FLIGHT SIMULATOR AROUND-THE-WORLD RACE 2019

Routing and Special Rules

Final Release
February 13, 2019

Highlights of the 2019 Special Rules

- The Racing Time is limited to 48 hours after the start. (Rule 2)

- Routing limited to a portion of the globe. (Rule 3)

- Pilots are limited to default depictions of Russian Airports. (Rule 3)

- Normal and Thoroughbred Category aircraft types are limited to 5 and 3 (or 2) usages per type respectively. The Thoroughbred class is limited to 5 total usages. (Rule 4)

- Limited use of Jet Transport aircraft in Wild Card leg(s). (Rule 4)

- Special Aircraft requirement of C-47 and P-38 legs (Rule 5)

- Wingmen land with or after the lead pilot to retain eligibility (Rule 6)

- All penalties will be served in place in real time. (Rule 8)

- Violations of Overspeed can be costly. Newer pilots should be aware. (Rule 8)

- Special penalty options provided for crashes. Some options are necessarily complicated but will help keep the baton moving if an incident occurs. (Rule 9)

- The Missing Pilot rule is updated. (Rule 10)

- Rookie Mulligans. (Rule 12)

- Pilots may fly FS9, FSX, FSX-SE, P3Dv3 and/or P3Dv4. (Rule 16)

-Teams manage their own roster. (Rule 17)

1. The Prize.

This year's winner will receive the Wilhelm "Wilhe" Bendit Trophy.

2. Start Time, the Finish, and the Winner.

The Race will begin on Friday February 15, 2019 at 2400 UTC (that is: Friday 1900 EST, 1600 PST, and Saturday 0100 CET). The Racing Time is capped at 48 hours after the start.

The first team to complete the Race (including waiting out any not-yet-served penalties) is the winner. If no team has finished after 48 hours, each team's baton will revert to the last airport at which the team made a baton transfer. The team nearest the finish airport (the distance measured by the FSX flight planner) is the winner.

3. Routing for 2019.

The 2019 Race begins at Dubai International, U.A.E. (OMDB) and ends at Phoenix Williams Gateway International, AZ, USA (KIWA). Teams must follow the prescribed route subject to the following conditions.

> Airport Requirements. After leaving OMDB, teams must execute a full stop landing at each of the *remaining* airports listed below.
> The teams must follow the designated sequence.
> The teams may select and use any intermediate race-legal airports of their choice.

> OMDB – Dubai International, UAE (Start)
> UADD – Taraz, Kazakhstan
> VQPR – Paro, Bhutan (plan your approach ahead of time)
> YBRM – Broome, WA, Australia
> YPDN – Darwin, NT, Australia
> VMMC – Macao, Macao SAR, China
> Any Alaskan airport north of the Arctic Circle
>   [The Arctic Circle is N66*33'78.5" this February.]
>   [This class includes but is not limited to PAOT Kotzebue, PABT Bettles, PAPR
>   Prospect Creek, PFYU Fort Yukon, PABR Barrow, and PASC Deadhorse]
> CYZF – Yellowknife, NT, Canada
> KMDW – Midway, Chicago, IL, USA
> KIWA – Phoenix Williams Gateway, AZ, USA (Finish)

> Notes. ☺
> a. The two Australian airports are designated explicitly to help any team that might have trouble understanding whether airports are on the continental landmass.
> b. The KMDW waypoint, in sight of the Chicago skyline, salutes the special place of Meigs Field in flight simulation history. Time permitting, teams may wish to fly low over the old Meigs site and throw out a wreath in memoriam.

> *Routing Restrictions for 2019.* Teams may overfly but not land in Iran, Tibet, or North Korea. The penalty for doing so is a 30 minute wait penalty served before the next departure. Nor may teams land at the South China Sea airports Woody Island (VH84) or Pratas Island (Z28X) due to their highly sensitive military nature. In these two cases, the penalty is 60 minutes. (You may fly over Chinese and Taiwanese airspace and may land at those nations' other airports – as long as they are default airports in your simulator.)

