

AVSIM Commercial FSX

Combination Review

Do add-ons really make a difference?

*A novice flies the MD-11F solo
Boston Logan to Frankfurt Germany*



Product Information

Publishers: 6 different developers

Description: Complex add-ons, repaints, video training and books.

Download Size:
Various

Format:
Downloads, DVDs,
books

Simulation Type:
FSX

Reviewed by: Ray Marshall - AVSIM Contributing Reviewer - May 12, 2011

WHAT THIS IS.

As Bill Clinton so eloquently stated – It all depends on what the meaning of is is?

This is a review of a half dozen or so popular add-ons for FSX used straight out of the box for the first time, all

together for my first transcontinental flight using the PMDG MD-11X F.

WHAT IT IS NOT.

This is not a review of the PMDG MD-11, but rather an experience of how a *HANDFUL of popular add-ons* can work together with the MD-11. I will not be providing a detailed review of each add-on, I will simply be using each as intended for that portion of the experience. Let's see if the sum of the parts enhances the whole.

This is my first flight as Captain of the MD-11 Freighter across the Atlantic Ocean using FSX. It took a bit of prep to get to the gear up callout and I am going to share those experiences with you shortly. But first, we need to see how we came to have an MD-11 to start with.

FIRST THERE WAS A 10

No, not Bo Derek, and no not the A-10 Warthog. The DC-10, one of the two wide-bodied, 3 engine planes from the early 70s. The other being the Lockheed L-1011. (Most folks can't easily tell the difference when viewed from a distance, including me.) Both production lines ended long ago. 250 total L-1011s were built with variants from -1 to -500 between 1972 and 1983. Douglas built 386 DC-10 airliners and an additional 60 tanker versions for the US Air Force between 1968 and 1989.



Unfortunately, neither Douglas nor Lockheed are still around and building airliners. Douglas Aircraft and McDonnell Aircraft merged in 1967 after McDonnell lost the bid to continue with the manned spacecraft production and was reeling from the DC-8 cost overruns. North American, - later Rockwell - won the Apollo contract. Douglas' pocketbook was strained from the DC-8 and DC-9 production costs and was looking for a friendly merger. Both companies were in the space business with McDonnell at the pointy end and Douglas at the business end of the massive rockets bound for the moon. 30 years later this McDonnell-Douglas venture was gobbled up by Boeing and Lockheed merged with Martin Marietta and wound up making mostly military planes, spacecraft and ships.

OK, so much for mergers and acquisitions. The DC-10 was a mediocre success and needed a successor to carry on the wide bodied competition with Boeing. Douglas Commercial (DC) engineers now being McDonnell-Douglas (MD) came up with the MD-11 design in the late 70s, but the economic downturn during the Carter administration made introducing a new airliner tough. The 1980s was dedicated to completing the design, chasing firm orders and cranking up production. The following 10 years saw the production of 200 MD-11s with the last one coming off the Boeing production line and destined for Lufthansa Cargo in January 2001. This is the one I will be flying in this review.



The MD-11 was the first aircraft to carry the MD prefix. While outwardly looking similar to its DC-10 predecessor, everything except the basic wing structure was totally new. The prototype MD-11 first flew in January 1990, being about 20 feet longer and fitted with the latest GE or PW engines with a two man crew setup looking at a slick, full glass cockpit with EFIS and FMC.

The winglets and straight-thru tail engine assembly are quick and easy methods of identifying an MD-11. The Lockheed wide-body has an S tail engine configuration and no winglets.

Boeing was in the driver's seat at the turn of the century with the historic 707, 727, 737, and the gigantic 747 in their stable. With their 757, 767 and newer 777 steadily coming off the lines, they quietly put the MD-11 to rest.

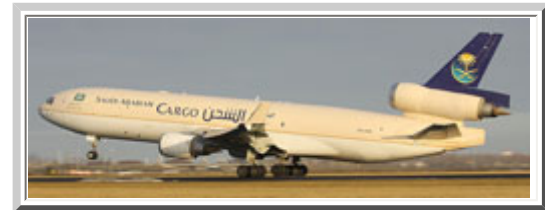
FedEx and UPS love the DC-10-30 and MD-11F for their cargo business. They can haul almost as much as a 747, get into smaller airports, and save the added cost of one loaded with a typical FedEx load at about the same time it reaches max takeoff weight. The 747s still has available weight to spare but the cargo hold is full. This puts more pennies in the pocket flying the MD freighter. Apparently this has to do with bulk capacity vs payload.



Boeing has a cost center that specializes in upgrading the DC-10-30 to basically a modern, almost MD-11F. These modified aircraft are often referred to as the MD-10F. An all new modern glass cockpit with increased useful load capacity and one less crew member conversion for mere millions. FedEx sent 70 through the conversion line as soon as it opened. But even with the DC-10 conversion, the MD-11 has more power with just 2 fans running than the MD-10 with all three churning, but the conversion has 6 new CRTs, EFIS, HUD and shares the type rating with the MD-11 guys and girls.

About a dozen companies still have the MD-11 flying in their fleet today. The most recent count has FedEx flying about 160 DC-10/MD-11 and only slightly less Boeing 7XX, and even less Airbus A3XX. Their most popular Boeing is the model 757. Interestingly FedEx does not have a single Boeing 767 in their fleet. Many writers seem to think the MD-11 production was ceased to make room for the B767.

I just read an article about Lufthansa Cargo looking to grow their fleet of 18 MD-11F by another 6 aircraft. They have ruled out the 747-8F as being too large and the 767 as too small, but the 777F is probably just right. A decision should be made about the time you are reading this review.



From the pilot's seat it is often heard that Lockheed should design them, Boeing should build them, and Douglas should market them. But, it doesn't really matter anymore – it's all Boeing nowadays.

SO WHY ONLY 3 ENGINES?

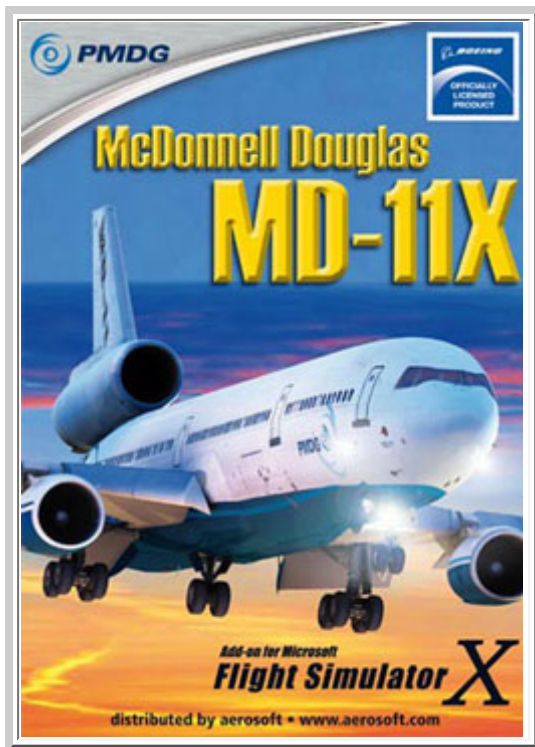
Basically, it turns out that 2 wasn't enough and 4 was too many. That is what American Airlines said when they asked the market to build them a passenger jet to cross the Atlantic. The thinking was the then current basket of twin jets lacked the range and it was perceived that the public, i.e., paying customers, wouldn't feel safe over that much water for that long with only two engines. Somehow, four engines just seemed overkill, so the logical choice was the tri-engine, wide bodied jet.



I remember asking a Mercedes salesman why a particular model had a 5 cylinder engine and his answer was 4 wasn't enough and 6 was too many. Guess there is something to be said for odd numbers.

NOW CAN WE FLY?

So, here I sit at my desk looking at my new PMDG MD-11X DVD case



thinking *I wonder how you really learn to fly one of these big, beautiful birds.* I'm not an experienced airline pilot, as matter of fact I have never been in or on an MD-11 ever. I got to the party a little late in that I only started flying flight simulator with the FSX version in August, 2009. I usually look for tutorials to learn to fly my add-ons and as a last resort go to YouTube. I'm sure there are probably lots of really good video tutorials out there, but, I prefer the ones that are in understandable English and the author sounds like he is more than 12 years old. I know, picky, picky.

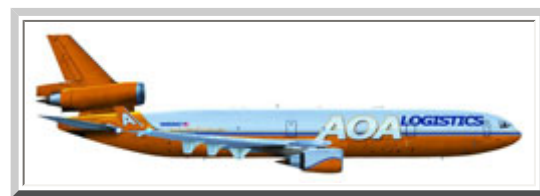
Then I start thinking it would be enjoyable to plan and fly from the US to Europe. So what would I need for such a feat? At the time, all I had was a little over one year experience flying FSX with minimal add-ons. My first heavy was the PMDG Queen of the Skies 747-400 and I quickly found lots of older FS9 tutorials which seem to work just fine for me. Lots of technical and operational errors but the kids still knew a lot more than I did about the flight deck. Then I got a couple of Airbuses', then Embraers' and finally last November, I purchased the Aerosoft/PMDG MD-11X. This version has been available long enough for the initial bugs to be worked out and a couple of developer tutorials were available for download. Plus, just about any repaint one could wish for was available at the PMDG's web site.

