



Briefing Notes PTAR 2019

Introduction

The Saldanha Bay Flying Club welcomes you all to an exciting and fun weekend in the Western Cape on the West Coast.

This race is steeped in history and an institution in the power flying fraternity in South Africa, and unique in the world in its prestige, and with that the honour of winning the 1st place trophy. Given that as aircraft and systems are making progress in automation in navigation and flight, the race has had to start evolving to take this into account, and as such the format of the race has had to change to ensure the ethos of flying a race as a team of pilot and navigator using the most basic navigation of map reading and flying the individual aircraft at maximum performance levels to achieve the fairest of results based on that combined performance of team and aircraft.

This 2019 edition of the PTAR will introduce the new format of race, and as with anything that is a first, there will be teething issues that will occur that will need addressing, therefore as competitors and organisers, let's use the opportunity to make the race better for future editions.

As per our previous communique's since mid-2018, the format of the race has been formulated based on inputs we have received from you as the competitor, where we have said we would:

- Simplify the handicapping formula;
- Allow test flights as a matter of course;
- Review the penalty system to be less punitive;
- Improve time taken to obtain results;
- Figure a method for the race to be more about hands on navigation, and less reliant on automatic systems, amongst others.

All of these are encompassed in a new set of rules available from the website at Revision 11B.

As this new race format will be new to most of you, we will run a familiarisation course on Thursday afternoon at 2 PM given by Mary de Klerk where we will point out all the main elements, and provide a sample course to work with. You will also receive a blank map at registration for you to familiarise yourself with the area of the PTAR course over the 2 days.

The Following salient changes have been made to the PTAR format:

- Test flights are encouraged, but not mandated, however if large variations in flown speed against handicap speed is noted, it will require additional test flights both on day 1 and on day 2. No automatic handicap adjustments will be made. Handicaps are already published on the website for those who have entered.
- Maps of 1:250K with the route pre-plotted with magnetic headings given, will be handed out 30 min prior take-off, no prior preview of the route will be provided beforehand. There will be photo sheets given of each turnpoint at the same time.

- Handicap speed will be based on a simple relationship on two factors; Number of turns in the event (major turns only – based on V^2); and distance of the course (allowance made for obtaining stability of speed per leg – the longer the leg the better the stability of speed). This handicap relationship is published as part of the rules. The supplementary rules contain the handicapping formula.
- Scrutineering will be carried out as per current standard procedure
- The Routes will contain major turnpoints (between 4 & 6 – and are regarded major with turn angles of +/- 90 deg), and chicane turn points (shallow angle turns numbering between 6 – 8). The idea is to enhance the navigation aspect of the race, which precludes the use of automatic systems.
- Penalties will be time based only, to allow all competitors to gain a result without exclusions. Exclusions will only be for dangerous flying, or busting the lower altitude limit, or for getting lost where the scoring system cannot resolve a score.
- New GPS loggers (with excellent height accuracy) and in-cockpit cameras will be utilised for this race.

Briefings

The briefings will be held in the Briefing Hangar at 17h30 and 08h30 daily. It is important to understand that everything that is to be said at all the briefings are in these notes and it is critical that they are read carefully and understood clearly by all participating pilots and navigators.

Roll call will be taken at every briefing and both pilot and navigator must please be present. Non attendance will mean exclusion from the race.

Parking

You have all parked in bays according to your take off position for Friday morning which means the fastest aircraft will be in bay 1 and the slowest furthest away

When you return from Friday's race you will be allocated a parking bay exactly the opposite to this. The slowest aircraft will be in bay 1 and the fastest furthest away. Ground marshals will be in the area to assist.

Refuelling

Please do NOT queue at the fuel bay. Go straight to your allotted parking bay and shut down. The fuel bowser will come around at some point to refuel your aircraft. If you have locking caps, please leave them unlocked. Please ensure you are at your aircraft whilst it is being refuelled.

Scrutineering

You have signed a declaration stating that your aircraft is airworthy, has all the necessary documentation on board and is unmodified other than what you have already declared and shows on your entry form

Your aircraft will be scrutinised by the marshals as follows after briefing on Friday morning, the idea is that avionics that needs to be disabled to be done on Thursday where possible to save time:

- Your aircraft to be unlocked and all valuables removed
- It needs be fuelled to capacity, unless otherwise agreed with the handicappers (i.e. long range tanks etc.)
- Your GPS must be disabled to the satisfaction of the marshals (the rules are clear on the fact that no GPS' are allowed to be used in any shape or form and therefore it is **your** duty to ensure that mobile GPS' are removed and fixed GPS' are disabled. We will assist where possible when requested to do so but the responsibility remains with you to ensure that your G1000 or any other GPS is not usable for the duration of the race. Similarly that the auto-pilot is disconnected / disabled.
- A cursory inspection to see that all is where it should be (seats, spats, carpets etc)

What is important to understand is that:

- We reserve the right to do a detailed scrutiny on any aircraft at any time if we feel it is necessary that may mean removing cowlings and checking for nitro-glycerine canisters or suchlike
- The jury reserves the right to examine any aircraft they feel might be contravening any rule

Obviously, if anything untoward is found, steps will be taken which might include exclusion.