> *Special 2019 restriction on Russian Airports addons.* Pilots are limited to using Russian airports as they are depicted in the default simulator (FS2004, FSX, and P3D). (For example, pilots may

not use the FS2004 or FS2002 packages that install ILS systems for large collections of Russian airports.) This provision is meant to maintain a level playing field across simulators in the 2019 Race.

4. Aircraft Options and Requirements for the 2019 Race.

On posting the takeoff for any leg, the pilot must explicitly identify his aircraft. He should announce (a) the aircraft type, (b) the model and (c) the specific simulation modeler. Failure to announce all three in a timely manner (within an hour after releasing the baton) may incur a documentation penalty.

Note: An aircraft "type" is determined by its characteristic airframe and propulsion system. A "model" or a "variant" is a variation of a "type". (For example, the F4F, F6F, F8F are different "types" as they are different designs; various models of the Beechcraft King Air are one "type" as they are variations of one design.). The "White List" (RTWR Whitelist) provides the Types and Models allowed along with the specific Flight Sim version(s) approved for use. This does not constitute any change from past practices or application.

> [Note: The "pilot-of-record" is the one who releases the baton after successful completion of a leg. If this is the original baton pilot, then a wingman is, in effect, a 'non-entity' for the purpose of the flight. Should a transfer take place then the wingman becomes the baton pilot (of record). It should be apparent that a wingman on any flight should therefore be flying an appropriate type that complies with the rules of the leg and the race as a whole. In the case of a Formation or Team Flight, the above still applies but the wingman is now essential for completion of the Formation, or qualifies as a participating pilot in the Team Flight. These extra flights are not counted in the usage limits as they are secondary to the baton leg. The 2019 RTWR does not include Formation and Team flights.]

> i) Normal Aircraft
>> (a) This category includes those aircraft listed in "The White List" – See the RTWR Site Whitelist – as well race-eligible aircraft with a maximum speed of no more than 350 Knots True Airspeed.
>> (b) Normal aircraft legs may extend to a maximum distance of 750nm and are limited to two hours in duration after which the standard triple time penalty applies.
>> (c) A normal aircraft type may be used by a Team no more than five (5) times each. For these normal aircraft, a 10-minute "maintenance" penalty applies to each excessive use. That said, the race eligible P-38(F-J,L) and P-51(B/C/D) may be flown as many times as desired.
>> (d) Normal race-eligible aircraft with a maximum speed of no more than 350 Knots True Airspeed may be flown without usage restriction. (This class might include quality simulations of the DH.98 Mosquito, Lockheed Constellation, ... or the Wright Flyer.)

> ii) The Thoroughbreds:
>> (a) These aircraft are listed in "The White List" – See the RTWR Site Whitelist.
>> (b) The Thoroughbred list includes all models of the Dornier Do335, P-51H, P-82B, and P-47M, as well as the DH.103 Hornet and F-80 Shooting Star by AlphaSim/Virtavia.
>> (c) Thoroughbred aircraft legs may extend to a maximum distance of 750nm and are limited to two hours in duration after which the standard triple time penalty applies.
>> (d) Teams may fly no more than a total of five (5) baton legs in thoroughbred class aircraft. No Thoroughbred type may be used more than three (3) times, *and the F-80 may not be used more than two (2) times*. A 30-minute "maintenance" penalty applies to each

excessive thoroughbred use. These 5 thoroughbred legs represent a resource to be used strategically.

iii) Transport Jet Operations:

In certain situations it is desirable to have access to jet aircraft to bridge longer distances at higher speed. Therefore the Committee has made provision for a known list of transport-category jets to be available as a strategic resource. These are divided into two categories with specific usage limits for each, as follows:

(a) Transport Category 2 (Medium) Jets: Civilian Transports having a MTOW of 100,000 to 190,000 Lbs and powered by no more than two engines (except those listed below).

Available types are shown in the White List and generally described below:

(i) Airbus A320 (family, including A318, A319, A320, A321). Boeing: the B737 (family). Add the following flying but well-worn classics: McDonnell Douglas DC-9, MD-80/90 (family) and four lovingly restored early classics, the BAC 1-11, the DH.106 Comet, the Hawker Siddeley HS121 Trident, and the SE 210 Caravelle.
(ii) In addition, Embraer, Bombardier and British Aerospace "regional" jets (E-145/170/190 and CRJ-200/700/1000 and HS/BAC146) that fit below the weight limits above are allowed.