One day, while surfing the forums, I came across some text about Angle of Attack working on training videos for the PMDG MD-11. I remember reading something about a DVD they had made for the PMDG 747 so I started

thinking this may be a possibility.

Now, if I can get AOA to teach me how to fly this thing, what do I need to properly plan an international flight? Probably more than the FSX default flight planner, I'm thinking. I wonder where you get maps and charts for flying over the ocean and into Europe? Certainly more than the Map program that is included with FSX, although it is a lot more capable than most simmers give it credit.

I started buying digital copies of older issues of Computer Pilot magazine so I could read up on these things. You see, I'm retired with not much to do each day, but I have this tremendous thirst for knowledge; I know how to use a PC; and I can read. This is where I first heard of Doug Horton's Hints and Captain Mike Ray's series of glass cockpit articles. Captain Mike is now an acquaintance, if email correspondence counts. Seems we have a few things in common – we are both retired pilots, and both are happily married with grandkids. He also happens to be a retired United Airlines captain and was a Navy carrier pilot. I was in the Navy and have ridden on United Airlines. He also has a knack for writing informative articles and explaining how to make sense of complicated issues using sketches, drawings and a lifetime of experience. Oh, one other thing, we both thoroughly enjoy the total flight simulator experience.



NAVIGRAPH



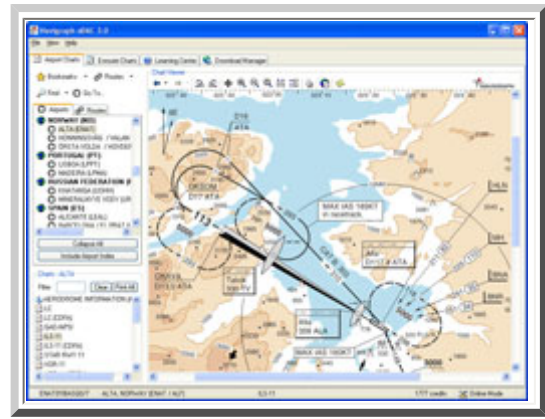
In my reading I keep hearing about Navigraph charts and graphs and monthly updates for the FMC. After checking into this, I find it's a one of a kind company that started out filling a niche that has turned it into an indispensable add-on that any serious simmer just absolutely must have. I now have a credit account and can download and update my maps, charts and AIRAC data as needed. The good thing is you only have to pay for what you download and most downloads cover most of your fleet for each developer. Like one file is for all of the PMDG aircraft or Captain Sim's 757/767 or Wilco/Feelthere add-ons. Not one for each model. That solves the riddle on where do I get maps and charts? Navigraph account. A full set of SIDS/STARS/approaches, etc. for a major airport anywhere in the world is only 2 credits (little more than a US quarter). I started with 200 credits for 20 Euros (about \$28.00) and I still have credits available after updating all my AIRACs and downloading several maps and charts for many of my favorite airports.

The Navigraph updates are so easy a caveman could do it. Log on to your active account, download a ZIP file, unzip it, backup your current file and run the new 'exe'. Less than a minute later you are good to go with the latest monthly cycle for the world. These are only good for flight simulation so

don't take your real Cirrus SR-22 out and shoot the Innsbruck approach for fun.

SELECTING THE ROUTE

Assuming that I could learn to fly the MD-11F well enough to plan and fly from the U.S. mainland to Europe sounded like a good challenge. Next I needed to select departure and arrival airports. It seems everyone has a tutorial either beginning or ending at Heathrow (EGLL). So now I have one less airport to consider, same for Zurich (LSZH) and Palma (LEPA). While searching one of the free route sites, I came across some recent real world routes and one really caught my eye. You guessed it. A Lufthansa MD-11 freighter run from KBOS to EDDF. With Boston Logan already rich in American history as a starting point and the old Rhein-Main as the destination, I knew I had a winner. There is a short video of a similar flight found in cyberspace. Google 'diverted MD-11 departs Boston'. This shows the beautiful skyline of Boston, the airport, and the Lufthansa MD-11F.



As luck would have it both airports have add-on scenery for FSX that was recently released or upgraded. I contacted Aerosoft in Germany and gave them my proposal for this review. Being receptive to providing the scenery, I had approval for downloads within 24 hours and KBOS was on its way as a DVD from Europe and arrived a few days later. Neat people run Aerosoft. They also threw in a 10-credit pack for their AES – Airport Enhancement Services.

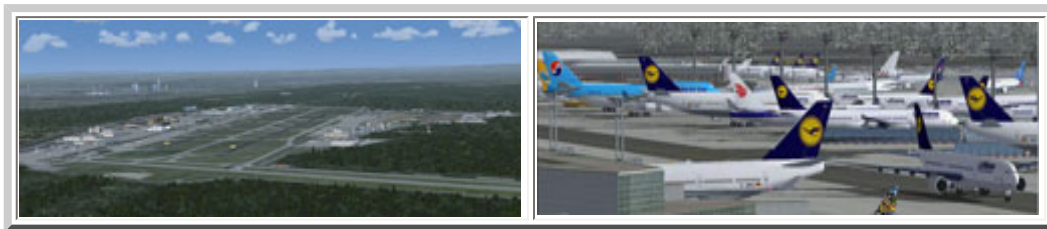
MEGA AIRPORT FRANKFURT



Taking the arrival first, Frankfurt is the busiest real world airport in Germany, employing 65,000 people on any given day. That is not a misprint – 65,000 people work for 500 companies located at the airport. Wow. Cargo and passenger movements place EDDF in the top 10 busiest airport list in the world for the last 10 years, usually around number 7. As one might expect, Lufthansa is the big gun in town here, both at the passenger terminals and the cargo center.

This was a shared military/host city airport until the military side known as Rhein-Main since the Berlin Airlift days of 1947 was given up at the turn of the century and airport renamed Fraport AG (FAG).

Marketed by Aerosoft as the flagship of the Mega Airport series for flight simulator, Frankfurt is truly remarkable in depth and detail. You could just taxi around the place for days and continue to be amazed. The periphery and street traffic can be controlled and seasons are selectable from the start menu. As expected, this is one busy airport so look both ways before stepping out. You know you have a quality scenery package when performance sliders are shown in the manual with explanations and they lean to the Left, Yeah! When comparing the FSX performance slider selections of Boston and Frankfurt airports you will find they are worlds apart, not just an ocean apart. FlyTampa's slider recommendations are more on the heavy or right side of the scale.

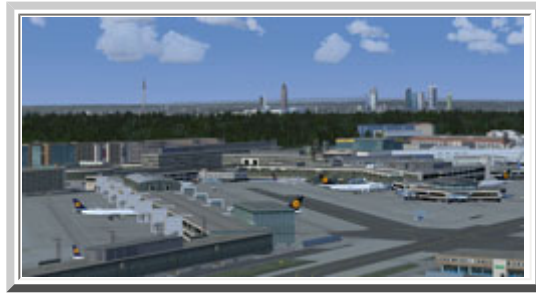


I used BOB, a free walk around scenery viewer from ORBX to tour the airport facilities with no loss of FPS whatsoever. This is one gorgeous place. I am quite sure that if I could only have one upgraded airport for the entire world for FSX, Aerosoft's Mega Frankfurt would be my choice.

Technically, at 364 feet elevation and located 6.5 nm South of Frankfurt, the airport has parallel 7/25 runways located 1,800 ft apart. Runway 18 is on the West side. All runways are 13,000 feet long, with 7L being ~200 ft wide. 7R and 18 are both ~150 wide. A new 9,200 foot Northwest/Southeast runway is under construction. On the South end of the airport you can see a new A380 hangar under construction. Although not slated to be complete until 2013, the

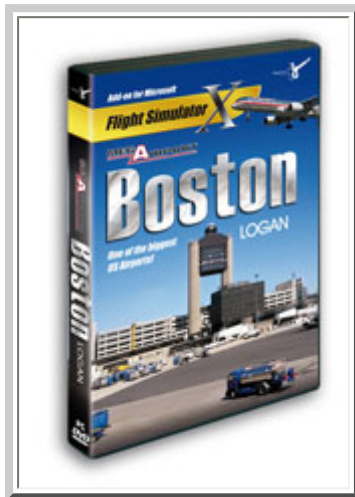
first phase is already included in the scenery package.

Having 63 terminal positions with Lufthansa starting at number one is no surprise. For FSX we have the AFNIS docking guidance system. We will be delivering urgent goods (live lobsters) from Boston to the WOW Cargo facility at the Northwest corner of the airport.