Handheld GPS' have never been permitted in the cockpit and now the same applies to cellular phones and watches with built in GPS'. In terms of safety and in case of emergency your primary form of communication remains the radio however, should you feel so strongly about carrying your phone from a safety point of view, it may only be carried in a sealed bag that will be provided at the aircraft during scrutineering.

When the race is over, you are to take the sealed bag with the GPS logger to the scoring team and scrutineers at the debriefing table.

Handicaps

Handicaps are known to always be one of the major difficulties in this format of race, and in this instance we are striving for the most accurate situation possible, which is based on previous race history as an initial baseline, but also to encourage test-flights in the race conditions of the particular PTAR, this one being at sea-level and at Saldanha. More detail on handicapping can be found in the rules.

For test flights, the handicapping committee will publish those aircraft requiring a test flight on the website, others not so indicated are still welcome to carry out a test flight, please indicate as such if so wished. A test flight schedule will be published for Wednesday & Thursday 1st & 2nd May.

Scoring

Scoring and results will be carried out as per Rules paragraph 9, with penalties applied as per paragraph 7. As per paragraph 9.11, the scoring results will consider placings in terms of ranking, where the position sequence will rank the no penalties placings first, then in increasing penalties as the follow-on. (i.e. a competitor with no penalties will always rank higher than one with a penalty no matter the handicap position).

For the purposes for the starting position and time for Day 2, Rule 9.4 will apply which will be applicable to all "no penalty" competitors. Competitors that accrued penalties in Day 1 will have their time penalties added to their gain/loss up to a maximum of 360 seconds (6 minutes). Those competitors excluded from Day 1 will start with a 420 second (7 minute) deficit. This will allow all competitors to complete Day 2's course within reasonable time bounds, however these time delays will not reflect in their individual scoring for Day2, but will accrue to the overall result of both race days.

Protests and Jury

A protest is a written request made to the Competition Director, by a competitor who may consider himself aggrieved by any decision, act or omission of an organiser or race official. This needs to be provided within 1 hour of when the issue manifested itself.

Any protest related to handicapping, decisions, penalties will be referred to the Jury. The Jury, which will consist of three members, will be appointed by The South African Power Flying Association. For 2019 the Jury members are:

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|-------------------|--------------|
| Ron Stirk (Chair) | 082 445 0373 |
| Hans Schwebel | 082 656 3005 |
| Deon vd Berg | 082 773 5135 |

GPS Loggers

For this year the loggers being used will be of a new type, more accurate in the vertical plane (altitude reporting), and are faster to download. They will be part of your race envelope. Please ensure that you have a bit of prestik so that you can place it on the glare shield of your aircraft, and ensure they have a blinking blue light.

On returning, please take the logger and your sealed bag to the debrief table. The logger will be downloaded by the scoring team, and reviewed by the handicappers, within an hour or so, results will then be released, or competitors will be called to the debriefing room for a results review. These will be listed as provisional results prior to there being any protests or Jury decisions. Official results will be posted once the full field of competitors results has been finalised.

Route Information

At registration you will receive:

- A blank map of the area that will not be to scale to give you an overview of the terrain of the general flying area.
- Your race sticker – to be placed on the LH side of the aircraft (for the starter to observe)
- Other stickers of our sponsors that are optional to place on your aircraft.

You will get the following related to the route for Day 1 and Day 2 prior the race start at 30 minutes in an envelope handed to you at your aircraft:

- 1:250 Scale Topographic map – no lat / long info, no grid lines. Route pre-plotted with magnetic headings per leg.
- Speed Scale for 1:250 000 scale map
- Photo Recognition Sheets of Turn Points are oriented in line of flight +/- 1000 ft at 60 deg angle, and includes the altitude reference for each turn point
 - Turnpoints marked in red are major Turnpoints & those with gazebos marked with a star
 - Turnpoints not marked with gazebos are at the centre of the feature intersection
- All in an envelope with Race No + Aircraft Reg + Papers Time + Take-off Time

The route for both days will be around 270 nm, Day 1 will be anti-clockwise, and Day 2 will start off anti-clockwise with a cross over at Saldanha airfield mid-way thereafter clockwise.

