

# FLIGHT SIMULATOR AROUND-THE-WORLD RACE

## 2015 Routing and Special Rules

v1.01

February 17, 2015

### Highlights of the 2015 Special Rules

- *Paradise Island.* The 2015 Race emphasizes the warm breezes and white sandy beaches that we dream about on our ideal escape to the tropics.
- *Sponsored Aircraft.* This year teams have access to a number of Airbus and Boeing jets as well several other aircraft.
- *Wildcards.* Teams have three wildcards to total no more than 5,150nm, the longest being limited to 2,110nm.
- *Special Continental-Island Jet Legs.* Teams may optionally fly four two-engine regional jet legs, each limited to less than 1,000nm, that link airports on a continental landmass or connect a continental landmass to a required destination island.
- *Formation Flights.* Teams fly five closely coordinated legs.
- *Special Aircraft and Team Flights.* Teams conduct Team Flights that include a total of six participating pilots. The legs include "Extra Credit," "Royal Reign" and "Skyhawk" as well as the popular "Cold Warriors."
- *Rookie Mulligan.* During the Race, each new pilot may exercise a single "wingman transfer" without cost.
- *Bonuses in 2015.* There are no bonus events this year.

### 1. The Prizes.

This year's winner will receive the *Wilhelm "Wilhe" Bendit Trophy*. Additionally, two more prizes will be awarded. First, the baton pilot who flies the fastest normal leg over 600nm wins the *Roadrunner Prize* for speed. And second, the flying pair who performs the best single time in the Formation Flight contest captures the *Gemini Award*.

### 2. Start Time.

The race will begin on Saturday February 21, 2015 at 0000 UTC (that is: 0100 CET, 1900 EST [Friday], 1600 PST [Friday]).

### 3. Routing.

The 2015 Race begins and ends at Bali, Indonesia (WADD/WRRR), the enchanted tropical island.

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

The teams must land at one airport on the main landmass of each of the continents (Africa, Asia, Australia, Europe, North America, and South America.)

The teams must land at latitudes "NORTH" and "SOUTH" such that the difference between the two is at least 60 degrees latitude.

*Airport Requirements.* Teams must execute five full stop landings at airports that represent some of the world's most delightful wintertime destinations. Think "Paradise Island."

Teams must stop at one from each of the following groups of destination islands. (A total of five targeted airports, one from each pair or triplet.):

*Atlantic Ocean*

Madeira, Portugal (LPMA), or  
Tenerife North Los Rodeos, Canary Islands, Spain (GCXO), or  
Fernando de Noronha, Brazil (SBFN)

*Caribbean Sea*

Willemstad, Curacao (TNCC) or  
Margarita, Venezuela (SVMG)

*Indian Ocean/China Sea*

Male, Maldives (VRMM), or  
Sanya, Hainan, China (ZJSY)

*Mediterranean Sea*

Mallorca, Spain (LEPA), or  
Mikonos, Greece (LGMK)

*Pacific Ocean*

Honolulu, Hawaii, US (PHNL), or  
Tahiti, French Polynesia (NTAA)

*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:

Iraq, Somalia, Gaza (LVGZ), Ukraine and Crimea,

and the ungoverned Federally Administered Tribal Areas, Pakistan (OPWN, OPMN, OPPC are closed, others are ok)

*Special Restrictions.*

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

*Airports closed.* The US Navy is testing advanced weapons this long weekend. Point Mugu NAS and the islands along the Los Angeles coastline are closed. (No landings at the following: KNTD, KAVX, L11, KNSI, KNUC, SZN, CA97)

**4. Sponsored Aircraft.**

This year Airbus and Boeing have continued their sponsorship by making available aircraft from their current roster as well as selected classics from their constituent companies' history. In addition, from the 2013 race, we have one holdover sponsor for tri-jets.

*Sponsored Civilian Transports.*

Airbus has made available the A320 (family, including A318, A319, A320, A321), A330, A340, A380. In addition it offers four lovingly restored early classics, the BAC 1-11, the DH.106 Comet, the Hawker Siddeley HS121 Trident, and the SE 210 Caravelle.

Boeing has made available the B737 (family), B747, B757, B767, and B777. It adds the following flying but well-worn classics: the Boeing B707, B720, B727 and the McDonnell Douglas DC-8, DC-9, DC-10, MD-80/90 (family), and MD-11.

Lockheed has continued to offer immaculately restored instances of their famous L-1011 TriStar.

*The above civilian jets are the only jets eligible for use in the 2014 Race with two exceptions.*

Lockheed Martin have made available to each team a pair of F-80 Shooting Star jets for limited use.

