



November 15, 2006

Volume 1, Issue 1

## Comments from the Editor

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### Welcome to the Island Breezes E-zine!

The idea for the Island Breezes is not new, only this format and some of the ideas in it will be new. Our sincerest thanks to everyone who has worked on this e-zine in the past; for their ideas, dedication, commitment, and joy in Flight Simming with Tradewind Caribbean Airlines.

The current plan is for Island Breezes to be a quarterly product. If we see the need to adjust the frequency then we can always do that later.

The contents will vary, but the main thought is that each issue will have a theme around which most of the e zine will revolve. For instance, this issue features Nassau in the Bahama Islands. There are articles about traveling around Nassau, the airports and major sights to be seen. Also available sceneries, AFCADs, and of course TCA flight plans in and through MYNN as well as photos, both of Nassau and of TCA flights in and around Nassau.

We intend to include articles of interest on sceneries, aircraft, new software or hardware, various how-to's , and a number of other ideas.

We at TCA have a widely varied group of pilots, from the newest of the new, to those who have been with TCA since its beginning 10 years ago. Some of us fly a few hours at a time, some are obsessed with flight simming (it's not a hobby, it's an obsession!). Some prefer short hops for TDM or TL or seaplanes, some like cargo flights, some like "heavy iron" on long flights. In every case, we will try to have something in Island Breezes for all of you.

We would also like to hear from you, what do you like, not like, what would you like to see included, and if you would like to contribute to your ezine from time to time please let us know.

Happy landings, smooth air, margs for everyone, blue side up and green side down. And keep enjoying this wonderful virtual airline of ours, Tradewind Caribbean Airlines.

The Island Breezes Staff

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*The official newsletter of  
Tradewind Caribbean Airlines*  
<http://www.tradewind.org>

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## From the Office

### Island Breezes, "It Back & Better Than Ever!"

Fellow TCA fans, it's incredible how some ideas just keep going and going. Island Breezes is a terrific example of this process and I for one, am thrilled that this grand idea is still alive.

This is the inaugural reinstatement of our news magazine and I sincerely hope that everyone reading it will appreciate how much time and energy it takes to create it. I also invite you, the readers, to contribute to our future success. In the ten plus years that TCA has been on the net we have seen hundreds of people pass under our wings. Many of them have been active in the creation, implementation and organization of our great airline. We find that an entire new breed of pilot is joining us in our Caribbean fun and if you have the ability to devote some of your time, energy and talents in creating the handy tools we use for simming, and the nuts and bolts of TCA, please contact us and you might find yourself in our management team shaping the airlines future.

This is a serious endeavor and if you look closely you'll find people in the shadows that have been helping us keep the airline vibrant and up to date since its very beginning. We still have active members with pilot numbers from the first year of our birth. This airline is a special place for all of us and I know you might think you don't have much to contribute but you'd be surprised at all the ideas floating around the CEO's desk.

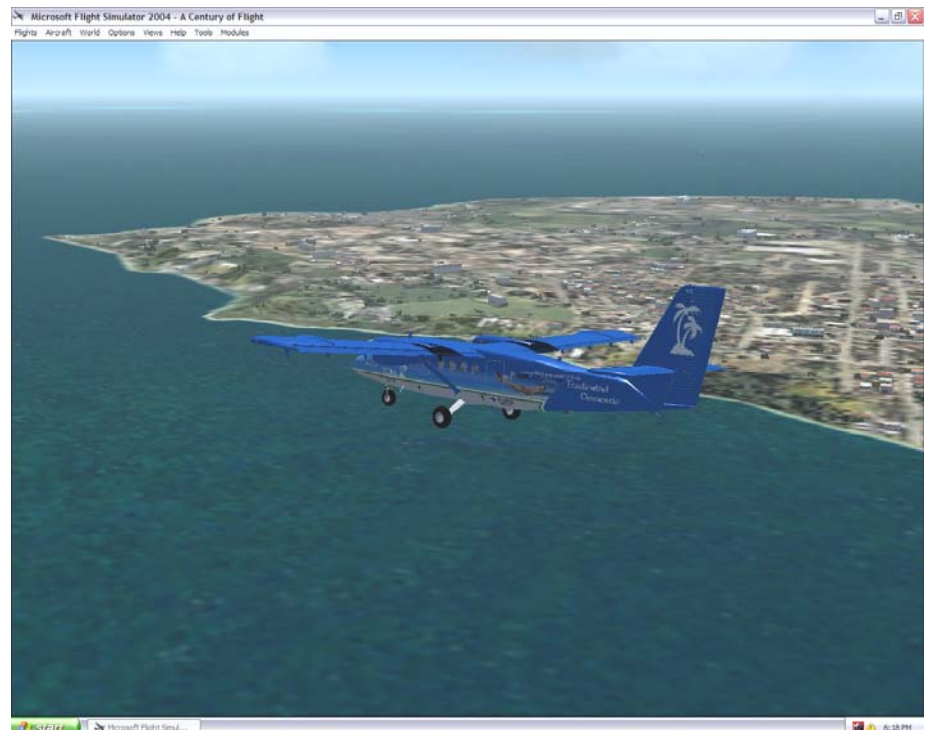
I hope you enjoy the Island Breezes and we look forward to seeing you in the skies over our Caribbean paradise.

