

FLIGHT SIMULATOR AROUND-THE-WORLD RACE

2013 Routing and Special Rules

February 11, 2013

Highlights of the 2013 Special Rules

- *Sponsored Aircraft.* This year teams have access to several three-engined jets.
- *Wildcards.* Teams have three wildcards to total no more than 5,000nm, the longest being limited to 2,250nm.
- *Special Continental Jet Legs.* Teams may optionally fly three three-engined jet legs, each of a distance less than 1,000nm and to be completed on a continental landmass.
- *Formation Flights.* Teams may earn a bonus for five closely coordinated legs.
- *Special Aircraft and Team Flights.* Teams may earn a Team Flight bonus of 15 minutes per participating pilot up to a total of three hours. The legs include "Three Motors," and "Three Tails," and options for "Three Wings," and "Three Jets."
- *Rookie Mulligan.* During the Race, each new pilot may exercise a single "wingman transfer" without cost.

1. The Prize.

In honor of Ian Dale, Matt Smith, and Reggie Fields, we shall take this occasion to retire the *Tornado Trophy*. Thanks for the terrific decade of around-the-world racing. This year's winner will become the first recipient of the *Wilhelm "Wilhe" Bendit Trophy*. (More on the trophy as we go along.)

2. Start Time.

The race will begin on Saturday February 16, 2013 at 1500 UTC (1600 CET, 1000 EST, 0700 PST).

3. Routing.

The 2013 Race begins and ends at Cape Town, South Africa (FACT)

Teams must circumnavigate the world, passing through all degrees of longitude, and meet the following requirements:

The team must land at two airports 1,000nm apart on the main landmass of each continent.

The team must land at three airports 500nm apart north of 30° N and three airports 500nm apart south of 30° S. Each airport should be on a defined continental landmass and no two may be on the same continent.

Airport Requirements. Each team must land at the following airports.

Moscow, Russia (UUWW)
 Moscow, Idaho, USA (KPUW)

Restrictions on Airspace and Landing Rights. The global character of the race requires working with many countries to obtain legal clearance, including overflight and landing rights, as well as to assure minimal security for our pilots. This year, pilots have free access to all countries with the following exceptions.

Airspace denied and landing rights denied: Iran, Syria, and North Korea.
 Airspace is open but landing rights denied or security inadequate: Mali, Somalia and Myanmar.
 Special Ban: Direct flights between China (PRC) and Japan are prohibited.

Special Restrictions.

Polar restrictions. Pilots may not land at latitudes above 80° N or below 60° S.

Airports closed. The runways at Svalbard, Longyear (ENSB) and at the Cocos Islands (YPCC) are under repairs and closed for the 2013 RTWR. Diplomatic considerations have closed the airport at Woody Island [Yongxing Island in Chinese] of the Paracel Islands [Xīshā Islands] in the South China Sea (Z24D in FS9)/(VH84 in FSX).

4. Sponsored Aircraft.

This year, at the request of the organizers, several manufacturers have offered immaculately restored instances of their famous three-jet aircraft. You may choose from the Boeing B727, Douglas DC-10, McDonnell Douglas MD-11, Hawker Siddeley HS121 Trident, Lockheed L-1011 TriStar, and Tupolev Tu-154. For specific flight simulation models allowed in this years' Race, see the Trijet White List in Appendix B.

The above civilian jets are the only jets eligible for use in the 2013 Race.

5. Normal Legs.

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.

Normal legs may extend to a maximum distance of 750nm and are limited to two hours in duration.

6. Wildcards.

In addition, each team has up to three wildcard flights – the total distance is not to exceed 5,000nm and no one leg is to exceed 2,250nm. There is no time limit on these flights. Pilots must fly an aircraft with a takeoff weight of 30,000 pounds or more, they may not exceed the maximum gross weight, and they may choose either a normal race eligible aircraft or a sponsored jet. Jet legs of greater than 1,500nm are limited to the following aircraft: DC-10, MD-11, or L-1011.

7. Special Continental Jet Legs.

Each team has available three optional "continental" jet legs to be flown in the sponsored three-engined jets listed above in Rule 4. Each leg is limited to less than 1,000nm, must begin and end on the same continental landmass, and must be completed within 2½ hours. The leg is otherwise treated as a normal leg.