Boeing's North American division has provided a set of F-86E/F Sabres for limited use.

For specific flight simulation jet models allowed in this year's Race, see the Jet White List restrictions in Appendix B.

## 5. Special Aircraft Options and Requirements for the 2014 Race.

*The White List.* A list of eligible race aircraft is presented in Appendix C below.

*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 12 baton legs in thoroughbred class aircraft. A 30-minute "maintenance" penalty applies to each excessive use. These 12 thoroughbred legs represent a resource to be used strategically.

*Shooting Stars.* Optionally, teams may choose to fly 2 legs in the AlphaSim F-80 Shooting Star (this simulation model only) instead of regular thoroughbred legs. These legs substitute the F-80 for thoroughbred class aircraft. That is, for every Shooting Star leg flown, the team is allowed one fewer piston-engine thoroughbred leg.

*Sabre Flights.* Optionally, teams may choose to fly 4 legs in the Section F8 F-86E/F Sabre (not any other F-86 Sabre simulation model) instead of regular thoroughbred legs. These legs substitute the F-86 for thoroughbred class aircraft. That is, for every Sabre leg flown, the team is allowed one fewer piston-engine thoroughbred leg.

## 6. 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 after which the standard triple time penalty applies.

## 7. Wildcards.

In addition, each team has up to three wildcard flights. The total distance is not to exceed 5,150nm and no one leg is to exceed 2,110nm and no other leg is to exceed 1,650nm. 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.

## 8. Special Continental-Island Jet Legs.

Each team has available four optional "Continental-Island" jet legs to be flown in the sponsored twin regional jets listed here. Each such leg is limited to less than

1,000nm, and must connect two airports on the same continental landmass *or* connect a continental landmass with one of the required destination islands. Each must be completed within 3 hours. The leg is otherwise treated as a normal leg. Eligible aircraft include these sponsored jets: the Airbus 320 (family), the Boeing 737 (family), the McDonnell Douglas DC-9/MD80/MD90 (family), and the two classics, the BAC 1-11, and the SE 210 Caravelle.

## 9. Formation Flights.

Teams must complete five Formation Flights in which two pilots complete their legs 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.* For the Formation Flight to count, the next leg may not depart (nor, on the final stop, does the team's race end) until both formation pilots have posted their landings.

A perfect Formation Flight ends when the two pilots complete the leg in such a manner that their individual Duenna-marked Flight Times are equal. Teams have six attempts at such flights and score the best five of the six. The penalty for imperfections in any given Formation Flight, measured as the difference in the two legs' durations, is as follows:

<i>Duration Difference m:s</i>	<i>Penalty m:s</i>
0:00	0:00
0:01-0:10	1:00
0:11-0:59	2:00
1:00-1:59	4:00
2:00-2:59	6:00
3:00-3:59	8:00
4:00-4:59	10:00
5:00+ or failure to complete	12:00

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 penalty (if any). He declares the Formation Flight and enters the appropriate penalty into the team's bank. Of the 6 opportunities, the top 5 count (the team throws out the worst score).

Once the two pilots declare a Formation Flight, a failure to complete both parts forfeits the opportunity. (That is, the team gives up one of its 6 chances to complete a Formation Flight.) 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 too large. The lead pilot merely declares "The Formation Flight is terminated" and the leg reverts to a normal leg. The opportunity is lost.

## 10. Special Aircraft Legs and Team Flights.

Below are two required Special Aircraft legs (Extra Credit and Royal Reign) and two optional legs (Skyhawk and Cold Warriors), any of which can also be declared a Team Flight.

Each team is required to execute Team Flights so that six (6) Participating Pilots (other than baton pilots) complete the legs in accord with the specific conditions below. Teams that fail to complete six Participating Pilot legs incur a penalty of ten (10) minutes for each such leg that they fall short of the requirement.

The standard rules governing team flights are in Appendix A. (Note that the restrictions on the baton pilot implicitly apply to a possible wingman.)

In order to constitute a Team Flight, the team needs at least three pilots: the baton carrier, the wingman, and one more participating pilot. Although any number of participating pilots may fly a team flight, no more than three pilot legs can be earned in a single event. (For requirement fulfillment purposes, the wingman counts as a participating pilot if he does not handle the baton.)

*Extra Credit (A required leg of 20-750nm).*

A brief flight honoring Patty Wagstaff and the US Aerobatic Championships. The team must advance the baton a total of at least 20nm in an Extra 300 with *each pilot flying inverted for at least 60 seconds*. The baton carrier and wingman fly the default (FS9/FSX/P3D) Extra 300 or the Alabeo Extra 300. Participating pilots may fly any Extra 200/300. Participating pilots must land within 20 minutes before or after the baton pilot and fly the required time in inverted flight. This baton leg is required, wingman is optional. The Team Flight component is entirely optional.