"TCA the Only Way",  
TCA Management and staff

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*"... you might think you don't have much to contribute but you'd be surprised at all the ideas floating around ..."*

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## An Interview With ....

### Milton Shupe

<http://www.flightsimonline.com/>

Thank you for the invitation to share in a bit of TCA history here on this premier resurrection edition.

#### How long have you been involved in Flight Simming and designing?

It was interesting to jump into the FS98 edition I received around Christmas of '98. It was so intriguing to learn how to fly. I invested three months just learning flight basics, how to read instruments, and doing flight tutorials. Conceptually, when I later discovered FSNavigator, it put a lot of that learning into perspective and proved my navigational understanding. From the beginning, I wanted to learn to fly by instrument so that's where my major investment of time started.

#### How did you get started designing aircraft?

After a year of flying, discovering the "community of flightsim", and meeting others on the "Zone", I met some friends who later became part of our nightly multiplayer flights ritual. One of these friends is Scott Thomas. Scott and I were interested in the same basic types of aircraft and we loved the propeller driven types mainly. The C130, DeHavilland Dash 7 and Dash 8 were some of our regulars. Scott had been building and modifying panels for aircraft for some time and he had developed one for the Dash 7 that we really liked. At that time, we thought we needed a better Dash 7 model, especially the flight model so we decided to just build one ourselves. With an Information Systems background and Scott's talent for panel design, I thought for certain we could do something nice. Project development to build the Dash 7 required a lot of research and homework to master new tools and concepts, and for the first 4 months of a 9-month effort, that's what it was about.



*Our first project, the de Havilland Dash 7.*

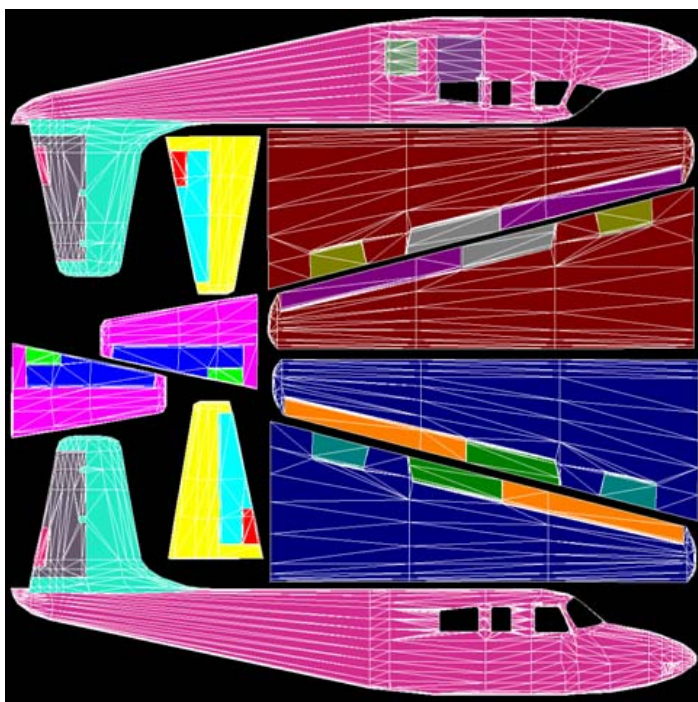




## An Interview With .... Milton Shupe (continued)

### What software and other goodies do you use for your designing?

My role on the team has been project leader, model developer and flight model development. Once we decided to do the Dash 7, we were flying FS2002. That version came with gMax so that was the tool to use for me. Once an exterior model is prepared, the next tools that come into play for me are the texture mapping tools. Mapping for textures can be very cumbersome and time consuming. Every poly must be mapped. I use QuakeIII to export those maps and LithUnwrap to create the texture templates. These texture templates are then applied in gMax to the model with perfect fits. Once tested, the texture templates are then sent to the texture artist for all the great detail application that brings the model to life. João Paz did our Dash 7 liveries and they were simply awesome.