8. Formation Flights.

Teams may earn a Formation Flight bonus for any leg in which two pilots complete their flights in close coordination. For any leg the lead pilot initiates, "I have the baton in a Formation Flight." And the wingman declares, "Flying wingman in a Formation Flight." The leg length must be at least 400nm; both pilots must leave the same airfield within 3 minutes of each other, and both pilots must land at the same destination. To validate their flights, *both pilots must use the Duenna online flight tracking software while enabling the "Arm baton auto-pickup" button.* The lead pilot declares "The baton is free" only after both pilots have posted their landings.

Teams get 6 opportunities. For each flight, the maximum bonus is 30 minutes. The actual earned bonus is 30 minutes minus the difference in flight durations (Flight Times) as measured by the Duenna. Round the bonus up to full minutes. Immediately after releasing the baton and confirming the validations, the lead pilot or a teammate posts in the active thread showing clearly the two flights' durations, the difference, and the calculation of the Formation Flight bonus. He declares the Formation Flight bonus and enters the total into the team's bonus bank. Of the 6 opportunities, the top 5 bonuses count (the team throws out the lowest score).

In a Formation Flight, a failure to complete both parts forfeits the opportunity to earn the bonus. (That is, the team gives up one of its 6 chances to earn such a bonus.) Such a failure might occur when a diversion makes the leg length too short, or one pilot crashes, a computer fails, or the interval between the pilots grows larger than 30 minutes. The lead pilot merely declares "The Formation Flight is terminated" and the leg reverts to a normal leg. The bonus opportunity is lost.

9. Special Aircraft Legs and Team Flights.

Below are two required legs and two optional legs. Teams may (but need not) designate any of these as a Team Flight.

All teams must advance the baton in the appropriate aircraft for each of the first two following legs (*Three Motors* and *Three Tails*). Either one of these flights must be completed within the first 24 hours (including the race's first leg) and the other must be completed after the first 24 hours have expired. The third and fourth alternatives are entirely optional and may be conducted at any time.

Additionally, the team may choose to declare any or all of these legs as a Team Flight in which they earn 15 minutes for each successful Participating Pilot up to a total of three (3) bonus hours. The standard rules governing team flights are in Appendix A. (Note that the restrictions on the baton pilot implicitly apply to a possible wingman.)

Three Motors (A leg of 50-750nm).

The baton carrier flies the default MSFS Ford Trimotor. Participating pilots fly any Ford Trimotor, Fokker F.VIIb/3m, or Ju-52/3m. (See FAQ on eligibility details.) All pilots, both the baton and participating pilots, must operate without the aid of an autopilot—they must fly with the *Duenna's autopilot-disabled feature activated*. This baton leg is required, although the Team Flight component is not.

Three Tails (A leg of 300-750nm).

A flight in Lockheed Constellations. The baton carrier flies the Manfred Jahn Lockheed L-1049G Super Constellation. Participating pilots may fly any race-eligible Lockheed Constellation. This baton leg is required, although the Team Flight component is not. (The Connie does not count as a tri-motor!)

Three Wings (A leg of 50-750nm).

All pilots fly the CR1-Software (or simTECH) Fokker Dr.I triplane. All pilots, both the baton and participating pilots, must operate without the aid of an autopilot—they must fly with the *Duenna's autopilot-disabled feature activated*. This baton leg and the Team Flight component are entirely optional.

Three Jets (A leg of more than 300nm).

A team may augment one of the optional jet legs by turning it into a Team Flight as well. This option is available for *either* one Wildcard Leg (Rule 6) flown in a jet *or* one Special Continental Jet Leg (Rule 7). The flight must be at least 300nm and any participating pilots must land and post within one hour of the baton pilot. All pilots must fly a three-engined aircraft from the sponsored jets and satisfy the wildcard requirements *or* the special jet leg requirements, as appropriate. This baton leg and the Team Flight component are entirely optional.

10. Special Aircraft Requirements for the 2013 Race.

The White List. A list of eligible race aircraft is presented in Appendix C below. Pilots desperate to fly another aircraft should contact the Executive Committee well before the race. Not all requests, even reasonable ones, will be granted. Updates will be published in the NOTAMS. This White List governs only the 2013 race.