(b) Transport Category 3 (Large) Jets: Civilian jet transports with 2, 3, or four engines and a MTOW of 170,000 Lbs or more.

Available types are shown in the White List and generally described below:

(i) Airbus A310, A330, A340, A350, A380; Boeing B747, B757, B767, and B777. It adds the following flying but well-worn classics: the Boeing B707, B720, B727, McDonnell Douglas DC-8, DC-10 and MD-11; Lockheed: restored instances of their famous L-1011 TriStar.

(c) Limitations. Teams optionally fly Transport Jet flights only in the designated Wild Card Leg.

iv) Wild Card Legs:

After landing at Paro, Bhutan (VQPR), teams may optionally fly up to three separate Wild Card Legs.

- On one (1) "Super Wild Card", teams may fly up to 1200nm in any Transport Jet (Category II or III) or any Normal race eligible aircraft (not a Thoroughbred).
- On two (2) "Standard Wild Card" legs, teams may fly up to 900nm in a Normal race eligible aircraft (not a Thoroughbred, not a Transport Jet).

Aircraft usage in the Wild Card legs does not impinge on the numerical limits stated in (i) and (ii) above. (These Wild Card legs are not time-limited. Teams may use the missing pilot rule if necessary.)

Supersonic flight is not permitted. (The Duenna will record if speed exceeds Mach 1.05 and the leg will be examined by the Race Committee.) A momentary transgression will result in a small time penalty. Extended flight in excess of Mach 1.0 will trigger an escalating penalty sequence that may result in the leg being rendered invalid and require it to be re-flown. See the penalty regime in Special Rule 8 ahead.

5. Special Flight Requirements for 2019.

Age of Flight. In Manfred Jahn's C-47, teams must complete a leg of at least 100nm after landing at Paro, Bhutan (VQPR). The freeware Manfred Jahn FS9, FSX, and P3D versions are eligible – but not other C-47s or DC-3s. Pilots will note that the Manfred Jahn C-47 comes with a damage module than allows pilots to blow out the engines. [This feature may not be disabled.]

An Ode to the Classic RTWR Racer. In a race-eligible P-38(F-J,L) Lightning, teams must complete two (2) legs of at least 300nm *each* after landing at Paro, Bhutan (VQPR). Notable options are the P-38 models by David Copley (freeware for FS9 which port nicely to FSX) and by MilViz (payware for FSX and default freeware for P3D).

6. Wingmen in 2019.

The wingman should land alongside or after the lead pilot. Accordingly, the wingman may not receive a transferred baton if he lands more than three minutes before the baton pilot lands or more than three minutes before the baton pilot initiates the wingman transfer. If special circumstances arise where the intent is correct but the effect is not, then the team should proceed with the wingman transfer – and then note the discrepancy, make an appeal, and expect that appeal will likely be granted. This rule intends to govern normal practice but considers exceptions for unforeseen circumstances.

7. The Consecutive Pilot Rule in 2019.

Normally, a pilot may not be the pilot-of-record in consecutive legs. (A pilot-of-record is the baton pilot who completes a leg.) However, he may do so in the following circumstances.

A. Emergency Pilot Rule. If the team has no pilot to carry the baton, the just landed pilot-of-record may carry the baton on the next leg, provided:

- On the team's first use of this rule, the pilot invokes the Emergency Pilot Rule and accepts a five (5) minute transfer wait period. The pilot officially posts on the forum that the "Baton is Free." He then waits at least five minutes. And then he posts "Invoking the Emergency Pilot Rule. I have the baton." and proceeds. That is to say, on the team's first invocation of the Emergency Pilot Rule, the time cost is 5 minutes to be served as the pilot waits before starting the next leg. (Note that on the forum clock, the difference between the "Baton Free" and the "Invoking Emergency Pilot Rule" posts should show 6 minutes – to insure that the full 5 minutes have been served. See Rule 8 below.)