*Royal Reign (A required leg of 100-750nm).*

A flight celebrating the fiftieth anniversary of Beechcraft's King Air. The team must advance the baton a total of at least 100nm in a King Air. The baton carrier and wingman fly the default (FS9/FSX/P3D) King Air 350. Participating pilots may fly any race-eligible King Air. Participating pilots must land within 20 minutes before or after the baton pilot. This baton leg is required, wingman is optional. The Team Flight component is entirely optional.

*Skyhawk (An optional leg of 25-750nm).*

A return to our roots. The team must advance the baton at least 25nm in a Cessna 172. The baton carrier and wingman fly the default (FS9/FSX) Cessna 172. Participating pilots may fly any realistic Cessna 172. Participating pilots must land within 20 minutes before or after the baton pilot. This baton leg and the Team Flight component are entirely optional.

*Cold Warriors (An optional leg of 300-750nm).*

During an optional Sabre Flight, the baton carrier and wingman fly the Section F8 North American F-86 Sabre. Or during an optional Shooting Star Flight, the baton carrier and wingman fly the AlphaSim F-80 Shooting Star. Participating pilots fly any realistic North American F-86 Sabre, Douglas F3D Skyknight, Grumman F9F Panther, Lockheed P-80/F-80 Shooting Star, Lockheed T-33, Northrop F-89 Scorpion, Republic F-84 Thunderjet, de Havilland DH.100 Vampire, Gloster Meteor, Hawker Hunter, Sud Aviation Vautour, Dassault Mystère IVA, SAAB J29B Tunnan (not J29F), or MiG 15. (See FAQ on eligibility details.) Participating pilots must land within 20 minutes before or after the baton pilot. This baton leg and the Team Flight component are entirely optional.

After each Team Flight, the team must post a summary that indicates the name of the Team Flight and that identifies the participating pilots who scored for that flight. The summary should indicate the cumulative number of participating pilot credits in the race thus far. After the final Team Flight, the team must post a Team Flight summary that indicates the date and time for each of the individual Team Flights, gives the number of participating pilots in each, and then sums up the total. If the team should fall short of the overall requirement, the team will then calculate and report the incurred penalty. That penalty should then be entered into the team bank account.

## **11. The Consecutive Pilot Rule in 2015.**

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, conditioned on provision "c" below, 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 first instance of the team's using the Emergency Pilot Rule, the pilot waits 5 minutes after the baton release before claiming the baton.
- Thereafter, the pilot waits 30 minutes before claiming the baton.

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 at the normal cost of a 30 minute penalty.

c. In no case may a pilot be the pilot-of-record in more than two (2) consecutive legs. (Note this rule may affect a subsequent retrospective wingman transfer.)

*(This Special Rule supersedes part of Rule 6.b.ii in the General Rules.)*

## **12. Artificial Vision and Artificial Landing Aids in 2015.**

Pilots may not use artificial (not true to their aircraft) gauges or tricks to enhance their vision or their ability to approach an airport. Standard TAWS gauges or GPS gauges are fine. They simulate real world depictions of terrain and give "non-precision" approach information. However, artificial vision gauges and tricks are not allowed. (Even if realistic, in 2015 they are not allowed because they change the nature of the competition.) Similarly, Glen Copeland's nifty "Satellite Assisted Landing System" (SALS) gauge is not suitable for the Race and is therefore disallowed. This ruling expands the General Rules' prohibition of "artificial landing aids" such as third-party Autoland gauges and devices.

## **13. 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.

## **14. The Duenna.**

All pilots should authenticate their legs using the Duenna. In 2015 the standard method for leg authentication is the new Duenna v2.0 (latest release) combined with an updated FSUICP (freeware or payware). The new version accommodates the new simulation platforms of FSX: Steam Edition and Prepar3d. It also reports on each leg's weather dynamics and thus helps document the operation of add-on weather engines. That said, some pilots may prefer to use the 2014 authentication system that employed Duenna v1.0 and the default MSFS-Jeppesen weather engine. Accordingly:

- (a) The standard authentication method is the Duenna v2.0.
- (b) Pilots may instead opt to revert to the 2014 system. This means the current version of the Duenna v1.0 coupled with the default MSFS weather engine (properly configured). This combination is now the standard "Legacy" authentication procedure for 2015.
- (c) Pilots with problems or special needs should contact either the Racing Committee or the Executive Committee for relief.