*A texture template for the Aero Commander 520*

Once I arrive at this project juncture and before I begin the virtual cockpit work, I began working on the flight model. Flight models are extremely complex and I put many hours into the Dash 7 flight characteristics using the air file editor, AirEd. The flight model evolved over 5 months with input and feedback from one Dash 7 pilot and 11 other real world pilots who flew the results. In future projects, I would switch to using Jerry Beckwith's Flight Dynamics Workbook to reduce the time and improve the accuracy of the flight model. To help prove results, I also use flight test gauges from Jerry's site (<http://www.mudpond.org>) or AFSD from Herve Sors site ([http://perso.wanadoo.fr/hsors/FS\\_Soft](http://perso.wanadoo.fr/hsors/FS_Soft)). Tweaking the flight model with these test gauge and flight model tools is essential.

Although the texture artists do the main textures, I still must take care of many of the smaller texture bits. For this work, tools like Imagetool, DXTBmp, Paint, and several other graphics programs work just fine.

Finally, the toolkit cannot be complete without the SDK's from Microsoft and the various design forums where designers hang out and help each other with issues as they arise. Examples are Freeflight Design Shop (lots of great experienced designers here), Simviation Design forum (lots of newbie help here), Avsim Design Forum (great gauge resource), and Sim-Outhouse Design. There are other very nice design forums for those wanting help or those who wish to help others.



## An Interview With .... Milton Shupe (continued)

How long does it take you to complete an aircraft from start to finish (example, your magnificent aero-commander) and, what are the steps involved in your design and development?

Our projects have required 6 -11 months from data collection to release.

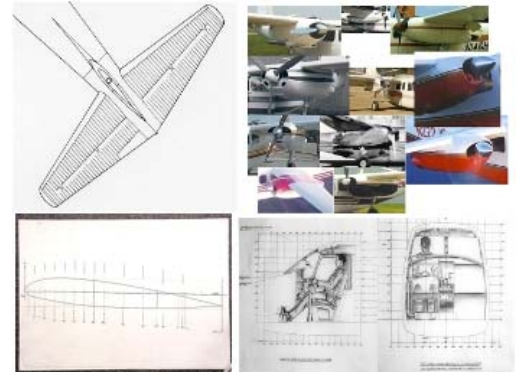
The projects start with [data collection](#). Critical things are geometry, performance, wing foil, and detailed aircraft and engine specifications. An abundance of reference pictures are essential to help get a feel for the aircraft. We also try very hard to get real world pilots of these aircraft on the project who can assist with pictures, clarification of aircraft functions, a Pilot's Handbook, and flight model testing. This usually requires one to two months to gather, organize, rationalize differences, and decide on a final model variation to do

Then the [exterior model development](#) starts usually concurrent with [panel and gauge design](#). The exterior model may require 1-2 months depending on its complexity, available data and good 3-views and the designer's experience. As the model is developed, of course, the control surfaces, windows and doors, engines, landing gear, antennae, etc. are being developed so you are constantly jumping in and out of the start of the flight model components of the air and aircraft.cfg files.

Once the exterior model is complete, the [texture mapping](#) begins. This usually requires a week for the first cut of the templates and these are sent off to the texture artist to do the [exterior textures](#).

At this point, I usually do a few rounds of [flight model development](#) and testing to get the project into a flyable stage and began to involve alpha testers, and usually a real world pilot of the selected aircraft. This then would start the feedback stream from the panel designer, texture artist, and others as to how the project is looking and evolving. This may take 1-2 weeks for a basic flight model.

With all parts of the project going now, I jump back to gMax to model the [virtual cockpit](#). This is a very painstaking process for me and one I both enjoy and loathe. The shape of the interior starts with a copy of the exterior, copied and flipped inward. This provides my VC shell from which to begin shaping the cockpit and cabin. There are many intricate details inside and this process requires 2-3 months for me. The VC panel and gauges are critical as this is where we mostly spend our time so we try to get it right. Once I have the cockpit modeled, I create the texture templates for Scott Thomas who will then apply the [panel textures and gauges](#). In later projects, I texture mapped the interior walls, floor, ceilings and one of the texture artists will make the virtual cabin come to life. The Spartan and the latest AC520 upgrade a good examples of this.