The Thoroughbreds. The Thoroughbred list includes all models of the Dornier Do335, P-51H, P-82B, and P-47M, as well as the DH.103 Hornet by AlphaSim/Virtavia,. Teams may fly no more than a total of 10 normal baton legs in thoroughbred class aircraft. A 30 minute "maintenance" penalty applies to each excessive use. These 10 thoroughbred legs represent a resource to be used strategically.

11. New Pilots.

New pilots enjoy a one-time "rookie mulligan." During the Race, each new pilot may exercise a single "wingman transfer" without cost. A new pilot is one who is racing for the first time this year or who is returning to the race after an absence of at least three years. Pilots must declare the wingman transfer as a 'mulligan' in order to claim the relief.

12. Weather.

In 2013, all flights will be conducted using the FS2004 or FSX live weather engine (as supplied by Jeppesen). The appropriate setting is Real Weather with 15 minute updates. Special exceptions will be made for pilots who cannot comply. If the Real Weather system fails for everyone, pilots should switch to the "Fair Weather" (not the "Clear Weather") theme, contact the Duty Officer, and follow any subsequent instructions.

13. Bonus Bank.

To speed up the race, teams will keep open accounts of their bonus hours and also be able to apply those hours against any penalty time that they incur. Teams gain bonus hours for the Team Flights, Formation Flights, and other bonus opportunities. This Bonus Bank is public and everyone can quickly keep track of the competition. Care should be exercised to insure as much security as possible.

Teams are to keep track of bonuses and penalties in the web application located on the official web site here: <http://www.fsrtwrace.net/bank/> .

A team may use its Bonus Bank hours to pay off any enforced delays or penalties incurred. They may borrow against future earnings. At the end of the Race, the net balance will be applied to the team's actual race duration to produce an official Race Time.

After a team has earned or expended bonus hours, it is the team's responsibility to adjust the proper entries to indicate the bonus time earned or expended. The team should complete this accounting within two hours of the transaction. There is no penalty for failure to post the numbers except that the team will forfeit the bonus or will be required to return and serve the penalty in place. (Appeals may be made in the case of accounting errors or a tardy posting. The Racing Committee will be lenient on the first instance of a mistake.) Keeping good records is a team responsibility, not a baton pilot responsibility.

14. Administration.

The 2013 RTWR will be governed by a more inclusive Administrative Organization. See the Race Administration document for details.

15. Communications.

The Official Race Site is here:

[Flight Simulator Around the World Race \(www.fsrtwrace.net\)](http://www.fsrtwrace.net)

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 [here](#). (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 [here](#). (The Duty Officer will frequently check that forum for new messages.)

You may send a private email to the Executive Committee rtwrace@gmail.com. This email will be checked only occasionally. It is not your main contact point.

Appendix A.
Standard Rules Governing the Team Flights.

- a. Each Team Flight requires a baton pilot and participating pilots. These flights can take place in any location and at any time—with two restrictions. First, team flights may not be consecutive—there must be at least one normal leg between two team flights. And second, either *Three Motors* or *Three Tails* must be completed in the first 24 hours and the other after the first 24 hours have passed.
- b. Each participating pilot, not counting the baton carrier, who completes and validates a successful leg will earn a 15-minute bonus for the team. A maximum total of 3 bonus hours can be earned from the Team Flights combined, of which no more than 1½ hours may be earned in a single event. Once a category of team flight has been flown, it may not be re-flown by the same team.
- c. The baton pilot and all participating pilots must fly aircraft of a specified class, as listed above. The participating pilots do not have to fly the same aircraft as the baton holder – although a potential wingman should do so. The baton pilot and all participating pilots must take off from and land at the same airports.
- d. Participating pilots may not take off until after the baton pilot has departed. They may land before the baton pilot, but must complete and post their legs within 30 minutes after the baton pilot's "Baton is free" post. The team may continue to advance the baton on the next leg while participating pilots are landing and completing their validations.
- e. All participating pilots must post their aircraft type, takeoff, landing, and authentication in the normal manner in the team forum. (A Duenna authentication needs only the textfile. The automated tracking authentication will not suffice for the Team Flight.) Finally, after the event and authentications are completed, the team must post a "Team Flight Summary" indicating the number of bonus hours earned in this event and then make the appropriate entry into the Bonus Bank.