## **15. 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 a pilot wishes to use the previous Duenna v1.0 in the "Legacy" authentication system, he should limit himself to a choice of the MSFS default Jeppesen weather engine. (See Rule 14.) The default weather should be properly configured to pass the scrutiny of Duenna v1.0. Pilots needing a special exemption should appeal to the Racing Committee.

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.

## **16. Bonuses, Penalties, and the Bonus Bank.**

Teams will keep open accounts of their penalty time. Teams incur penalties for wingman transfers and rules violations. They also incur penalties for falling short of the highest standards in the Team Flights and Formation Flights. (There are no bonus opportunities in 2015.) This 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 penalties in the web application located on the official web site here: <http://www.fsrtwrace.com/bank/> .

The official Race Time is the time from start to finish plus any penalty time.

## **17. Administration.**

The 2015 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.

## **18. Communications.**

The Official Race Site is here:

[Flight Simulator Around the World Race \(http://www.fsrtwrace.com/\)](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 [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](mailto: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. In order to constitute a Team Flight, a leg requires a minimum of at least three pilots: a baton-carrier, a wingman, and one more pilot.
- b. Each participating pilot, not counting the baton carrier, who completes and validates a successful leg will earn credit for the team. The team must complete six such participating pilot legs, of which no more than three can 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 always have to fly the same aircraft type(s) as the baton holder – although a potential wingman should do so. (This may vary by Team Flight.) The baton pilot and all participating pilots must takeoff 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 20 minutes (or a specifically-designated time) before or 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. If *both* the baton pilot and wingman crash during a team flight, the time interval requirement for participating pilots' arrival is waived.
- f. 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 Participating Pilot credits earned in this event.
- g. Teams that fail to complete six Participating Pilot legs incur a penalty of ten (10) minutes for each such leg that they fall short of the requirement. After the final Team Flight, the team should post a Team Flight summary, indicate any penalty, and enter the penalty in the bank.

**Appendix B.**  
**2015 White List for Eligible Race Aircraft – Jets**

Aircraft (and class)	Modeler or Company	Abbreviation.	Free- ware	(FS9 and/or FSX)	Notes
<b>Airbus</b>					
A320 (Family)	Aerosoft	AOS		FSX	
A321	Microsoft	MSFS		FSX	
A320 (Family)	Project Airbus	PJA	Free	FS9/FSX	
A330/A340	Thomas Ruth	TR	Free	FSX	
A330/A340	Commercial Level Simulations (JF)	CLS		FS9/FSX	
A380	Project Airbus	PJA	Free	FS9/FSX	
<b>Boeing</b>					
B707 (and 720)	Historic Jetliners Group	HJG	Free	FS9	
B707	Captain Sim	CS		FS9/FSX	
B707	Alejandro Rojas Lucena	FSND	Free	FSX	
B727	Historic Jetliners Group	HJG	Free	FS9	
B727	Flight One / Dreamfleet	DF		FS9	
B727	Captain Sim	CS		FSX	
B727-200	Alejandro Rojas Lucena	FSND	Free	FSX	
B727	Thomas Ruth	TR	Free	FSX	
B737-200	Tinmouse	TM	Free	FS9	
B737-200	MilViz	MilViz		FSX	
B737 (Family)	Microsoft (Default)	MSFS		FS9/FSX	
B737 (Family)	PMDG	PMDG		FS9/FSX	
B737 (Family)	Tenkoo Developers Studio	TDS	Free	FS9	Not B737 MAX.
B737 (Family)	iFly	iFly		FS9/FSX	
B737 (Family)	Project Opensky	POSKY	Free	FS9/FSX	
B747-200	Ralf Tofflemire	RT	Free	FS9	
B747-200/300	Commercial Level Simulations (JF)	CLS		FS9/FSX	
B747-400	Microsoft (Default)	MSFS		FS9/FSX	
B747-400	iFly	iFly		FS9/FSX	
B747 (Family)	PMDG	PMDG		FS9/FSX	
B747 (Family)	Project Opensky	POSKY	Free	FS9/FSX	
B767	Level D Simulations	LDS		FS9	
B767	Captain Sim	CS		FSX	
B767	Commercial Level Simulations (JF)	CLS		FS9/FSX	