**An Interview With .... Milton Shupe (continued)**

Where do you get your ideas/concepts from?

Given the significant investment of time required by all involved, we only do aircraft we love and want to fly. It would very difficult to sustain the energy and enthusiasm to invest 1500-2600 hours in a freeware effort otherwise.

What documentation do you use to authenticate your work?

I start with official documentation, government FAA sources, aircraft and parts manufacturers, wing foil data, engine data, tire data, operating or service manual data, real world pilot experiences, and websites. The hardest of all is to find a good 3-view for the level of detail desired. Fortunately for the Aero Commander series, I had copies of original design specs and drawings.

Looking back over your designing/developing career what do you wish that you had done?

I really wanted to do a dhc4 Caribou, a dhc5 Buffalo, a C-130, a PBY5 Catalina and an Airstream Ambassador. Fortunately, there are great releases of some of these aircraft available now.

If you weren't retired from the field, what would you be doing in the flight sim world.

I retired from serious design work otherwise, we would likely be releasing the new Dash 7 VC model right now. That project was canceled but I am doing a few things yet in the FS world.

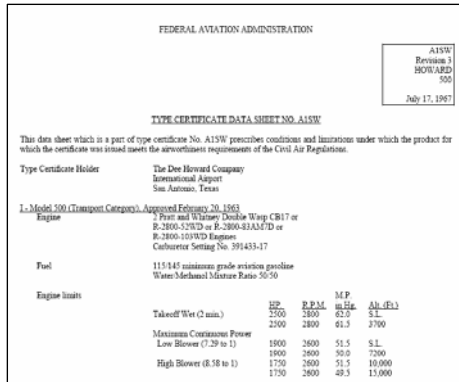
First, at a leisurely pace, I am revisiting some of our earlier projects to better optimize and bring up to our today's standards. The AC520 recently released is the best example of this improving polys by about 40% and totally redoing the VC for hi-resolution. The AC680 now has a better optimized model available on the website, and we may do a hi-res VC for it over the Winter months. The AC500VC version may also get an all-new woodgrain panel over the Winter and have smoother operating gauges. These updates will be available only from our website (<http://www.flightsimonline.com>) on the Download pages.

Second, I continue to visit and help on some of the design forums. I enjoy helping others as they climb the learning curves of development.

Finally, what do you see as the horizons and future for Flight Simulation and for a virtual airline like TCA?

Flight Simulation continues to offer more quality and breadth in our virtual world. There just seems to be something for almost anyone from simple play to technically challenging 3D design to managing hubs or companies of airlines. I believe as long as the sim is runnable for the average computer, the FS world will continue to grow and expand and offer more ways to enjoy, contribute, communicate, and learn. We will continue to participate as long as the fun, challenge, and participation is there for us all.

Finally, if you are interested in the Dash 7, Aero Commanders, Howard 500, Beechcraft D18S, or Spartan Executive, drop by our website (<http://www.flightsimonline.com>) at times to check for any updates.



*Flight Simulation continues to offer more quality and breadth in our virtual world.*

*- Milton Shupe*



## Location, Location, Location ....

by Scott Gridley and Robert Brown, Freeflow

Destination: Nassau, New Providence, Bahamas

Departing the south east US mainland eastbound, the islands of the Bahamas are instantly visible from even a modest cruising altitude. The proximity of this tropical archipelago to the United States makes it one of the most popular general aviation destinations in the world. The Bahamas are comprised of nearly 3,000 islands and cays covering more than 100,000 square miles, making it a fantastic place to explore. In the virtual world of Microsoft Flight Simulator, the Bahamas are a fun place to fly over, particularly using the free addon scenery produced by the folks at **Freeflow**. (At the time of this writing, this scenery is in late-stage beta testing, due to be released on or about November 10th, 2006 – visit <http://www.fs-freeflow.com> for more information.)

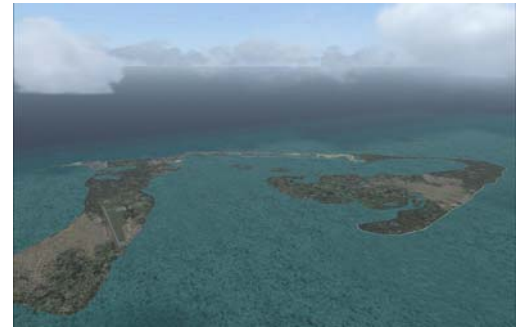
On our virtual tour today, we will depart the US mainland from Palm Beach Airport (KPBI), Palm Beach, Florida and head east south east. We first encounter the Bimini Islands. South Bimini has been serviced commercially by Chalk's International Airlines (then Chalk's Ocean Airways) since 1911. In the 20's, the islands became a popular tourist destination which was free from the restrictions of prohibition. In the 60's, Bimini gained notoriety as the alleged site of the lost city of Atlantis.