Note: Not all turning points will have markers (markers are bright orange 3 metre square gazebos), only major Turnpoints (acute angle TPs), and some selected chicane TP's. Make sure you go round the outside of these markers (the photo sheet gives you a direction of turn). Other TP's with no markers will always be the centre of the intersection. The photo sheets will indicate which Turnpoints have gazebos.

If there are more than one aircraft approaching a turning point it is better that you maintain a wider turn and keep a safe distance and lose a second or two than take each other out by trying to dive inside and flying dangerously

Further more detailed information will be provided at the briefings

Procedure for Preparation & Start

After briefing go to you're a/c, scrutineer to provide sealable bag for contraband, place in items such as phones & ipad & GPS devices. Scrutineer to sign out bag. Aircraft Avionics scrutineering will be confirmed by Century. Wait at a/c for papers, plot, start up 10 min prior take-off. Do run-ups mindful of dust and aircraft behind you. Starting Line-up – line-up in sequence at the starters position.

If you find you have a snag of any kind that will hamper your starting on time, pull safely off the taxiway and out of the way of those behind you. Once your problem has been cleared you may start again at the back of the field.

Day 1 start will be as close to 10h00 as possible.

Day 2 start will be at a time to be decided but will probably be between 09h30 and 10h00 which is calculated to make the winner cross the finish line at exactly 13h00. The sequence will be exactly the opposite to Day 1 which means that the slowest aircraft will take off first.

There will be a starters triangular rotating banner marked in red, amber, green, which the starter will turn during the release sequences as follows:

| | |
|---------------------|--|
| Red | - brakes on and power set to idle |
| Amber for 6 seconds | - feed in power slowly and hold the brakes |
| Green for 1 second | - release brakes and give full power |

Only when the banner turns to green may you release the brakes and start the take-off roll.

The gap between aircraft rolling is 30 seconds on Day 1. You therefore have 23 seconds to move forward to the start line which is more than enough of time. Please keep one eye on the banner and one eye on the ground marshal and react quickly to instructions. On Day 2, the gap between the aircraft may be down to 8 seconds, and that means each aircraft are to move up quickly to the line.

Maintain heading after take-off until you are comfortable that the aircraft is flying and you have it under control. The first check point is at the end of the active runway and is marshalled, you may only turn on to heading after passing this point.

Procedure for Finish

The finish for Day 1 is the intersection of the runway and the angled taxi-way. For Day 2 as the heading back to the field perpendicular to the runway, the full runway is the finish line, thus you can spread out if you note bunching up.

Day 2's finish is very exciting and will take all your flying skills to keep it safe. There will be a large concentration of aircraft over the finish line and therefore a number of aircraft in a small piece of the sky together. It is therefore imperative that you keep your head outside the cockpit and stay alert to others around you.

Once through the finish you should slow down and climb to 800 feet agl and maintain heading either as crosswind for 02 or 20, the landing runway will be preferred 02. For Day 2 there will be a large number of aircraft close together it is extremely important at this point that every aircraft should slow down to 90 knots. We know that this means that the big twins will just be on blue line whilst the babies will still be close to full power but this is the only way we can keep a safe separation. Only on very short short finals should you set up whatever your safe landing speed may be.

Land safely, keep your speed up and taxi directly to your new parking bay (after Day 1) which should be the fastest aircraft furthest away from the start, or back at your Day 2 parking bay (except for the first 10 aircraft over the line on Day 2). The marshals will direct you

In the event of an overshoot or go around, turn crosswind for runway 02 or 20. Always turn WITH the traffic. Climb as quickly and safely as possible to 800 feet agl. Broadcast that you are going around so that others can look out for you. Set yourself up for another circuit for the runway in use. You will probably need to slot in with the other aircraft in the circuit so please do this as soon and as safely as possible.

Radio Calls

Keep radio calls to minimum, and while on the ground do not talk at all, unless you need assistance. You will refer to yourself by your race number for the test flight as well the two race days. You must ensure you understand and use the following frequencies;

120.2 Saldanha Ground

122.7 Saldanha Tower

Area frequencies to be used during the race will be briefed at the briefings

Transponder on 2000, or you will be provided a race squawk code for the duration of the weekend.