- On the each subsequent team invocation of the Emergency Pilot Rule, the pilot incurs a ten (10) minute transfer wait period. On each such instance, the pilot makes the proper posts outlined above while waiting at least 10 minutes before invoking the Emergency Pilot Rule, taking the baton and proceeding on the next leg. (Note again that a 10 minute wait implies 11 minutes on the forum clock.)

B. Wingman Transfer. The pilot-of-record on the previous leg may take the Wingman role in the current leg. He may accept a Wingman Transfer by invoking the Emergency Pilot Rule at the normal 5 minute Wingman Transfer cost plus a 5 or 10 minute wait period (as per the Emergency Pilot Rule). The two penalties must be served after the Wingman-now-Baton-Pilot releases the baton and before the next leg commences.

8. Penalties for 2019.

Teams will serve each penalty in real time at the next available moment. Any penalty under review need not be applied until the final decision is made at which time it will be served as soon as possible. Normally, teams must clear all outstanding penalties before they depart on the final leg. Note that the 2019 penalty scheme reduces the penalty times in order to emphasize the importance of performance on the race course.

Serving a penalty:

When serving a penalty, the team holds the baton stationary on the ground. Importantly, the team must ensure that the wait time on the ground, the difference between the last baton release and the new baton claim, is at least as long as the penalty.

The correct procedure requires attention to detail. For an example, consider a one (1) minute penalty. If the last baton release is marked at 12:00 on the forum clock, the new baton may not be claimed before 12:02 on the forum clock. Note that the forum clocks are marked in hours:minutes and not hours:minutes:seconds. Thus, a forum clock time of 12:00 may have been registered at any time between 12:00:00 and 12:00:59. Only a 12:02 departure can ensure that one full minute has expired. Similarly, a five (5) minute penalty would mean that the team could not reclaim the baton until 12:06, a fifteen (15) minute penalty waits until 12:16, … and so forth.

In effect, the penalty served on the forum clock will look like the true penalty time plus one minute. This feature applies to every penalty or wait time.

Penalties for 2019 include:

- *Triple Time Excessive Leg Duration.* Teams serve a penalty 3 times the time they have exceeded any leg duration limit. (See General Rule 6.d.iii.)
- *Timing and Sequence Errors.* The team must serve the error time as a penalty at the next baton transfer with a minimum penalty of one full minute. Immediate self-reporting (before the next baton is claimed) and voluntary correction is sufficient to clear the error. However, if Race Committee action is required a two-minute Administration Penalty will be added.
  (Example one. Based on the sequence of forum posts, it is evident that a departing pilot claims the baton before the arriving pilot releases the baton. The forum clock times may be identical. Nevertheless, the improper sequencing carries a minimum penalty of one minute – and so the team must serve a one minute penalty at the next baton transfer. Example two. The departing pilot leaves 5 minutes before a tardy arriving pilot remembers to release the baton. The team serves a penalty equaling the discrepancy in posting times. Example three. The team aims to serve a penalty but they accidentally leave one minute too early. The team serves a penalty of one minute at the next baton transfer.)
- *Administration Penalty.* Two (2) minutes. Incomplete posting and documentation errors that persist more than one hour after the leg's completion. These minor errors would include the lack

of a timely Duenna, absence of a starting Baton/Wingman post, incorrect ICAO descriptions, incomplete aircraft type information, etc. This administrative penalty applies when there is solid evidence that the leg was completed, that the baton/wing pilots did the right thing, the aircraft was properly eligible, and so forth. (Absence of evidence for a leg completion, or start time, or aircraft probity, and so forth will activate more serious penalty regimes than the administrative penalty.) If the team corrects the error before an administration action is required, then there is no penalty. Edits to forum posts must clearly indicate the nature of the change. Simple deletions or additions are not acceptable. (This should become part of the General Rules at a later date.)