Appendix B.
White List for Trijet Race Aircraft

Aircraft Type and Model (and class)	Modeler or Company	Abbreviation.	Free-ware	(FS9 and/or FSX)	Notes Modeled (Mmo, Vne)
<i>Wide Body Trijets</i>					<i>Eligible for all wildcard and continental jet legs.</i>
DC-10-10 (and other models)	Thomas Ruth	Ruth	Free	FSX	(0.88, 360)
DC-10-30 (and other models)	SGA	SGA	Free	FS9	(0.88, 360)
DC-10	Aerosim	Aerosim	Pay	FS9	(0.91, 350)
MD-11	iFDG	iFDG	Free	FS9	(0.91, 350)
MD-11	Premier Aircraft Design	PAD	Free	FS9&FSX	(0.85, 325)
MD-11	PMDG	PMDG	Pay	FS9&FSX	(0.87, 372)
L-1011-100	Thomas Ruth	Ruth	Free	FSX	(0.88, 360)
L-1011-100 (and other models)	HJG (Vistaliners)	HJG	Free	FS9	(0.88, 360)
L-1011	Aerosim	Aerosim	Pay	FS9	(0.90, 375)
<i>Narrow Body Trijets</i>					<i>Eligible for all wildcard legs of less than 1,500nm and continental jet legs</i>
B727-100/-200 (and other models)	HJG (Vistaliners)	HJG	Free	FS9	(0.82, 341)
B727-100/-200 (and other models)	Thomas Ruth	Ruth	Free	FSX	(0.90, 340)
B727-200	Alejandro Rojas Lucena	FSND	Free	FS9	(0.91, 375)
B727-200	Alejandro Rojas Lucena	FSND	Free	FSX	(0.91, 375)
B727-100/-200 (and other models)	Flight One	FlightOne	Pay	FS9	(0.90, 390)
B727-100/-200 (and other models)	Captain Sim	CS	Pay	FSX	(0.90, 390)
HS 121 Trident 2 & 3	David Maltby	DSM	Free	FS9	(0.88, 375)
Tu-154B	Project Tupolev	PT	Free	FS9	(0.88, 365)
Tu-154B	Tlbor Kykai	Kykai	Free	FS9	(0.88, 365)
<p>Notes. The aircraft's modeled Mmo and Vne are taken from the "official release" aircraft.cfg file. It is the responsibility of the pilot to be sure that the official Mmo and Vne parameters are satisfied in his particular aircraft and that the Duenna confirms the numbers. (*Be aware that some "repaints" and "conversions" get new numbers in the process.) The status of the native model is noted as FS9 or FSX or FS9&FSX, the latter when both are available. Most FS9 native models will port over to FSX. Note that any transfer of FS9 native models to FSX must maintain the identical flight parameters (airfile and aircraft.cfg) modeled into the FS9 simulation.</p>					