I'm sure air crews look forward to deadheading here as EDDF sports 188 shops, 43 bars and restaurants and a casino. It also has Inter City Express (ICE) train stations on the grounds. You can travel on the German Rail ICE connection to Cologne, the famous cathedral city, in 57 minutes. These guys are the real bullet trains. The numbers are staggering – something like 400 trains per day zoom thru the two airport stations carrying 640,000 passengers per month to/from the airport. Travel time from the airport to downtown Frankfurt is 15 minutes. I'm excited!

BOSTON LOGAN



OK let's talk a little about the General Edward Lawrence Logan International Airport (sounds like it was named by committee). KBOS to aviators. Sitting smack in the middle of the tea party bay, they have so many runways that you should always have a runway on your nose. Especially if you don't turn ATC on. Looks like X marks the spot plus another half dozen or so just for good measure. Seriously, they have an even dozen runways. Those making the big X are 15/33 and 4/22 at 10,000 feet x 150 ft wide. Here you must pay attention to the details, each of these two have a parallel runway, 04L is 7,861 feet but 33R is only 2,557 feet. Should you be a little lax and choose that one, you better have your auto brakes cranked all the way up because there is water on both ends. Do I hear a *uh oh kerSplash?*

This scenery upgrade is brought to us for FSX by FlyTampa via Aerosoft. It comes only as a DVD with a small, thin printed manual, half English, halbe Deutsch. They made a few strange decisions along the way, like changing the airport



elevation from the real world 19 Feet to sea level. There is an explanation in the manual, but I didn't understand it. No hill for a climber, it's not going to spoil my day for the airport scenery is just stunning. It first appears like 3d photo-real scenery. Download BOB from FTX/ORBX and take a walk around this place. The lobster isn't cheap but it sure is good and it couldn't be any fresher. Mine was doing a head-stand when I walked into a restaurant in Terminal A. (Pilots get discounts on food). This is a very scenic locale. I enjoy taking something like my Aerosoft Twotter or IRIS TexanII and just staying in the pattern for a few loops. Beautiful scenery around the docks and city center. All the terminals are vastly improved when compared to the FSX default dull buildings. You can read a nice Boston Logan review by Bill Stack and see some impressive screenshot [comparisons](#).

The taxiways look like the real deal, I really like the cracks and patches. The Aerosoft AES seems to be of limited use with the freighter at this airport. One of the forums has a post about an imminent upgrade for AES and states it will add a lot more goodies for the freighters. This will probably end up being my home airport for airliner type domestic flights. I think Fly Tampa probably captured the essence of the airport. No single air carrier dominates Boston Logan. There is a very long list of tenant airlines using the terminals. Lots of commuter types, American and Canadian mostly.

I just added the update to version 3.2 from the FlyTampa website. They are continuing to refine the package. A simple file copy and replace update. I made a quick reference page for the FSX graphics settings for each of the airport scenery packages.



LIVERY (PAINTS)



Continuing with impeccable timing, I get my December newsletter from McPhat Studios and voilà. The PMDG World Airlines 4 for the MD-11F will be available in early January 2011. Yep, you guessed it, the Lufthansa Cargo is one of the spectacular 7 included. I'm sure everyone already knows, but, just in case someone just started simming yesterday, McPhat Studios' repaints are HD drop dead gorgeous pieces of art. You will be hard put to tell the difference between real world photos and the repaints in this review. The other good news is there is practically no hit on the FPS when using these repaints. They have an additional 21 more passenger airliner liveries in the other three packages.

To drive home the point of how good the [McPhat Studios](http://www.mcphatstudios.com) repaints really are. The editor cautioned me that I needed copyright approvals for some of the photographs used in the review. Turns out they weren't photographs, just real good screenshots using the McPhat HD liveries and a World Airlines 5 is already in the works.

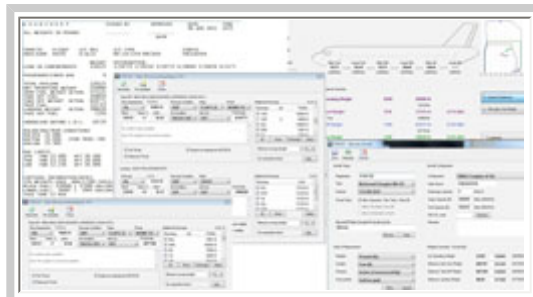
So now we have an airplane, a livery, a departing airport and an arrival airport. We are on our way. When this idea was still in the forming stages, I was thinking it would most likely be a two day affair. Plan and prepare one day, fly the next. This could also be a weekender if some of you guys and girls choose to recreate it with your PMDG MD-11F or actually any add-on with the necessary range.



TOPCAT

While in flight training for the PMDG MD-11F over at Angle of Attack, I was first introduced to [TOPCAT](http://www.topcat.com) (Take-Off and Landing Performance Calculation Tool). A day or so later, I was talking with Ryan at PMDG and asked if He had any specific suggestions for my flight. He also recommended TOPCAT for the performance calculations. These are real world programs that are used by real world pilots that have been adapted for flight simulation. It is actually much more than that. Here is a quote from their website:

"TOPCAT will provide you, the captain, with Load Sheets, Take-Off and Landing performance analysis, Individual Runway Tables including all relevant speeds (V1, VR and V2), optimum thrust and flaps configurations, de-rated and assumed/flex temperatures and stop margins. TOPCAT is similar to real-life software and was developed by professional airline pilots."



These calculations are model specific and of course, airport, runway and weather specific. You get printed tables, not just a number. This is where we start to approach simulated reality at the highest degree. We will be doing all our performance calculations with TOPCAT later on. You can download a full featured trial version that is limited to the PMDG 747.

HOW ABOUT THE FLIGHT PLANNING?

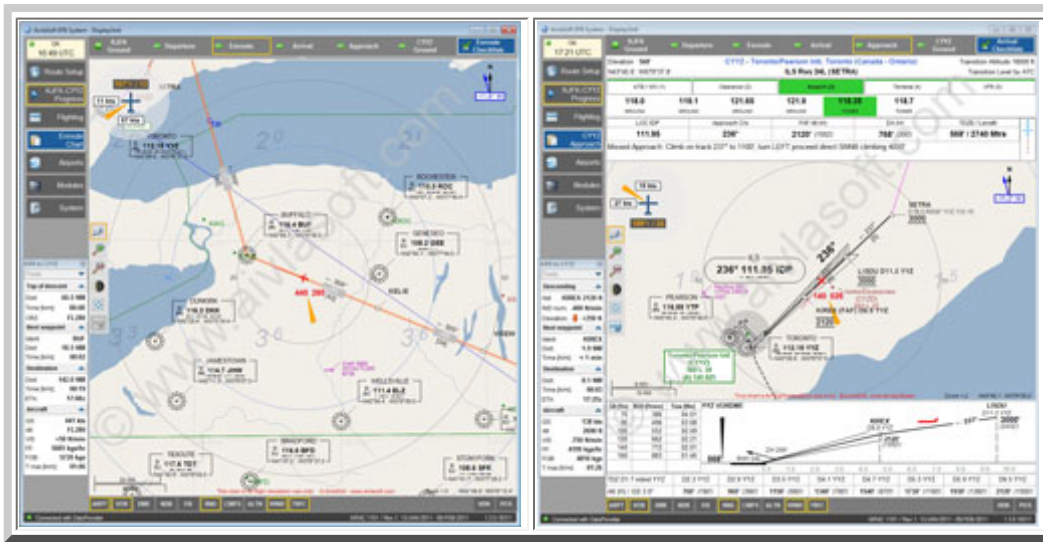


Seems like many of the old timers use FSBUILD or FSCOMMANDER for their flight planning. Being new on the block, I missed growing up with either of these so I went looking for something new. The stars must be aligned because I stumbled right dab into the middle of a new major release of the ELECTRONIC FLIGHT BAG developed in Switzerland by AivlaSoft. This is another one of those bigger than life simulator packages. I have to admit that I am probably not using it to its full potential but I have absolutely no reservations in recommending anyone and everyone take it for a serious test drive. 30 days totally free. The developer evidently never sleeps and the support forum is active with one of the key guys living in California so it is truly a great setup.

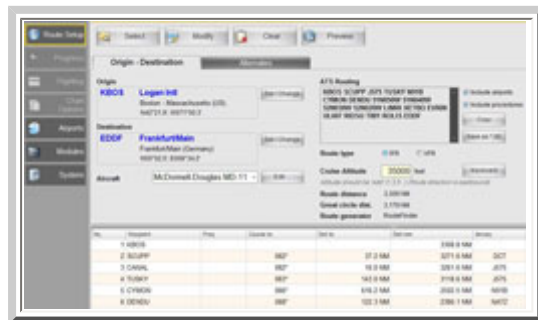
WHAT IS THE ELECTRONIC FLIGHT BAG?

It is a lot of useful things that put maps and other essential info at your fingertips without having the hard copy. Maps, charts, Airport info, Routes, Weather, Checklists, Flightlog, and a document library.