- *Consecutive Pilot Rule.* The wait times are not penalties in the sense of a rules infraction. The mechanism is the same. See Special Rule 7 above.
- *Crash Penalties.* See Special Rule 9 below.
- *Penalties for Mach violations.* Supersonic flight is not permitted. The Duenna will flag speeds in excess of M1.05 and record Mach speeds in its routine monitoring.
  Penalties for Exceeding the Mach Limit (>M1.05): any single record in the Duenna textfile, including the Max Mach flag, of speed >M1.05 = 1 minute; any two such records = 5 minutes; more than two such records = invalid leg. Where available, a Wingman Transfer is permitted. Pilots wishing to 'fly near the edge' should be prepared to maintain full-time flight monitoring.
- *Penalties for overspeed violations.* The different simulators vary in how they monitor time and stress in "overspeed" and then signal a "crash" upon reaching a threshold. But some violations of Mmo will not cause a crash.
  Penalties for Exceeding Placard Speeds not causing a "crash" (Duenna-reported cumulative time per leg): up to 90 seconds = nil; more than 90 seconds up to 120 seconds = 1 minute; 121 seconds to 180 seconds = 10 minutes; 181 to 300 seconds = 10+10 = 20 minutes; more than 300 seconds = invalid leg. These penalties stem from examining the Duenna records; the Duenna will not automatically signal the violation. Because the penalty is severe, <u>pilots should always be aware of their time in overspeed.</u> Where available, a Wingman Transfer is permitted. Again, pilots wishing to 'fly near the edge' should be prepared to maintain full-time flight monitoring.
- *Invalid Leg Penalties.* Any completed leg that is later declared to be an invalid leg for technical reasons will be subject to an ordinary Crash Landing Penalty plus any Compensatory Penalty to be assessed by the Racing Committee. The full penalty will be served at the next available opportunity. (Note that the Racing Committee may judge some technical violations to be largely inconsequential and assess a minimal penalty rather than invalidate the leg.)
- *Other Penalties.* Other penalties assigned by the Race Administration are also to be served in real time.

9. Crashes or voluntary or involuntary termination of a leg.

In 2019, the Special Rules provide penalty options for these events.

In the case of a crash, simulator program failure, computer error, or other reason, it may be necessary to prematurely terminate a flight. In such case, the baton holder chooses from the following options:

a. Restart the <u>flight</u>.
The baton holder or wingman may restart his flight. In this case, the pilot need not make a formal announcement. He merely relocates his aircraft at the last departure airport and restarts. The leg duration clock continues to be measured from the lead pilot's original "I have the baton" post. A subsequent wingman transfer still requires calculation of time from the original baton post on legs where there is a time limit.
[Note that this quick restart option works best when the pilot crashes on takeoff or the pilot quickly realizes that he has not triggered the Duenna or that he has the wrong realism settings.]

b. Abort the <u>leg</u>.
The baton holder may abort the leg. This option:
- Requires the pilot to announce a formal Abort;
- Requires the wingman to Abort as well (no formal announcement needed);
- Returns the baton to the last departure location;
- Vacates any penalties accrued on the aborted leg;
- Allows the pilot to retain the baton (without penalty) or relinquish it to another pilot. [Note this is different than the General Rules]

The team begins a new leg as normal with both the baton pilot and wingman making the proper posts.

c. Transfer to wingman.
The baton holder may transfer the baton to the wingman, as provided for in General Rule 9. A five (5) minute penalty is assessed. [Note that this provision modifies General Rule 9 which specifies 30 minutes.]

And some special alternatives.

d. Crash on landing at the declared destination airport (where the Duenna reports the position as on the actual airport). The pilot posts the crash on the forum. The team may optionally move the baton to the declared destination airport and incur a 15 minute penalty to be served immediately from the crash post time. It then departs on a new leg. (When available, the team may optionally choose a normal wingman transfer.)

e. Crash en route: relocation-and-leg-completion. The pilot posts the crash on the forum. *When no wingman is present, and when the Duenna indicates the geographic location of the crash (or the last known location before the crash),* the pilot may optionally relocate to an alternative airport and fly a new leg to the previously declared destination airport. The pilot may make a Baton Post and start a new leg (with a new duration clock) from any airport (a) not nearer to the destination airport than the last known flight location and (b) within 150nm of the direct great circle route tracing back from the crash site to the original departure airport. [Note that this relocation airport need not be directly on the original routing pathway.] In the new start, the pilot may without penalty retain the baton or he may relinquish it to a teammate; the aircraft may be kept in service (at no usage cost) or it may be substituted (consistent with other rules); and/or it may be refueled. The team must wait 15 minutes after the crash post time and then flies the new leg to the previously declared destination airport. This option is available to the current baton pilot but not the current wingman.