B777	Microsoft (Default)	MSFS		FS9	
B777 (Family)	Project Opensky	POSKY	Free	FS9	
B777 (Family)	PMDG	PMDG		FSX	
B777	Captain Sim	CS		FSX	
<b>McDonnell Douglas</b>					
DC-8	Historic Jetliners Group	HJG	Free	FS9	
DC-8	Aerosim	AeroSim		FS9	
DC-8	Just Flight	JF		FSX	
DC-9 / MD-80 (Family)	Historic Jetliners Group	HJG	Free	FS9	
MD-80 (Family)	Fly the Maddog	Maddog		FS9/FSX	
MD-80 (Family)	Commercial Level Simulations	CLS		FSX	
DC-10	Commercial Level Simulations (JF)	CLS		FS9/FSX	
DC-10	Historic Jetliners Group	HJG	Free	FS9	
DC-10	Aerosim	AeroSim		FS9	
MD-11	PMDG	PMDG		FSX	
<b>Lockheed</b>					
L1011	Historic Jetliners Group	HJG	Free	FS9	
L1011	Aerosim	AeroSim		FS9	
L1011	Thomas Ruth	TR	Free	FSX	
L1011	Just Flight	JF		FSX	
L1011	Captain Sim	CS		FSX	
<b>Others</b>					
BAC 1-11	David Maltby	DM	Free	FS9	
DH.106 Comet (all)	David Maltby	DM	Free	FS9	
DH.106 Comet (all)	Jens Kristensen	JBK	Free	FSX	
HS 121 Trident	David Maltby	DM	Free	FS9	
Sud Aviation Caravelle	Historic Jetliners Group (AFG)	HJG	Free	FS9	
	<b>Notes.</b> 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. Aircraft with Mmo>0.92 or Vne/Vmo>400 will need special permission and will be viewed skeptically. Twin jet regional liners with Mmo>0.84 or Vne/Vmo>350 will need special permission and viewed skeptically.				

We are not able to test all of these simulations and would like to know if any combination of the above are palpably unrealistic. The emphasis here is on flight dynamics and not systems complexity. If you know that a particular simulation is inaccurate in a way that would substantially affect the race, please inform the committee. (It would be helpful to provide as much evidence as you can.) Thus, the above list is tentative: the simulations should be legal—pending our learning otherwise. We shall be happy to restrict the list if doing so makes sense.

Note that eligibility is limited to the specifically designated sponsored civilian transport jets made by the modelers above. Not all jets by these modelers are eligible. (For example, the HJG Boeing B707 is eligible, the HJG Boeing C-135/KC-135/EC-135 is not. The Captain Sim Boeing 7x7 jetliners are fine, the Boeing B-52 is not. Not the HJG Concorde.)

Any transport jets with a  $Mmo > 0.92$  or  $Vne/Vmo > 400$  will need pre-clearance from the Executive Committee. Such requests will receive special and skeptical scrutiny. (Similarly, A320/B737/DC9/MD80/90twin engine regional jets with a  $Mmo > 0.84$  or  $Vne/Vmo > 350$  will need special clearance.) The emphasis here is on flying commercial transport jets and we expect quality simulations to have an appropriate "speed" profile. More important, we want to discourage a search for a racing advantage.

#### Military Transport Aircraft Eligibility.

Military liveries (paints) of the eligible transport aircraft are not themselves eligible. The paint does not make a difference of course. However, we are worried that we will confuse the matter if we allow military paints. (It is easy to imagine someone who sees a military aircraft in the race might want to install a similar military aircraft—one which might not rely on the civilian flight model.) We keep things simple: civilian transport jets with civilian liveries in 2015.

#### Eligibility for 2015 Shooting Star Flights.

For the optional Shooting Star Flights, you may use the AlphaSim F-80 Shooting Star (now freeware). This is an older FS9 model that ports well to FSX and P3D. (See Virtavia's generous presentation of the freeware here: <http://www.virtavia.com/Freeware/index.php>.)

#### Eligibility for 2015 Sabre Flights.

For the optional Sabre Flights, you may use the Section F8 F-86E/F Sabre. This is a prize-winning FS9 model that ports well to FSX (but not P3D). (See <http://sectionf8.com/>.) For a pre-assembled package (FS9 or FSX), ask your teammates.

### Appendix C. 2014 White List for Eligible Race Aircraft – Piston and Turboprop

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 Kazunori/Tom Falley	IK-TF	Free	FS9	Tom Falley FDE Required
North American P-51H Mustang	A2AWoP	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	
Grumman F8F Bearcat (Long Range)	Michel Migaud, Alpha Bleu Ciel and Milton Shupe-Ed Wells	ABC-SOH	Free	FS9	Milton Shupe updates lights, glass, and other details but retains same performance.
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. No portover to FSX.
Hawker Sea Fury FB.11	Flying Stations	FS		FSX	Must use the Flying Stations updated Airfile.
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><b>Notes.</b>  The status of the native model is noted as FS9 or FSX or FS9&amp;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. (Exceptions are: normalized_starter_torque and idle_rpm_friction.)  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>				