The first thing to get my attention is the moving map with your airplane position shown. This is either in the parking area, runway, climbing, cruising, descending, etc. I guess when I first watched my plane slide down the glide path on one of my favorite ILS approaches I almost wet my pants. For approaches you have both the top down (plan) view for lateral alignment and the side (profile) view for elevation and glide path monitoring. These maps are fed by your AIRAC Navigraph data and just in case you don't have a Navigraph account it comes with a full working version from early 2011. Along the bottom of the screen is the current map version so you know when you are in sync with all your other add-ons.



I use two monitors - a 24 widescreen and an 18 inch secondary - and this setup works like a charm with the Electronic Flight Bag. First a warning – this is habit forming and when it is not present you will miss it immensely. With my cockpit view on the big monitor and my maps and position and other status on the smaller monitor I feel I have a tremendous amount of timely up-to-date flight information available all the time. You can change a route, or an approach in an instant. I really like the visuals for the STARs and Approaches. I have been uncomfortable selecting STARs since the gitgo. With ELB you can select your quadrant, i.e. North, East, West or South, then your available choices are visually selectable. If you don't like the choice, just back up, and select another one until you find the one you want. Now I can see the STAR, not just guess at it.



Because you are using the same AIRAC for all add-ons, as you activate your route or plan with EFB it instantly shows up in your FSX flight planner, default Garmin500, and most CDUs. Being able to actually see the route or approach on a zoom able digital map is light years ahead of the presentation method of the usual cryptic text lines for the CDU or MCDU.

For the most part, most everything about the EFB just kinda makes sense. But, if you are a reader, it comes with two pdf manuals. One for configuration and such and a larger one that walks you through all the features. You also have weather reports (METAR) for your route, or actually for the world, checklists that you can download or build yourself, a flightlog and a documents library. The route selection is so simple to use. You have a button for selecting VAT routes, one for Route Finder - both of these have large searchable databases for routings - or a box to enter your own. Of course, you can also load from saved files, either the standard *.pln or the proprietary *.efbr file types. Find a route you like or almost like and click on it. You can then use it as is or modify it. All the intersections, NDBs, VORS, Airports, etc. can be shown or listed by touching a radio button for distance, 50, 100, 250, or 500 nautical miles. You would not want to select all of them at once for a 500 mile radius, but you could.

You can also control the enroute map clutter by clicking on or off for intersections, VORs, NDBs, etc. If you know your route or almost know it you can just type it in the box then go clean it up or modify it. Slick stuff.

EFB has a small box with all your flight status info called the Flight Information Panel (FIP).

It is constantly updated with TOC, altitude, next waypoint, destination, speed and fuel on board boxes. I find the time to the next waypoint during descent especially helpful. It gives you a constant readout for your predicted altitude at the IAF for instance. So if you are descending too slowly or started descent too late it will show how much above the fix you will be at arrival. You can use this information to roll the V/S dial for a little steeper angle and watch your predicted arrival come back toward your desired altitude.

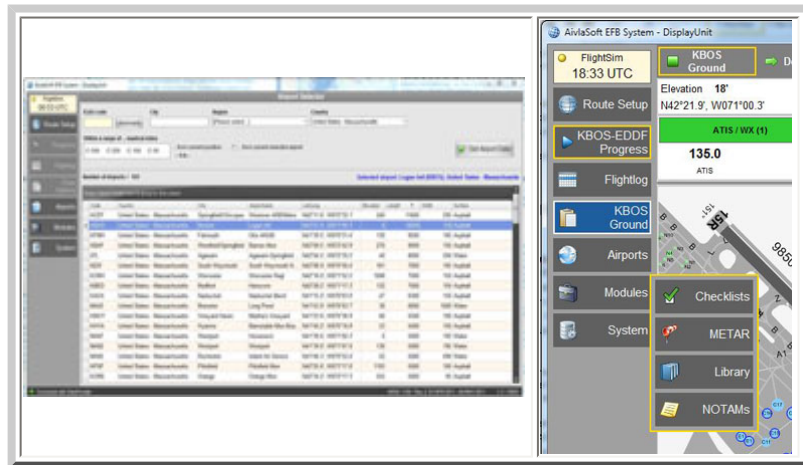
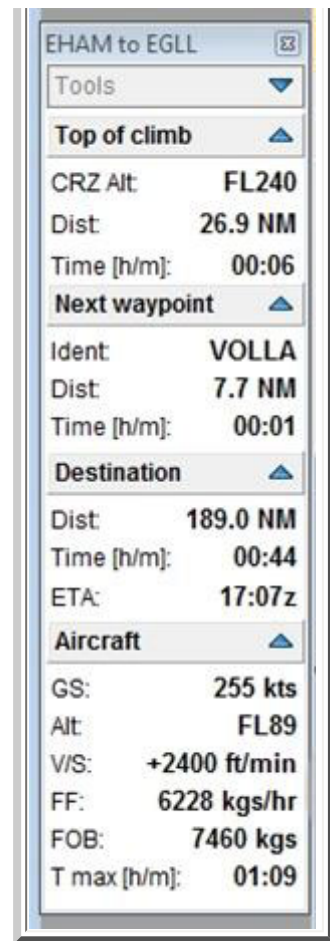
This makes the Aerosoft AirbusX and many other add-ons much more enjoyable and feature rich as it adds the missing SIDs, STARs and Altitude changes in your flight plan on the fly. All this data is fed directly to the MCDU or GPS as soon as you click the Activate button. Ole man Garmin would probably sit up and toast the Swiss if he could see this in action.



I like to fly into the military bases and for some reason, my Navigraph data doesn't have as many available approaches as the default Garmin 500 database so I usually add the 'Garmin window' to my add-ons. For instance, I have 10 really large Navy and Air Force bases nearby in the Florida panhandle area but where Navigraph only has RNAV approaches the Garmin will also have the corresponding ILS approaches. Duh.

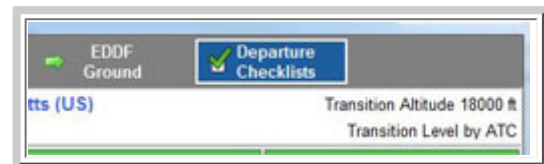
The speed of EFB is amazing. I just clicked on 'All Airports' and in the blink of my eye all the airports of the world are listed in a window table. Code, Country, City, Name Lat/Log, Elev, Length, Width, Surface. Now I can drag the columns around to my liking, I can click on the header and instantly sort that column, another click for reverse sort. One touch and any airport can be selected as Origin, Destination, or an alternate. EFB is not fond of using airports for route fixes, it wants intersections or navaids, not airports when importing standard routes. I guess this makes sense because the Jet Routes don't usually fly airport to airport (unless you are on SWA). My simple work around is to build a VFR route by inserting the airport codes. Works like a charm.

I am just scratching the surface on a few of the Electronic Flight Bag features. It is a clean looking program, blazingly fast, efficient and visually stunning. The screens convey a tremendous amount of useful data all the time, and it is constantly being updated as your flight progresses. You have full control of the windows, menu locations, etc. Remember, most everything is route segment specific so the clutter is kept to a minimum. But, if you want to look ahead, just change from 'enroute' to 'arrival' or 'approach' or 'ground' for instance by clicking the tab. This is so handy. You might want to check out the airport layout for the terminal area or parking or gas pump location and then select a specific runway or land long or short to minimize the taxi time. This gives you some useful things to do during the boring cruise phase of the flight.



I remember flying Southwest Airlines along one of their hippity-hop routes from Houston to southern California back in the olden days. They made so many stops, the joke was that if a runway was partially aligned with their flight path they were required to land. Usually they landed in such a way that the taxi time just seemed so excessive. One stewardess' announced the SWA policy was to *fly half way and taxi the other half*. 'bout right.

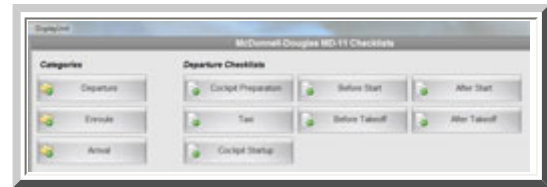
I am surprised that I use the 'Checklist' feature so often. Not having it handy on my desk must have been the deterrent. Now I look ahead by clicking on the next segment and follow my checklist. I find it very easy to build or edit a checklist with EFB. I have built them for some of my general aviation planes that have a few idiosyncrasies. As I get older, I can't seem to remember all those little differences from one plane to the other so I just make a note in the checklist. Problem solved. The MD-11 checklist was pre-built. Easy download and install from the AivlaSoft.com site. I'm sure the list of available checklists (xml files) will continue to grow. I see PMDG, Fokker, Level-D, and the default B737 are available now.



WEATHER RELATED FEATURES

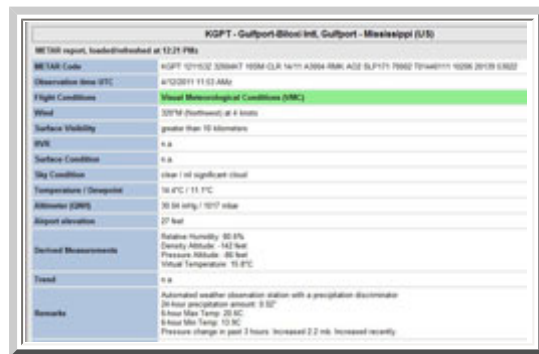
When planning a flight, you can use the REX/ASE (Real Environment Xtreme/

Active Sky Evolution) snapshot to look at the weather enroute - using your alternate and destination airports. The Remarks section help build a sense of "local flavor" or "realism" so even though F SX won't show a tornado or a squall line, at least you should be aware of the conditions.

