NCAA/SSN/ARO001

The Soaring Society of Namibia Chairlady: Heidrun Snyman

#### SSN Directive No. 5

Flight level System and Airspace Awareness Flight level Flights and Transponder Use

Transponders and Airspace Limits work on 1013HPa - QNE

When the glider is on the ground and sets to Local airfield QNH there will be a difference in the transponder reporting altitude and the altimeter due to the Altimeter being set on QNH and the Transponder on QNE (Pressure altitude). If your instrumentation is working on QNH for the entire flight this is contrary to the Airspace access rules for Namibia as described in AIP ENR 1.7 Altimeter setting procedures.

All gliders are required by NAMCATS Part 104.02.5 to have an altimeter onboard the aircraft. This altimeter MUST be set as per the procedures described in the Namibia AIP and be used as the vertical height reference point and not the GPS or FMS type system that is not adjusting to pressure altitude. Normal Airspace access rules have as required in AIP SUP 8/2018 have to be applied.

- 1. Altimeter Setting Procedures as described in ENR 1.7
- 2. Ensuring height monitoring above Transition Altitude is done by using QNE (1013.25HPa)
- 3. Transition Altitude (for the Windhoek TMA is 10,000ft AMSL or when operating outside the vicinity of an Aerodrome then the requirement to transition to QNE). All Operations and height reporting (specifically above 10,000ft AMSL) must be on QNE values and not Local QNH of your departure aerodrome.
- 4. When operating in the EGMAS areas (basically between the TMZ Kiripotib and Gobabis areas, the margin for error is limited. At a distance of i.E. 2.5 NM from the TMA boundary the margin for error is extremely narrow. Any operations here on the border of the airspace boundaries should be completed with extreme caution as the potential for an airspace violation is great. Does a Glider have to do an escape maneuver it is likely that it would fly into the TMA. This basically erodes any of the safety features that the buffer zone between the gliding area and the TMA had been designed to protect. It is strongly recommended that you brief your crews that this bufferzone is designed to protect the controlled airspaces and when Gliders are operating at the outer extremity of the bufferzone, they must have a well formulated plan on what recovery measures they will have in the instance of having to do an escape maneuver from the thermal or to avoid controlled airspace.

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#### Rules for Glider Pilots

- 1. Make yourself familiar with the flight level system and its requirements.
- 2. Have a pressure adjusted indicator that indicates the altitude in feet not only in meters and which is able to be set to 1013,2 hPa.
- 3. At the beginning of each flight set your barometric altimeter to the appropriate Airfield QNH indicating the ground altitude.
- 4. Set your FMS and/or Glider Computer to appropriate Airfield Altitude (In most of the glider Systems the FMS adjusts the correct QNH by itself) and/or QNH too.
- 5. Program your FMS or Glider Computer to indicate the actual flight level (FL).
- 6. Switch on the transponder if mandatory.
- 7. Make sure it is working active by checking the indicator light if the transponder replies to interrogations. Some transponders remain in standby mode after being switched on.
- 8. Set your pressure altimeter to 1013,2 hPa and read the coordinated FL
- 9. Check the FL indication of the transponder. This is the indication that is sent down to ATC. And thus, the information ATC gets about your actual FL.
- 10. Coordinate your airspace awareness with this transponder indication only.
- 11. Double check the transponder indication with your FMS or Glider Computer indication of FL and the FL indicated by your pressure altimeter set to 1013,2. In case of irregularities request a Mode Charlie Check with ATC to synchronize your transponder indication with ATC.

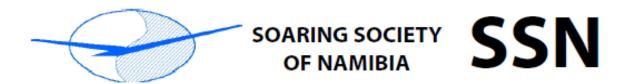
### For further Airspace Awareness

For Airspace Awareness every Glider is equipped with a GPS based FMS or Glider Computer with a moving map system that can indicate the position of the glider in relation to the Airspaces. For this the FMS or Glider Computer must be loaded and activated with the actual and correct files for the region and the aerea, with the actual airspace data and with the actual waypoint and task data.

## Rules for FMS and Glider Computers

- All actual Airspace files for your systems are provided for distribution on the SSN website <u>www.fly-ssn.org</u>
- 2. The Pilot himself is responsible for the correct settings and awareness of Airspaces
- 3. Check if the actual data according to the SSN website are uploaded and activated in your FMS / Glider Computer System.
- 4. Request help if you feel unfamiliar with the systems your glider
- Doublecheck and activate the appropriate indication funktions and warnings of your computer that will help you to be aware of approaching airspaces horizontally and vertically
- 6. Keep in mind that your preceding pilot might have removed his data cards when handing over the glider to you. Make sure that the appropriate files have not been removed from the system by this but stay uploaded into the system and activated.

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- 7. Be aware when you install own data cards that they do nor carry old files from years before and find their unwanted way into the system.
- 8. Stop climbing at 1000ft below and proceeding 2.5 NM at horizontal distance of any restricted airspace for your own safety.

Bitterwasser 21.11.2018 Ralph Buerklin SSN Safety and Quality Management

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