Continuing eastward, we pass north of the largest land mass in the Bahamas, Andros Island. Despite its size, only about 6,000 persons live on the island. Andros was well-known for it's pirate inhabitants in the 1700's. It is also home to the second largest barrier reef in the world.

Crossing the island, we catch sight of New Providence, home of the capital of the Bahamas, Nassau. The city of Nassau is home to almost seventy percent of the population of the Bahamas. The island of New Providence is also home to several world class resorts, among the most famous being the Atlantis Hotel and Paradise Island.

Finally, we arrive at Nassau International Airport. The airport has been highly detailed by the Freeflow crew, specifically Jim "Hornit" Campisi who is an airline pilot with real-world experience arriving at Nassau. The addon bring many new details to the facility, such as baggage carts, new lighting, and an accurate layout.

As a tangent to this FS-destination highlight, we were asked how the Bahamas became a "destination" for the Freeflow design team. Often the hardest part of scenery design is choosing the location on which to focus. Our scenery design experience began before the Freeflow team existed, and it began with scenery projects centered on our individual "home towns" (well, states).



*On our way – the Bimini Islands*



*North end of Andros Island, Bahamas*



*New Providence, capital of the Bahamas, Nassau*



### Location, Location, Location .... Nassau, Bahamas (continued)

Bob Brown and Joe Watson had created an accurate Florida land class, first for FS2002, then updated it for FS2004. Scott Gridley had been experimenting with an automated method for generating very accurate water bodies and shorelines, and released his New England scenery. A request to apply that automated method to the Florida keys led to a very fruitful collaboration between the three designers that galvanized the Freeflow team, and led to the Freeflow Ultimate Florida scenery package for FS2004. With the release of Ultimate Terrain, we started looking for areas that could be improved upon in FS9. Finding excellent satellite imagery of Bermuda, we next tackled that island, and finally, through use of the SRTM water body data set, we decided to attempt to improve the scenery of the Bahamas in FS9. Thus, we choose our scenery packages based on need of improvement, regional interest, and availability of good imagery.

#### The method:

We first start by completely inactivating the default FS9 scenery – in most cases it is easier to start from scratch than trying to edit the default. Using a variety of source imagery we create simple black and white bitmaps representing water and land respectively. Then we employ Slartibartfast written by Jim Keir to convert the images to FS9 scenery of just water and shorelines. This scenery is imported into Sbuilder, the excellent scenery design package developed by Luis Sa, and heavily edited. We use calibrated satellite imagery to validate and enhance the scenery. Google maps and Google Earth have become important tools in this respect. Once the land masses are positioned, we generate an accurate land class of the area, and add roads or other important features. We also remove misplaced default objects, and accurately locate airports. This is the base of our scenery package, and we really consider it to be a canvas upon which details can be added. We strongly encourage others to make Freeflow compatible addon scenery – our Bahamas package will be the first released with several addons already ready to go.

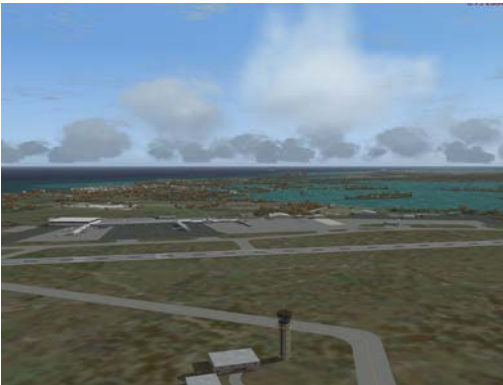
We do add some details ourselves, often through collaboration with other designers, and we've been very fortunate to have very talented people join our team during the development of each of these packages. Details we have added include custom models of landmarks, airport buildings and AFCADs, and even animated AI air and sea traffic. Our scenery is often made such that these detailed parts can be easily inactivated for compatibility with more detailed addons or payware.