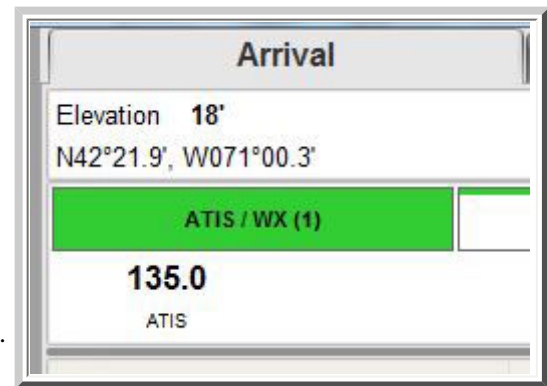


If you do not have these weather add-ons, while enroute you can simply switch to FSX METARs in EFB to get detailed sim-weather conditions enroute and the destination... this includes icing, turbulence and wind shear reports. If you need Density or Pressure Altitude values or "Virtual Temperature" those values are calculated. ("Virtual Temp" was requested by a user who wanted it to help set up his FMC). For the non-weather person, METARs (METeorological Aviation Reports) have been around since the late 60s and have never been very easy to correctly decipher as each weather man tends to abbreviate slightly different than the next.

For departures and arrival/approaches, the reported winds can be used to anticipate the default ATC assignment of active runways. Plus the METAR module uses FAA rules to declare flight conditions at airports – Low Instrument Meteorological Conditions (really low visibility) to Visual Meteorological Conditions (blue sky) - so even if you're using a non-default ATC, you'll know if you can "legally" shoot a VFR approach or if you should fly a published procedure.

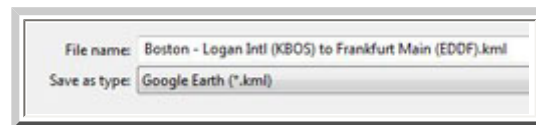


One of the newest elements for EFB is textual Online ATIS reports. This simulates a real-world feature used by real-world EFBs called 'D-ATIS' (Digital ATIS). The "I" icon located in the EFB COM frequency list indicates D-ATIS data is available from a specific control center. I'm not an online flyer yet, but I think this will be a really big deal for those who are. [Check it out.](#)



I used to avoid dialing up the default ATIS because it was so difficult to turn it off, but the broadcasts are packed full of useful local weather information. Here is a METAR for my backyard, the green bar indicates VFR conditions.

Another EFB feature that should be available by the time you are reading this review is the ability to save your routes as a KML – Google Earth - file type. You can then see your route superimposed on our beautiful blue planet. You can see my route across the Atlantic using the prototype version. Thanks, Urs and Travis.



TIME TO LEARN TO FLY A HEAVY

Along comes Chris Palmer and his Angle of Attack training videos. This is the same group that has provided all the free Aviator90 tutorials at the AVSIM site. Chris is a young real world pilot in Alaska with a highly talented staff that produce model specific, super detailed, high definition training videos. Not only do you can download or stream the videos, you get all the additional flight plans, charts, and panel states necessary for you to fly the exact mission or procedure. After learning the individual systems, you move on to the procedures for the MD-11, then a short, long, and real long flight. These are fully planned and executed flights using FSBUILD, TOPCAT, PMDG printed manuals, etc.

These videos are much superior to those free ones at YouTube. Actually, there is no comparison. One advantage of downloading the training library and additional files is that you can watch them anytime and fly the flights or approaches alongside the video. I take notes and make sketches then make a small packet for each procedure and repeat it until I am happy with my results. It sure beats the old method of flight training. And your Flight Instructor never smells like cigarettes or has bad breath. -Yeah! Yes, you can actually watch these videos using the full screen option.

If you have a question or just need some clarification on a procedure, click the support tab and leave your message. In my case, either Chris or Nick Collett got back to me with a timely email and we figured it out. I think Nick



may be the video guru and flight builder, but, I'm not sure.

AOA has video training for the PMDG 747-400 and the other 7XX models along with something called AVIATORPRO. I don't know hardly anything about this one, but a click or two at their site will get you going.

The PMDG 747 DVD was their first foray into the big time video sim training and was evidently well received. This has now been updated to streaming and downloadable videos similar to the MD-11 stuff and is one of the choices. I looked at a few 747 procedures for comparison and my take is they are getting better with each plane. The PMDG 737NGX is probably in work or will be started soon, but, just like the real deal - it's not quite ready for prime time.

So how does it work? Quite well. I highly recommend the MD-11 training at AOA. They have their own livery, a beautiful deep golden yellow, blue and off-white color job. It boldly displays the AOA Logistics logo. This plane is used in every segment of the training videos. AOA does a great job of controlling the weather for the flights. The first training video demonstrates the proper taxi technique in a thick fog at KORD. This is really fun. Chris is the narrator throughout the sessions and he just sounds like he has been there, done that. He also has lots of additional tid bits of info if you go back watch them two or three times. I found I need a notepad close by for all the practical hints he articulates. Must be from making all those Aviator90 and AviatorPro sessions or it may be the experience gained from cruising around in his Dad's new Bonanza. Envy.



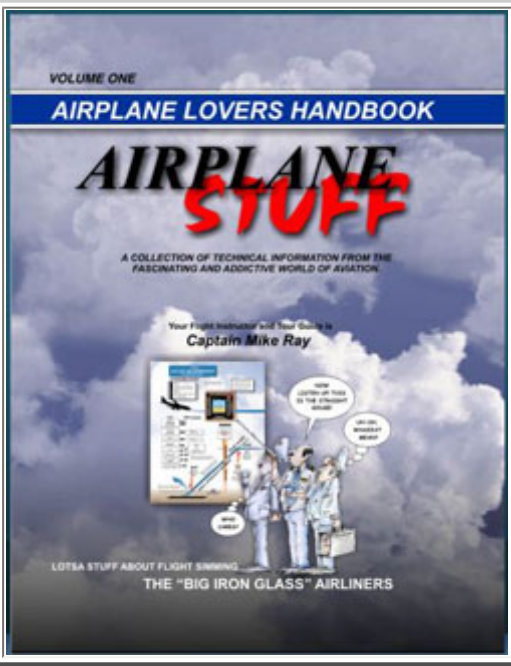
I especially enjoy flying the approaches down to minimums and straining to see those runway lights creep into view in the soup or fog. The VOR 34 at Zurich is great or the *CATIIIb* Autoland at Rome or the DME ARC at Honolulu. Get the drift? How about a freighter run from Anchorage to Memphis? The engine-out at rotation in Hong Kong ain't bad either, especially when you have to climb to the engine-out holding point and burn off fuel to get down to maximum landing weight before returning for the landing. (It never seems to be the in-line thrust engine that craters.) I was in the holding pattern and stepped out to watch a movie, when I returned the sun was setting, I was low on fuel, and the weather was going south. Now how real is that? Fortunately I had an alternate almost directly under me.

By using appropriate weather, good planning and execution and good articulation it is a pleasure to watch these training videos. There are a lot of them – taxi, normal takeoffs, aborts, all the approaches, go arounds, training flights. Most of the systems are covered in detail. They have evidently taken the PMDG printed systems manuals and turned them into high class videos.

The training program concludes with three full featured flights. I think a poll was taken some time ago and all the new customers were asked about their desires for the flights. The end result is a short, medium and long overwater flight. AOA uses the entire world as the stage as the procedures are around the globe – day, night, bad weather – you name it, it's somewhere in the package. I was overjoyed when I loaded up the normal takeoff and saw my newest favorite airport – Runway 7R – EDDF.

You get all of the above for the price of a typical add-on. While I was writing this review, AVSIM awarded AOA the coveted 'gold star' for the PMDG MD-11F training program. Read Marlon Carter's full [review](#).

BOOK ABOUT AIRPLANE STUFF



Now what do we have left? How about a book? Not just any book, the newest Captain Mike Ray's *Airplane Stuff*. This is one of those heavy books, not just for the Boeing heavies, it actually has a lot of weight to it. The subtitle is 'Airplane Lovers Handbook, Volume One'. What that tells me is we might get lucky and have a volume two or three down the road.

Who better than a retired airline pilot - by way of the Navy carrier pilot school of hard knocks during the Vietnam War era - to write a book explaining the glass cockpit among other things? Not only that but, Captain Mike can draw, illustrate, and has a sense of humor.

This 160 page full sized, full color, illustrated guide to understanding the business office of the modern airliner is just terrific. Somewhere along the way, I heard that we should use all our senses in order to retain more. With that in mind, this is now my handy desk reference. While my computer is loading, downloading or reloading or just thinking, I grab the book, open it to any page and start reading. Every single page has something interesting.