[Note that this option is the standard one for a mid-route crash due to flight into terrain, fuel starvation, overspeed stress, or simulator crash. On a simulator crash, the pilot should immediately turn his attention to the currently running Duenna. *After waiting no more than a second or two,*

the pilot should ABORT the leg by selecting the "Drop Baton" button. The Duenna will confirm and then close and issue a report. The report will indicate the last known en route position of the baton. Failing to abort the leg may leave the pilot in the position of improperly closing the Duenna and thus missing the chance to get a report of the last known location. Pilots might well plan what to do before they actually face the shock of an en route crash.]

f. Crash en route: false leg. The pilot posts the crash on the forum. *When no Wingman is present and no location is shown by the Duenna,* the Team may, <u>one time during the race,</u> optionally choose to execute a "false leg." The team moves the baton to the previously declared destination airport. It then calculates a "*wait time*" as follows:

(i) Generate the *leg distance* as the great circle distance (nm) between the departure and declared destination airports;

(ii) Calculate an estimated *leg time* in minutes as: (*leg time = leg distance*/5.50) [for Transport Jets, *leg time = leg distance*/6.80];

(iii) Determine the *elapsed time* (the forum time between the initial Baton Post and the Crash Post) in minutes;

(iv) Calculate the *wait time* as: (*wait time = leg time* + 15 - *elapsed time*).

The team then commences a new leg after waiting the calculated *wait time* (minutes) after the Crash Post. This option vacates any Triple Time leg duration penalty beyond that which might be incurred due to the actual *elapsed time*. The crashed baton pilot becomes the official pilot-of-record for the false leg. The false leg pilot's aircraft usage counts against any usage limits. This option is available to the current baton pilot but not the current wingman.

This provision represents a partial solution for a computer crash in which all information is lost – and it may be better than re-flying the entire leg but not so good as a wingman transfer or a relocation-and-leg-completion.

10. The Missing Pilot Rule in 2019.

If, for an extended period, the team loses contact with the baton pilot and the team believes that the pilot is lost for the session (perhaps a computer failure, internet cutoff, or power outage), the team may invoke the Missing Pilot Rule to take control. It then activates the appropriate section of Special Rule 9 "Crashes" (above). If the baton pilot suffers such an equipment failure, he should contact the team via other means such as telephone or text to accelerate the decision-making process. This Special Rule replaces General Rule 7C(iii).

11. Artificial Vision and Artificial Landing Aids in 2019.

Pilots may not use artificial (not true to their aircraft) gauges or tricks to enhance their vision or their ability to approach and land at an airport. Standard TAWS gauges or GPS gauges are fine. They simulate real world depictions of terrain and give "non-precision" approach information. However, no artificial vision gauges and tricks are allowed. (Even if realistic, in the 2019 RTWR they are not allowed because they change the nature of the competition.) More important, all artificial landing systems are prohibited because they violate the spirit of the race. The blacklist includes, but is not limited to: Glen Copeland's nifty "Satellite Assisted Landing System" (SALS) gauge, and the artificial ILS/Runway landing systems based on the Synthetic ILS developed by Karol Chlebowski (that is, Chlebowski's own "Synthetic ILS – For Every Runway at Every Airport" package, Bill McClellan's "Approach and Landing Automation of Synthetic ILS System", and the GCA system developed by the Manfred Jahn team for the C-47.) Nor may pilots artificially use carrier landing systems to shorten their stopping distances. Further, 'ad hoc' changes to computer/display settings that enhance the simulation in low-light or low-visibility conditions are prohibited. This ruling expands the General Rules' prohibition of "artificial landing aids" such as third-party Autoland gauges and devices. [If

you think that a questionable landing aid might be illegal, check with your teammates and with the authorities before using it. If you suspect that it is illegal, then it probably is.] The use of any such artificial landing aids constitutes cheating and will be treated as a serious violation of the pilot's honor and the community's trust.

(Note: It is anticipated that this will be incorporated in the General Rules at a future date.)

