation of persons unless temporary permission has been granted by the PIC
01.8	**Admission to flight deck**	No person shall be allowed on the flight deck unless 1) with permission of the PIC 2) they shall not interfere with operation of the aircraft 3) they are made familiar with applicable procedures
	Oxygen	
04.17 04.18 04.19	**Oxygen**	Supplemental oxygen is required for all pressurised aircraft and for non pressurised aircraft operating between 10,000 and 12,000 for more than 60min or above 12,000
02.8	**PIC responsibility: Oxygen**	The PIC must ensure oxygen is available for to crew members and passengers on flights in non pressurised aircraft: a) Between 10,000 and 12,000 for greater than 60 minutes b) Above 12,000
	Flight Operations: General	
07.1-2,3,5,7	**Operating minima**	The owner, operator or PIC shall ensure the routes and areas, aerodromes, alternate aerodromes and selected minimum flight altitudes to be used are authorized for use, and comply with the minimum performance and safety requirements of the operation The pilot or operator shall ensure that all considerations are made and all routes, MFA's and Aerodrome's are adequate for the planned operation, including all appropriate state or foreign minima

07.9	**Met conditions**	No flight shall take off OR continue beyond an in flight decision point unless information is available to indicate at the destination and at the alternate the weather is above aerodrome operating minima (Aerodrome Operating Minima: the higher of operator, pilot, airport or state minima)
07.14	**Smoking**	Smoking shall not be permitted in a Namibian registered aircraft or an aircraft taking off and landing in Namibia while carrying passengers In other cases Smoking shall not be permitted during a) Take-off, approach and landing b) During any ground operations c) Whenever required by the flight manual or operator
07.17	**Search and Rescue**	The PIC shall not commence the flight unless sufficient information for alerting action is available if required Operator or PIC of a flight which S&R has been requested and fails to comply with the requirements shall be responsible for costs incurred, not less than N$500
01.5	**Search and rescue Information**	The owner, operator, or PIC shall ensure information concerning search and rescue services of the area to be flow over is carried on board
GEN 1.5	**Ground to Air Signalling**	Symbols to be used in search and rescue for ground to air signaling shall be at least 2.5m at 3m spacing, as follows: V – Require assistance X – Require Medical Assistance N – No or Negative Y – Yes or Affirmative P – Proceed in this direction
07.26	**Emergency simulation**	No person shall simulate an emergency affecting flight characteristics while passengers are on board
07.27	**Starting engines**	A competent person must be at the controls when an engine is started. If the PIC is the only competent person present he/she must use brakes.
07.28	**Aerobatics**	Unless prior approval by director, not in the vicinity of ATS routes, below 4000ft if within 5nm of an aerodrome, over populated areas or gatherings, below 2000ft AGL on completion