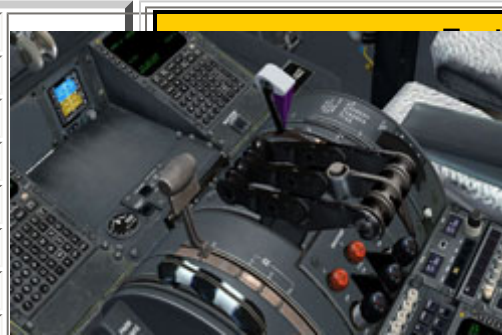
It has lotsa stuff about flight simming the 'Big Iron Glass' airliners.

This is the definitive [Airplane Lovers Handbook](#), written with us sim pilots in mind. How about detail? Would you believe 6 pages on TOGA (TakeOff and Go-Around). In addition to all the glass cockpit stuff, there are several pages about combat sims, dog fighting, flying the prop jobs, and it concludes with a very detailed explanation of the default Map toolset and how to make screen shots. Some of this stuff has appeared in issues of the Computer Pilot Magazine. It is a little pricey, but, worth every penny.

INVENTORY TIME

So let's sum up what we have to work with.

PMDG MD-11X Freighter	PMDG
Lufthansa Cargo HD Livery	McPhat Studios
Type Rating for MD-11X-F	Angle of Attack
Route and Planning	AivlaSoft/EFB
Performance Charts	TOPCAT
Charts and Maps	Navigraph
Airport Scenery/AES	Aerosoft
Desk Reference Book	Capt. Mike Ray



System
2.93 GHz 1GB SATA-II HD
GB RAM
1 GB, Dell 24" LCD/Dell 18"
n Z-5500 5.1 speakers,
Logitech 3D Pro Joystick
ike and Pro Pedals

Flying Time:
many, many hours

PMDG's McDONNELL DOUGLAS MD-11X

Just to make it crystal clear. This is not yet another review of the PMDG MD-11 add-on for FSX. Here are a few statements that echo the many reviews that you will find with a simple Google or Bing search. I just Googled 'PMDG MD-11 Review' and returned 17,000, yep 17,000 results in .09 seconds. So one rainy day you can read a few of the reviews. Common phrases you will find are:

1. Absolutely, unequivocally, the best of the best
2. So overwhelmed I thought I died and went to heaven
3. Highly recommended for anyone serious about flight simulations
4. Most realistic and complete simulator I have ever flown
5. Can't imagine any detail left out or overlooked
6. Very similar to what real world pilots experience in a modern airline training program

So do you get my drift as to why I do not need to add to the existing accolades? For this review, let's just assume you already have your copy of the PMDG MD-11X freighter with a few of the 46 official Pratt and Whitney or 41 General

Electric engine liveries. I'm sure the list is growing all the time. These are drop dead simple to install. Just download the file, unzip it, use the PMDG livery selector and click on the prepared file. Added in seconds, none of that modify the cfg file, add the textures folder, copy and replace these but not those type of instructions.

Because this is *the Douglas approach* and not Boeing, Lockheed or Airbus cockpit flight management, there is a learning curve that you may not have come across in flight simulator. The PMDG site has a 4 page gouge entitled *Tips for Boeing pilots learning the MD-11*. This helps with the transition. What is a *gouge*, you ask? [Answer](#). Much has been written comparing the Boeing 7xx with the Airbus 3xx, but not much can be found comparing either of those with the MD-11.

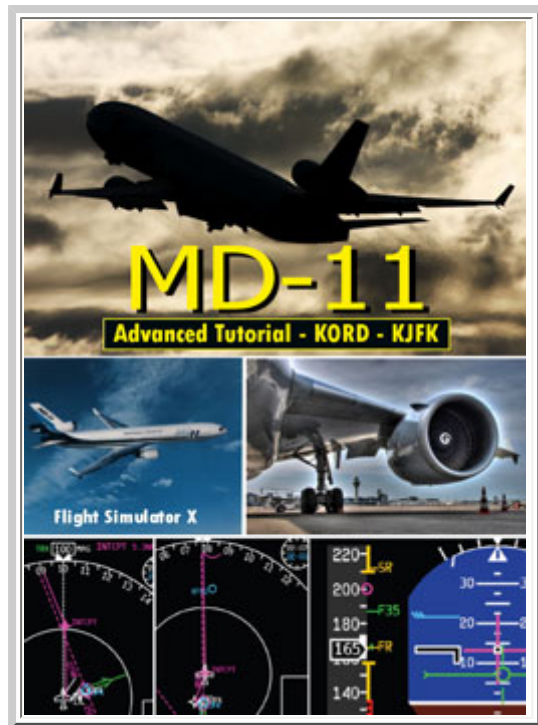
A few of the more important topics are MCP vs FCP, FMS color coding, Autothrottle and Autopilot relationship, disconnecting the A/T and A/P, Dial-A-Flap, RTE, LEGS, DEP/ARR, Direct to, HDG Hold & HDG SEL, ALT Hold and LVL CH/FLCH, LNAV vs NAV, VNAV vs PROF, Speed Modes, FMS speed targets, Speed control during approach, and Autoland. These differences make for some exciting takeoffs and approaches when us sim pilots jump from the MD-11 to the Airbus or the B757. This may have something to do with the logic of having real world type ratings.

THE PUSHMA PULLYA SYNDROME

There are lots of ways of implementing an ON/OFF switch or how and where to put an indicator, caution or warning. I find it absolutely amazing how similar the various airliner cockpits are, but I find it even more frustrating how very different they are. If I could just remember EPR, TOGA, A/T, Clamp, and which aircraft have them and which ones do not have them.



PROFESSIONAL FIGHT TUTORIALS



One of the saving graces for learning to fly this wonderful add-on is the two included flight tutorials. Tutorial Flight 1 (an introduction into flying) from London Heathrow to Zurich making a Swiss Air milk run with a little more than an hour of flight time. This is a fantastically simple flight using real procedures and flying the MD-11 PAX model the way it was designed to fly – on autopilot with all systems in normal operation mode. Lots of screenshots that show switch positions and FMC entries. Using stored files, company routes, recalled panel states, SIDs, STARs and arriving with a standard ILS Autoland. This is by far the best written and prepared flight tutorial that I have seen to date. A real beginner's delight.

The second is the truly advanced tutorial, the Tutorial Flight #2, flying from O'Hare to JFK. You are a guest Captain of an American Airlines MD-11 PAX on a typical gray, rainy, bumpy, winter flight making a non-precision approach into a busy metro airport. This one assumes you are intimately familiar with the left seat of the MD-11 and intentionally makes you think like a captain flying a full load of passengers in crappy weather from Chicago to New York. Not much in the way of push this or turn that knob, more like when you get to this waypoint then follow the profile until you receive additional clearance. Loaded with specific flight procedures and good airmanship tips and hints, it gives you the impression it was prepared by those that have "been there, done that". This one is not for the beginner or faint of heart.

The two tutorials are very different in approach and delivery, but were prepared by the same person or team – Kudos to Markus Burkhard and his team at PMDG. How about a third one?

ARE WE EVER GOING TO FLY THIS THING?

Yes, let's start some detailed flight planning now. OK, Equipment check – Lufthansa Cargo MD-11F, flying a load of live lobster from Boston Logan (KBOS) to Frankfurt, Germany (EDDF). Seems like Aerosoft is putting on a high class bash to celebrate Finn completing the advanced upgrade for their AirbusX. (Just kidding)

We have the Aerosoft AES available at both departing and arriving airport along with add-on scenery for both. We have TOPCAT available for performance calculations and up-to-date Navigraph, charts and FMC data. We have the latest version of the Electronic Flight Bag for routes, map displays, SIDs, STARs, enroute maps, approaches, etc. We have automated Checklists and METAR weather reports. The EFB runs interference by presenting these weather reports in a form that is actually readable by sim pilots. We have completed our flight training at Angle of Attack and have a MD-11 type rating with the ink still wet.

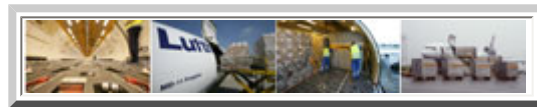
We have a virtual company credit card for fuel purchases and airport fees.

One approach to flight planning is to determine the expected arrival time or ETA and work backwards to find the expected departure time. By using our EFB we can check a few of the recent routes taken, equipment used, flight levels and flight times. Let's do that now.