#### Summary:

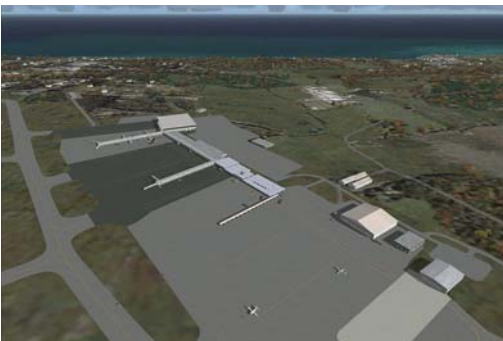
From New England, to Florida, to Bermuda, and soon the Bahamas, Freeflow has enhanced the virtual destinations in the western Atlantic to new levels. We hope the similarity to the real world destinations is close enough to classify our addons as "even more real than as real as it gets!"



*The Hotel Atlantis, Nassau*



*Nassau International Airport*



*Nassau International Airport*





## Traveling Around



Hello, and welcome to Nassau, Bahamas: a bit of sunny subtropical paradise in the Atlantic, just off the coast of Florida. The name Bahamas is supposed to come from Spanish Baja Mar, low tide, because the sea is shallow here. The different degrees of depth make for a whole range of colors, from turquoise to deep blue.

One of the benefits of being a TCA pilot is the opportunity to fly into some of the most beautiful cities and islands in the world. This edition we are featuring Nassau in the Bahamas.

So, Let's get going, and check out the sites that we'll see as we fly over, and have a little ground time in, Nassau!

The islands of the Bahamas were discovered by Christopher Columbus in 1492. Many people still discover the Bahamas by ship, but nowadays the conditions of comfort are a little more favorable, as Nassau has become a stop on the Caribbean cruise track. Cruise liners and luxury yachts dock at Prince George Wharf and Pier.

The Straw Market is a gaudy assemblage of stalls where local artifacts are sold as souvenirs. Local craftwork includes straw objects (as the name suggests) like hats and baskets, but also carved wood, sea-shell necklaces and bracelets, colorful beach towels, shirts and T-shirts in all colors and sizes

Nassau used to be the home base of many infamous pirates like Blackbeard and Anne Bonney. A small museum commemorates the times of piracy, wrecking and rum running.

[Nassau used to be heavily fortified, and many of the forts can still be visited. Fort Fincastle overlooks Bennet's Hill, and offers a stunning view over the city which stretches at its feet. The view from its tower encompasses all of the island of New Providence (on which Nassau is built), and includes Paradise Island, just off the coast

Just off the coast of New Providence lies Paradise Island, linked to Nassau by two toll bridges. The main attraction on Paradise Island is Atlantis, a huge 1200-room hotel, restaurant and shopping complex built around a casino decorated in monumental kitsch, borrowing its theme and imagery from the Atlantis myth. The ground floor opens onto a huge aquarium with many-hued tropical fish, sharks, and even an enormous manta ray. The island itself is beautiful, and one does wonder why people would want to spend their time in a dark hall feeding their money into slot machines when there is so much sun and beauty outside. But there's no accounting for tastes, is there?

So, Enjoy your time in our beautiful city of Nassau, as you fly in , fly over, fly out, or spend a little time. I would suggest talking to the office staff about arranging a permanent flight schedule!





## Software Review

By Felix/FFDS

### A modeler's question: FS9 and/or FS-X?

FS-X has just hit the streets. Many people are having problems getting the desired performance they perceive they should be getting. Typically, we can see three camps: FS-X is great, FS-X is okay, and "I'm sticking with FS-9".

To a modeler, the same questions apply.

FS-X has just come out, and with it, a set of SDKs. What the hobbyist modeler has found out is that unless he has the high priced 3DS Max, he cannot create a true FS-X model! Of course, that's only a temporary situation until the tools for gmax, FSDS and other programs are released.

However, flightsimmers are already looking forward to the "latest and greatest" offerings from modelers, and are asking whether such and such a model yet to be released will come in FS9 and FS-X versions. To the flightsimmer, it should be an easy and obvious answer - of course! - especially if he's not going to upgrade to FS-X anytime soon. To the modeler, it's a difficult answer.

With FS-X, the ACES team have introduced a significant number of changes for the modeler, not all of which are immediately obvious to the flightsim user, but enough so that a model made for FS-X cannot easily be "de tuned" for FS9.

Take a high end FS9 model, with all it's great textures, detailed interior, and other eye candy. Yes, it will run in FS-X.

Take that same model, make a few changes, and now you have an FS-X model that won't run in FS9.