12. New Pilots.

New pilots enjoy a two-time "rookie mulligan." Twice during the Race, each new pilot may initiate a "wingman transfer" without cost. Pilots must declare the wingman transfer as a 'mulligan' in order to claim the relief. A new pilot is one who has not yet been an official pilot of record or who is returning to the race after an absence of at least two years.

13. The Duenna.

All pilots should use the new Duenna v3.0 current release (available at the RTWR website here). [As of this Special Rules release, the latest version is 3.0.2019.208. You shall want to be sure that you have the updated version.] The Duenna handles FS9, FSX (Classic and Steam) and P3Dv3 and P3Dv4. This also requires an updated FSUIPC Version 3.999z9 (FS9), Version 4.938d (FSX) or Version 5.1 (P3Dv4) or higher. For 2019, pilots who cannot use the current release v3.0 may use the previous release v2.0. (Some pilots remain on Windows XP, for example.) However, please note that the older v2.0 cannot produce the tracking maps (Google maps has changed) and it has not received development updates after the move to v3.0. Nevertheless, it might work well enough. That said, pilots using post-XP operating systems should make the transition.

In 2019, it is _strongly recommended_ that pilots (especially those using Windows 10) execute the Duenna in "run as administrator" mode.

14. The Weather.

Pilots may choose their weather engine for the race as long as they stick with their choice throughout. The options are enumerated in the General Rules. Teams will publish a list of their pilot choices so that everyone knows what is going on.

If an individual pilot has unanticipated difficulties with his chosen weather engine, he should appeal to the Racing Committee about switching to the default Jeppesen or another engine.

If the Real Weather system fails for everyone, pilots should switch to the default "Fair Weather" (not the "Clear Weather") theme, contact the Duty Officer, and follow any subsequent instructions.

15. Time Bank

Normally, all penalties are served as time on the racetrack. Under unusual circumstances, a team might be granted "positive" time to make up for an administrative error or to handle an extraordinary event. The Racing Committee may allow the team to "bank" this time to be used to offset future penalty time. If so, then the team should post on its forum an open record of the time "bank account" and any modifications thereof. Rarely, if disaster strikes, then the Racing Committee may find other ways to make the race whole. (For example, the Committee may ask the other team(s) to stop, appropriately extend the 48 hour racing window, and then allow the victimized team to regain the lost time.]

16. Simulators Included in 2019

The Race accommodates several simulators of the MSFS family. Pilots may fly FS9, FSX, FSX-SE, P3Dv3 and P3Dv4. The simulators are not identical: the default airports and their locations vary slightly; the newer simulators' flight models are slightly more sophisticated; and not all race aircraft work in all the simulators. But the core seems similar enough to allow the Race to include our many pilots who have chosen, for whatever reason, one simulator or the other.

Note that when the team is working multiple simulators – from FS9 to FSX or from FSX to P3Dv4, the location of the same real world airport may not be identical across simulators. Pilots should simply fly the world of their own simulator while taking care to use a common real world airport when transferring the baton with teammates. Small location anomalies are understood and will be accommodated under the rules administration. (That said, when one simulator includes an airport while the other does not, then that airport is not suitable for a baton transfer between teammates flying the two different simulators.)

17. Team Administration.

Before the race, each team should post a public list of eligible pilots, including their simulators and chosen weather engines, and their rookie/veteran status. Any pilot may fly more than one simulator with a single weather engine designated per simulator. Teams may update their pilot rosters as the event moves along. Only pilots on the official team roster may fly a leg for the team.

18. Race Administration.

The 2019 RTWR will be governed by an Administrative Organization comprised of a number of race pilots who volunteer their time. See the Race Administration document for details.

19. Communications.

The Official Race Site is here: Flight Simulator Around the World Race
(http://www.fsrtwrace.com/)

NOTAMS will be published on the Official Site. Immediate notifications by a Duty Officer or committee member may be posted on the FSRTWR NOTAMS Forum. (There may be delays moving from the forum posting to the formal website posting.)

Communication with the Duty Officer is accomplished via a posting on the special Duty Officer Forum on the FSRTWR Forums. (The Duty Officer will frequently check that forum for new messages.)