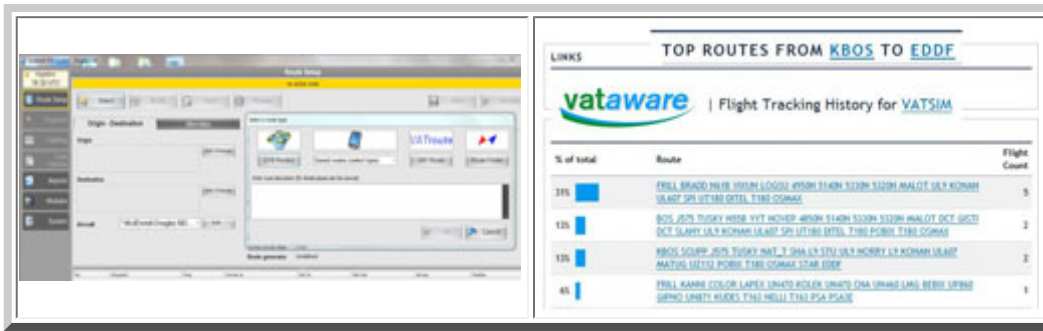
Oops, we just got pre-empted. The client would like the lobster to arrive (wheels down) between 7 and 8 pm local time, Frankfurt. Guess they want really fresh and tasty Maine lobster. I bet they have seafood delivery trucks waiting on the ramp and have invited the Customs officials to dinner.



We have several excellent choices for review of existing or recently flown routes between KBOS and EDDF. The list can be enlarged by simply changing the route origin to KDFW, KORD, or KMEM. Although the origin is different all these routes are almost directly over Boston so these additional routes could be easily adapted for our needs. Our online choices are VATroute, RouteFinder, FlightAware, and one of my favorites, VATAware. I used the CityPairs, then selected the most popular routes from the last 12 months based on percentage.



About a minute or so after typing in KBOS-EDDF in the CityPair boxes, then clicking GO, I am looking at a couple of colorful pie charts indicating that Lufthansa is the most prolific carrier flying the B744 for this route. Another click and I am looking at the 10 most popular routes in the last 12 months. A simple copy and paste into the EFB route box then adding the origin and destination and I am presented with a flyable flight plan. A few more steps to add a SID, STAR, and approach of my choice and the plan is complete. Something on the order of 5 minutes total time.

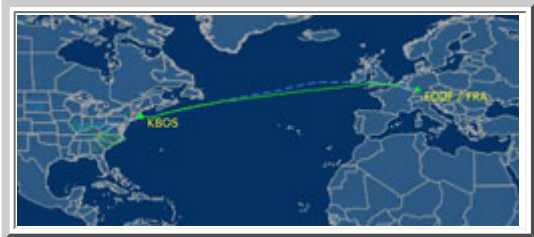


Here are some of the details while using the EFB standard features. First, I place the aircraft in the proper location - KBOS Cargo. If I threw a dart at the choices I might hit NW13. On the EFB airport chart, the circle is a buff or soft yellow color indicating Cargo. The nearest long runway is 15R and it just happens to be aligned with our departure heading. We will see if ATC and TOPCAT will accommodate a short taxi.

Visiting the various free websites searching for routes can be very entertaining in itself. I can spend hours at the Flight Aware site. I am constantly amazed at the breadth and depth of the captured data for each of those flights. These sites also have a great database of photos of these airplanes of interest.

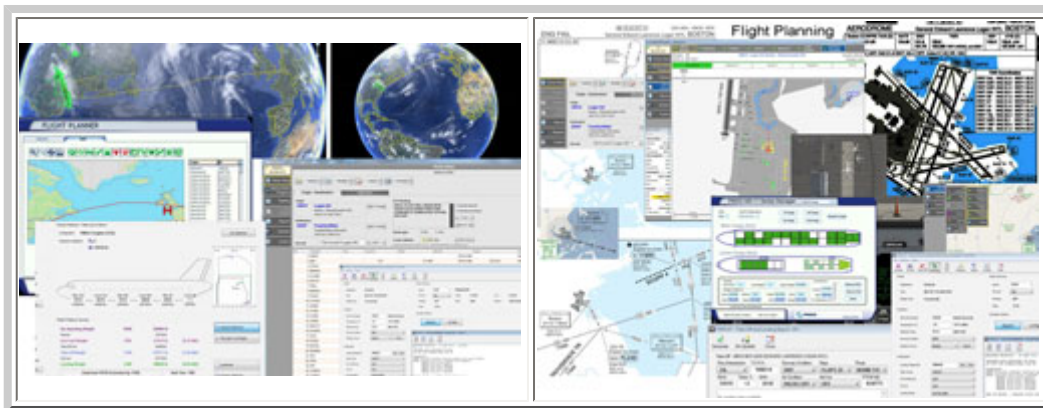
OK, NOW I HAVE A ROUTE

Now it is time to program the MCDU for the aircraft. I am going to start with the data in EFB and see how much I can transfer to the MD-11. For me, the least enjoyment may be the amount of time it takes to actually punch in the flight plan using the archaic one-line-at-a-time LineKey Left and Right method. I have been digging a little deeper into flight plan structures trying to see if *rte and *rt2 type flight plan files will be eagerly accepted by the PMDG MCDU. Seems it spits out the *rt2 quite rapidly. I can do a little editing in the EFT side and delete any NATS waypoints and that seems to please the MCDU instantly. My goal is to learn what will be accepted without change from the default FSX flight planner. EFB seems to understand that connection 100%.



Reviewing published flight data for the KBOS-EDDF route using MD-11 equipment flown in the last few months I find the average flight time to be a little more than 6 and one-half hours. So if I would like to pull into the Lufthansa Cargo unloading area around 8 PM local, I should plan on seeing 4 green gear lights in Boston at about 2 pm. AivlaSoft's Electronic Flight Bag has taken all the pain out of flight planning. This is really enjoyable. The team of Urs and Travis support EFB in the truest sense. Just give either one the slightest hint for an improvement or a secondary or even a tertiary method of doing a task and whoosh, done. . . please download the latest patch for your pleasure. Amazing guys these two.

HOW ABOUT SOME PLANNING NOW?





MD Flight LH01, you are cleared for takeoff, IFR, runway 15R, maintain runway heading, contact departure control on 133.0

Boston Tower, MD LH01, roger, cleared IFR on 15R, maintain runway heading, departure on 133.0, rolling. Good day.



Gear Up, X marks the spot. Boston has a spectacular city skyline and harbor area. Looks like a nice place for a tea party.



Lots of blue water



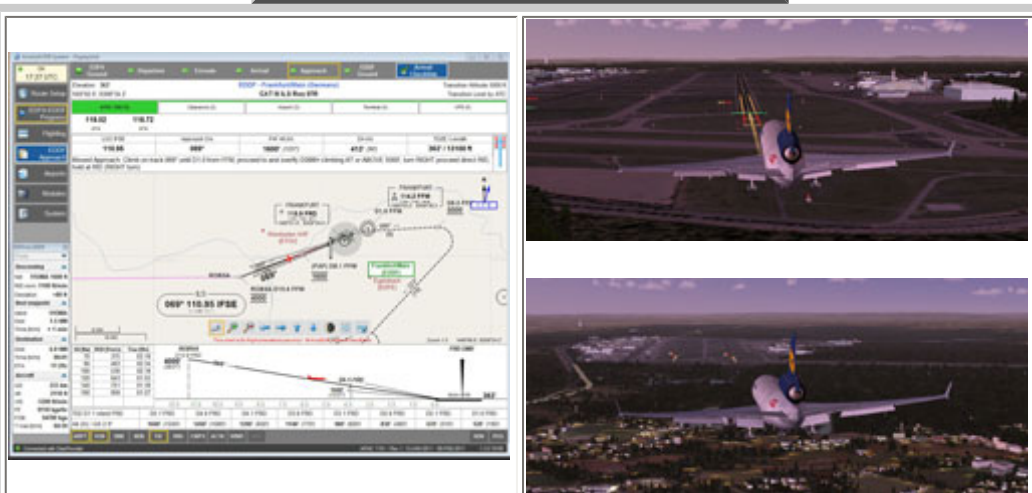
This looks like it's going to be one of those beautiful, good weather flights.



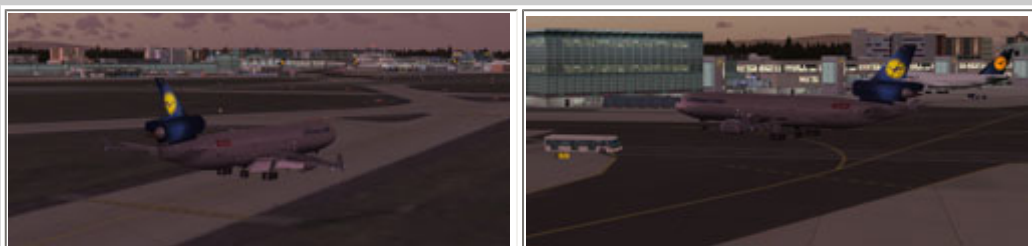
Approaching our first intersection. A slight left turn, then a couple of thousand miles of wide open water.



Here are some screenshots from FSX taken of Aerosoft's Mega Airport Frankfurt X. They chose to include a large portion of the autobahn, train tracks and stations, seasons, and do all this in a FPS friendly manner.