You must please be on 120.2 for ground at all times whilst on the ground at Saldanha. When in the correct position in the queue for take-off a few minutes before your slot, change to 122.7 for Saldanha Advisory Tower.

At this point you simply say, "Race # on frequency". Tower will acknowledge "Race #"

Once airborne change to the applicable area frequency – to be briefed on the day.

The only difference is the finish where you must change to 122.7 at about 3 minutes out for Saldanha and call, "RACE # 3 MINUTES OUT". Please don't broadcast anything else (to ensure clutter free airwaves)

This is to advise the Tower that you're on your way. The Tower will not acknowledge but they will be aware that you are inbound.

If everything goes according to plan, there will be no radio communication at all. The tower will only talk to you if something goes wrong and, because there are plenty racers up there, please do not reply. Simply do whatever the safe thing is to do.

Safety

Please fly safely. The race is a high adrenalin situation and we do not want an accident, or even an incident to mar the weekend. The future of the PTAR together with your own future, depends on you getting home in one piece and without mishap.

The SAPFA appointed Safety officer for this event is Nigel Musgrave 083 675 2211. His mandate is to exclude anybody deemed to be flying in an unsafe, reckless or dangerous manner

The trick is not to execute any sudden manoeuvres. Keep your direction changes smooth and predictable. Low flying is part of the race but it is never necessary to endanger your lives doing it. Low flying must at all times be in accordance with the Air Navigation Flight Rules and all due consideration will be given to property, people and animals throughout the race.

Finally, if you win or simply place well, do NOT finish with a shoot up, wing over or such like manoeuvre that will make an aerobatic expert proud but get you disqualified. A nice loud "yeeeehah!" screamed out of the cockpit window will be acceptable.

Should you have engine failure or any problem on the runway that prevents you from taking off, please turn your aircraft off the runway as early as is safely possible because there will be someone rolling behind you.

Keep a good lookout at all times. At least one person (pilot or navigator) should always be looking outside the cockpit. More particularly, at the finish you should have both pairs of eyes looking out and around all the time.

Approaching turn-points must always be carried out on the correct inbound track in order to avoid dangerous convergence and any hazard to other competitors. If this cannot be carried out then an orbit clear of any traffic and rejoin on the correct approach path before crossing the checkpoint.

The checkpoint must be crossed so that ground marshals can clearly identify a race number or registration and at a minimum altitude of 200 feet AGL and a maximum of 1000 feet AGL (unless otherwise stipulated during the pre-race safety brief).

Turns over the checkpoints must be carried out in a safe manner and never less than a level turn. A descending turn must be avoided at all cost as this could lead to ground impact that could seriously spoil your weekend. Be aware of other aircraft that may be turning inside of you and above and below you.

Upon crossing checkpoints or the finish line steep pull-ups are strictly forbidden and will be penalised. It should also be remembered that the race is timed up to the point where the aircraft crosses the finish line. The clock then stops so thereafter there is no urgency to get on the ground.

Circuits should be planned in order to consider other traffic with spacing being the most important aspect in order to get back on the ground safely. The trick is simply to follow the aircraft in front of you.

In order to keep the radio clear, the Tower will be monitoring circuit traffic and assisting only where necessary. You will not get confirming clearance to land.

In the event of a go around, which should be avoided if possible, turns and spacing must be planned in such a way that approaching traffic is not affected. Go around procedures will be briefed but this does not preclude the pilot being responsible for flight safety. The overshoot must be initiated just prior to the runway threshold and a turn towards the crosswind leg as soon as safety permits in order to avoid any traffic approaching the finishing line. Climb back to circuit altitude and rejoin the downwind leg slotting in with traffic already in the circuit. Be aware of the speed of preceding aircraft and make space accordingly. On the go around keep below 200 ft while along the runway.

It should be borne in mind that the aircraft speeds vary considerably and there will be aircraft passing each other throughout the race requiring diligent look out and awareness.

It is the race organizers intention to make the race a safe and enjoyable event but flight safety and the safety of competitors and the public will remain a top priority. It is the responsibility of each and every one of us to ensure a safe weekend for all.

Emergencies

If the runway at Saldanha are closed for any reason, listen out for Tower instruction as to which alternate airfields are to be used. They will either be:

- Fisantekraal 63 Nm 165° M; Runway 05/23 1000 m
- Morningstar 60 Nm 168° M; Runway 02/20 800 m
- Vrendendal 84 Nm 043° M; Runway 08/26 1300 m

Please contact Nigel Musgrave 083 675 2211 for any out landings or aviation emergencies of any kind.

We hope you all enjoy an exciting and safe weekend doing what you love to do.