From a modeler's point of view, we can create two different models - an interior and exterior model. So what? Through FS9, the interior and exterior models created in a modeling program were combined into one final FS model file (\*.mdl file residing in the Model folder). Because of the simulation considerations, we had to choose - although it wasn't apparent to many - on which model to spend polygons creating details for otherwise the final product could be a pain to the flightsimmer in terms of frame rates, etc. Now, we can create two highly detailed models in the modeling program, and compile each one separately, each residing in the Model folder. The model.cfg file now lets you specify the particular models. Check the Maule M7 airplane in FS-X.

```
[models]
normal=Maule_M7_260C
interior=Maule_M7_260C_interior
```

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*Typically, we can see three camps: FS-X is great, FS-X is okay, and "I'm sticking with FS-9."*

*- Felix/FFDS*

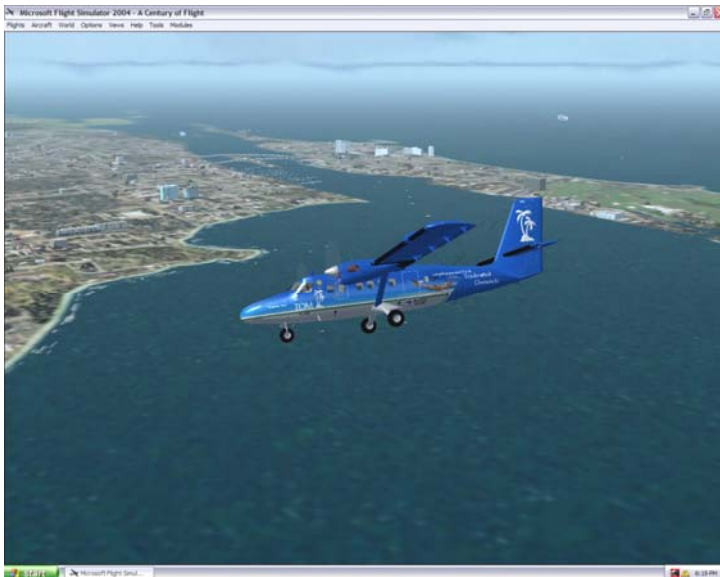
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### A modeler's question: FS9 and/or FS-X? (continued)

This means that an airplane created for FS-X can have a highly detailed interior, since it is a separate model. However, it is not just a simple matter to join the interior and exterior models and compile them for FS9. There is the little detail that the FS9 airplane creating process limited how small you could make a part without it literally collapsing on itself. FS-X does away with that limitation, so you can create a detailed small part (that little push button on the end of a lever, and yes, you would notice if it was a shapeless little blob. The US may have spy satellites, but there are few things that can spot errant details better than a flightsimmer!)

Good, so the modeler can still choose to create a less detailed (he'll know, you probably won't) interior, compile it with the exterior for FS-9 and compile it separately for FS-X.



Textures - the default FS-X airplanes now use ".dds" textures, rather than the ".bmp" textures. Without going into too much detail, the new textures are "DXT5" format, which FS9 cannot read, without being converted back. Maybe not too much of a problem there.

Then again, a model now can have several types of textures to enhance the visual model - the famous "self shadowing" and other types of images to fool the flightsimmer into thinking that there are details modeled that aren't really there. These textures are identified in the modeling process, and once so identified (or mapped) and compiled in FS-X, the modeler can't go back and compile the same model without removing those additional mappings. Now he may have to create different textures to "cover" the missing detail.

On the subject of textures, FS-X can now store "common" textures in the base texture folder, and just have variant specific textures in the variant folders. There is now a "texture.cfg" file to identify the "fall back" texture folder:

```
[fltsim]
fallback.1=..\texture
fallback.2=..\..\..\Scenery\Global\texture
fallback.3=..\..\..\..\Scenery\Global\texture
```

Look at the Maul M7 texture.1 folder and you see only 4 \*.dds files. Look now in the main Texture folder and you see 14 dds files.