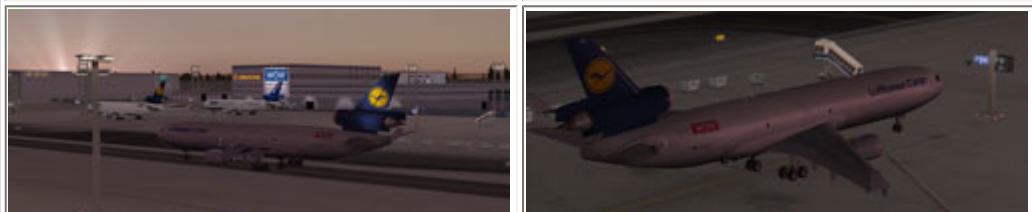


Everything right on the numbers. Start the water boiling, I have the lobsters.



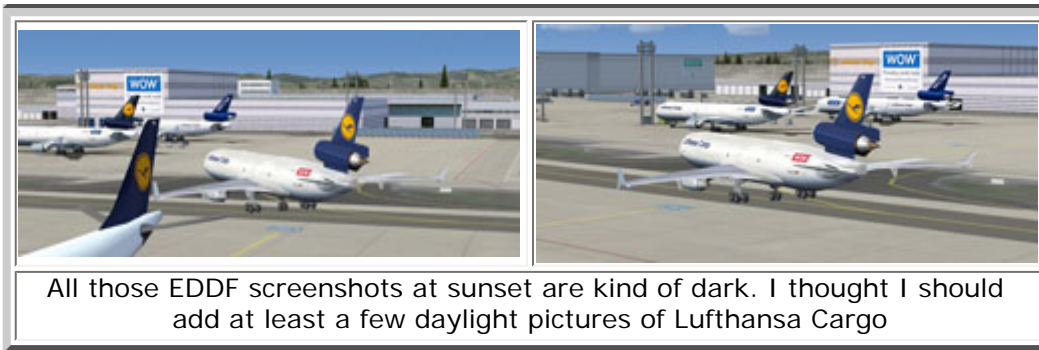
MD LH01 clear the active to the left, contact ground on 121.8. Frankfurt ground, MD LH01 clear 7R, taxi cargo please.

Watch for all that ground traffic. We don't want to get hit by a bus this close to home.



Hans, check out that sunset. I bet that is how they came up with the name "WOW".

Dispatch, CA has been put to sleep in 215. Gute Nacht.



All those EDDF screenshots at sunset are kind of dark. I thought I should add at least a few daylight pictures of Lufthansa Cargo



This is how the real team does it.



More photos of the real deal.



This is one gorgeous, proud bird. Thanks Lufthansa Cargo. It flies as good as it looks, thanks PMDG

Source: Deutsche Lufthansa AG, FRA CI/I, Photo Editing Department, Lufthansa Aviation Centre, Airportring

CONCLUSION

So what did I learn from the exercise?

I learned the enjoyment factor is increased exponentially with the use of quality add-ons to an already quality product. Each of the add-ons is used to support the others in this flight. My biggest surprise may be how much professionalism and enjoyment the TOPCAT program brings to the party. I didn't elaborate on it in the review, but, I spent most of an evening just doing what-ifs for the two airports. Increase the temperature a tad, add a little rain, change the wind a smidgeon, shift the load slightly, more fuel, less fuel, more flaps. TOPCAT puts out several quality tables and reports. Oh, and you can email them, print them, save them, etc. Now, my Vr, V1 and V2 speeds have some real meat in them. I even understand derated takeoffs now.

Which did I enjoy the most? Easy answer - Aivlasoft's Electronic Flight Bag. I don't think there is any going back, this one is a real keeper. If we ever create a Top Gun award or Best of the Best award, my vote would be for the EFB. This may be the number one add-on of all time as more simmers hear about it. If FSX is the steak, then EFB is the eggs, and nothing is better than Steak and Eggs. EFB is already a quality product, but the developer has an ear to the ground and a finger on the Enter key. It can only continue to get better and better.

Which could I not do without? Negative question. Answer - Angle of Attack PMDG MD-11F Flight Training videos. I don't have the patience to dig this stuff out of the voluminous flight manuals and I am just not a YouTube fan. I am quite sure that without the AOA training flights and practice approaches that Chris and Nick provided, my MD-11 wouldn't be used nearly as much as it will be now. This particular airplane was way ahead of the competition when designed. It could have been introduced yesterday and it would still be competitive in the market.

What about the airport scenery packages? Top notch. My favorite is the Mega Frankfurt and is now my home base in Europe. A lot of my flight plans will originate or be closed at EDDF - A perfect place to base your Airbus Jetliner or AirbusX. This should not be a slight to FlyTampa and Boston Logan because the version 3.2 is a tremendous improvement over the default scenery. KBOS will now be my domestic home base for airliner operations. I was a little disappointed with the AES support for freighters, but, I am eagerly looking forward to the upcoming release that adds more features for the Cargo carriers. AES has a steadily growing list of airports that will benefit from its use.

What about Navigraph? Navigraph is indispensable. With their AIRAC update cycles that covers your entire range of add-ons to keep all your SID's, STARs, airports and approaches up to date and so reasonably priced, how can you do without it? The fact that it supports AivlaSoft's Electronic Flight Bag is just a bonus. You have all the maps and charts of the entire world at your fingertips. A second monitor should be on a lot of wish lists.

Now the McPhat Studio's HD repaints. They are just in a class by themselves. There are a lot of quality free repaints out there, but, once you start flying with the McPhat Studio HD repaints, you tend to watch for the next newsletter announcing the newest release. You know you have something special when the wife or friend walks in, looks over your shoulder and says, "Wow, what a gorgeous airplane, how do they do the paint to make it look so real?" I'm not sure how they do it, I'm just glad they continue to do it.

I'm not totally sure how Capt. Mike Ray's *Airplane Stuff* book got into the mix, but, I'm sure glad it did. If you have an interest in understanding the modern airliner's glass cockpit or details about TOGA or dog fighting or making quality screenshots – then this is the book for you. It is my PDR, Pilot's Desk Reference. I find it amazing how much time I spend waiting on downloads or installs, etc. That downtime can be put to productive use if you have this book handy.

RECOMMENDATIONS:

I highly recommend everyone give AivlaSoft's Electronic Flight Bag a 30 day free trial and see if you are as pleased as I am. I predict this will receive all the honors for a long time to come. In my book, it is already the Best of the Best, a true overachiever. This Bag has it all and is a great compliment to the Navigraph charts and maps. New features seem to be added constantly. I only noticed the night lighting after I ran out of room, you can check it out at their website. There are many features that I totally failed to mention but are worthy of a full review.

If you have delayed opening a Navigraph account for some reason, I recommend you revisit that decision. I think it is almost a requirement for using FSX if you need maps, charts, approach plates, and FMS AIRAC updates for your airliners or corporate Jets.

If you have any of the major heavy aircraft then you are really depriving yourself of some nice supporting calculations if you don't get TOPCAT. It is a real sleeper. These calculations and reports add a realistic factor to the simulation of flying airliners. Very professional feel to this package. The list of support aircraft is also growing.

Should you desire to learn how to really fly one of these airliners, check out the Angle of Attack video training. The downloadable videos are absolutely top notch and can run full screen with a decent graphics card. The learning curve is almost vertical. Most systems, all approaches, aborts, emergencies are covered. As a bonus, you get all the supporting files and charts to recreate the flights with you at the controls and 3 full featured training flights in the MD-11.

Go to the McPhat Studios web site and review the HD screenshots of your favorite liveries. Check out the section where you can compare their HD work to the norm. They are head and shoulders above anything else out there. You won't be disappointed with any of their repaint packages.

Read a good book lately? Like airplanes? Wishing you could master the airliner glass cockpit? Checkout Captain Mike Ray's latest release – *Airplane Stuff*. Extras are details on capturing stunning screenshots, flying the props, and a tutorial on the FSX Map program. My favorite section is the ultimate dogfight - Boeing vs Airbus. 160 full sized pages. Color. Paperback.

If you are considering adding airport scenery to your system, you can't go wrong with the Aerosoft Mega Frankfurt package. This is my new home airport. Highly recommended. If you are wishing to stay on the domestic side of the pond, then checkout the Aerosoft FlyTampa Boston Logan on DVD.

Photo credits.

Kevin Stokes, Md-eleven.net website for MD-11 photos on pages 1, 2, 3 other than the Lufstansa AG Photos.. Thanks to Kevin for reviewing my brief history of the MD-11. Photos of Lufthansa Cargo equipment, personnel or operations – Source Deutsche Lufthansa AG, FRA CI/I, Photo Editing Department, Lufthansa Aviation Center, Airporting', 60546 Frankfurt / Main

Screenshot credits.

Screenshot on page 1, DC-10 from the Just Flight DC-10 Collection by author. If any of the developers had screenshots that I could use posted on their website I used them as my first choice. All other screenshots were made by the author on his PC for this flight.. Most retail graphic clips taken from online advertising sources.. Google Earth for graphic flight plan.. FlightAware screen capture for Ocean route.

Printing

If you wish to print this review or read it offline at your leisure, right click on the link below, and select "save as"

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