Appendix C. White List for Eligible Race Aircraft

Aircraft (and class)	Modeler or Company	Abbreviation.	Free- ware	(FS9 and/or FSX)	Notes
<i>Thoroughbreds</i>					(Thoroughbreds maximum 10 legs total)
De Havilland DH.103 Hornet	AlphaSim (Virtavia)	Alpha	Free	FS9	
Dornier Do-335	simTech, CR-1	CR1	Free	FS9	
North American P/F-82B	Ito Kanuzori/Tom Falley	IK-TF	Free	FS9	Tom Falley FDE Required
North American P-51H Mustang	A2A WoP	A2A		FS9	
Republic P-47M	Tom Kohler	Gnoopey	Free	FS9	
<i>Normal Race Aircraft</i>					
De Havilland DH.103 Hornet F.1	Rob Richardson & SOH Group	RR-SOH	Free	FSX	SOH FDE Required <i>External tanks allowed for RAF Hornet F.1.</i>
De Havilland DH.103 Hornet F.3	Rob Richardson & SOH Group	RR-SOH	Free	FSX	SOH FDE Required <i>No external tanks allowed for RAF Hornet F.3.</i>
De Havilland DH.103 Sea Hornet F.20 & NF.21	Rob Richardson & SOH Group	RR-SOH	Free	FSX	SOH FDE Required <i>FAA Sea Hornet allows external tanks</i>
Epic LT	Lionheart Productions	Lionheart		FS9&FSX	<i>Restricted to 31,000 hard ceiling.</i>
Focke-Wulf Fw-190D-9	A2A WoP	A2A		FS9	
Focke-Wulf Ta-152H	A2A (WoP)	A2A		FS9	
Grumman F7F-3	Milton Shupe & SOH Team	SOH	Free	FS9	
Grumman F7F-3N	AlphaSim/Virtavia & Tom Falley	Alpha-TF	Free	FS9	Tom Falley FDE Optional (Faster) Night Fighter version only.
Grumman F8F Bearcat	Vertigo Studios	Vertigo		FSX	
Grumman F8F Bearcat (Long Range)	Michel Migaud, Alpha Bleu Ciel	ABC	Free	FS9	
Hawker Sea Fury FB.11 v2.3	David Hanvey & Peter Forster Update	DH-PF	Free	FS9	Peter Forster update v2.3 required. External Tanks permitted.
Hawker Tempest Mk.V	First Class Simulations	FCS		FSX	
Howard 500	Milton Shupe	MS	Free	FS9	
Lockheed P-38 (not P-38K)	FSD	FSD		FSX	Not the P-38K
Lockheed P-38 (not P-38K)	Sky Unlimited	SU		FS9&FSX	Not the P-38K
Lockheed P-38 (not P-38N)	David Copley	dcc	Free	FS9	Not the P-38N, not the XP-38
North American P/F-82G	Ito Kanuzori/Tom Falley	IK-TF	Free	FS9	Tom Falley FDE Required. Not the P/F-82B!
North American P-51 Racer	MSFS FSX Acceleration	FSX		FSX	MSFS FSX racer is only racer allowed.
North American P-51B/C	Warbirdsim (John Terrell)	WBS		FS9&FSX	

North American P-51B/C	FDG2	FDG2		FS9	
North American P-51D	A2A (WoP, WoP3 & WWIIF)	A2A		FS9&FSX	All A2A P-51D models are fine.
North American P-51D	Warbirdsim (John Terrell)	WBS		FSX	
North American P-51D	Warwick Carter	WC	Free	FS9	
Piaggio P.180 Avanti I	FSD	FSD		FS9	
Piaggio P.180 Avanti II	Mario Noriega	Noriega	Free	FS9&FSX	
Piaggio P.180 Avanti II	Wilco Simulations	Wilco		FS9&FSX	
Piper Cheyenne LS400	FSD	FSD		FS9	
Republic P-47D	A2A (WoP & WoP3)	A2A		FS9&FSX	All A2A P-47D models are fine.
Republic P-47D	Aeroplane Heaven	AH		FS9	All AH P-47D models are fine.
Supermarine Spitfire XIX PR	Aeroplane Heaven	AH		FS9	Approved Imperial Gallon conversion fix
Supermarine Spitfire XIV	Real Air Simulations	RAS		FS&FSX	
Vought F4U-1, F4U-4	Aeroplane Heaven	AH		FS9	Tom Falley FDE Optional (Faster)
Vought F4U-1, F4U-4	FDG2	FDG2		FS9	
Vought F4U-1, F4U-4	A2A (Aircraft Factory)	A2A		FSX	
Vought F4U-4	FDG2 (TF FDE)	FDG2-TF		FS9	Tom Falley FDE Optional (Faster)
Vought F4U-5N	Aeroplane Heaven	AH-TF		FS9	Tom Falley FDE Optional (Faster)
Vought F4U-7 v7	Alpha Bleu Ciel	ABC	Free	FS9	V7 Revised FDE required
	<i>Also legal are all otherwise eligible realistically-modeled aircraft with a maximum of less than 350 kts true airspeed (KTAS) measured in level flight at critical altitude or, for turboprops, at speed-maximizing optimal altitude.</i>				
	<p>Notes. The status of the native model is noted as FS9 or FSX or FS9&FSX, the latter when both are available. Most FS9 native models will port over to FSX. Note that any transfer of FS9 native models to FSX must maintain the identical flight parameters (airfile and aircraft.cfg) modeled into the FS9 simulation. Several aircraft have a Tom Falley flight dynamics requirement: these aircraft are eligible only when the appropriate changes are made. Some aircraft have an optional (faster) flight dynamics alternative.</p>				