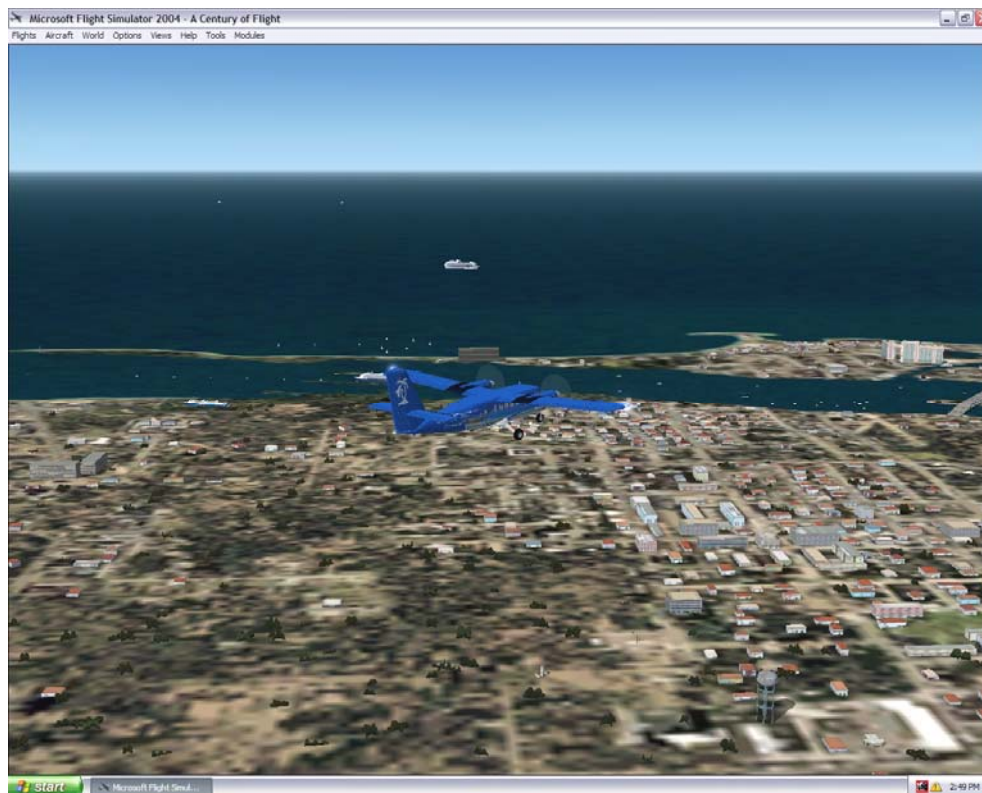
### A modeller's question: FS9 and/or FS-X? (continued)

FS-X also has brought about new variables, events, etc. that the modeller can use to create new or more detailed gauges, and animations. I think that this is where the "9" gives way to the "X". If the modeller uses one of these new variables, with its associated and particular XML coding, there's no way that the modeller can then create an FS9 model, short of reprogramming it (if at all possible).

I think that at first, modellers will make an FS9 airplane, compile them for both FS9 and FSX, and then add some FS-X only features. As they become more familiar, they'll increase the FS-X only content until in a short time, they'll be making FS-X only models.

We've seen this process each time a new version of Flight Simulator comes on the market. The first models are built to the previous version's best standards, with some new-version-only features that rendered them unusable in the previous version, until the modellers became familiar with the new tools and discarded the "old" ways, and we'll see it this time around.

FS-X brings more than just "eye-candy" to the flight simulation experience, a more detailed visual model is just one of the many.





## Interesting Links

### [Tradewind.Org](http://Tradewind.Org)

Tradewind Caribbean Airlines, our own home port-of-call!

### [FlightAware.Com](http://FlightAware.Com)

FlightAware is a free flight tracker that will change what you think about live flight tracking and aviation data.

### [FlightSim.Com](http://FlightSim.Com)

Here's the latest flight simulator news. But there's a lot more to FlightSim.Com.

### [Flight Simulator Software](http://Flight Simulator Software)

This site has been created to provide customers with a direct link into the world around Microsoft Flight Simulator.

### <http://www.projectai.com>

Complete AI additions.

### <http://www.fs-freeflow.com>

Excellent sceneries with animated ships, helicopters, etc.

### <http://www.editvoicepack.com>

Additional callsigns for Microsoft FS ATC.

### <http://portal.fsgenesis.net>

Featuring the most comprehensive and complete collection of terrain mesh products for Flight Simulator.

### <http://www.fs-shipyards.org>

Sail, steam, even sink, in sailboats, ships, & submarines.

### <http://www.vatsim.net>

Live ATC traffic control.

### <http://www.ultimatega.com>

Flight plans, general aviation and corporate aircraft.

### <http://www.surclaro.com>

Flight Simulator addons.

### <http://walhalla.mine.nu/fs2004.php>

Freeware scenery.

### <http://www.dusteagle.tk>

Great flight plans.

### <http://www.flightsimnetwork.com/premaircraft/home.htm>

Unique award winning freeware aircraft.

### <http://www.simviation.com>

Great source for FS Aircraft)

### <http://www.msfgateway.com>

Compilation of many FS resources arranged by topic

