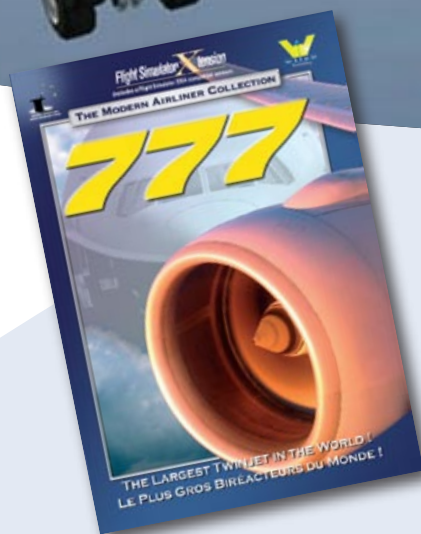




# WILCO 777 Review

BY DAVID ISON

**W**hile Boeing's 777 had its skeptics when it was first conceived, the aircraft has become an economical long range option for airlines worldwide. The 777-200 Extended Range (ER) model can easily fly up to 440 people (one class configuration) at Mach 0.84 over 7,000 miles. Some possible options for flight sim missions include London to Los Angeles or Tokyo to Sydney or even Chicago to Beijing. While MS flight sim users have had access to a generic 777 for some time now, nothing beats a good add-on complete with unique sounds, functional avionics and loads of switches and buttons to play with. Wilco Publishing has answered the call for such equipment with their *Modern Airliner Collection 777*, developed by the FeelThere group.



## Installation

Installation of the 777 add-on software is effortless. Simply place the disc into the appropriate drive and the software does the rest. First, the program will ask you if you would like to install the aircraft to FS2004 or FSX, as both versions are supplied. I installed and test flew the software in both versions without any trouble. Next, you're asked to put in the key code to prove you bought the software. From there, the 777 self extracts into the correct location for your simulation. The last step opens an internet browser which automatically takes you to a livery installation page. Simply select the liveries you want and they also self extract. It doesn't get any easier than this!

## Visual Inspection

Immediately after the installation I wanted to check out the exterior of the various 777 liveries. In general, the exterior detailing is very realistic. All of the flight controls move accurately and linearly with control inputs. The aircraft has inboard and outboard ailerons that work just like on the real aircraft as well as the spoiler deflection

## REVIEW

that goes along with large roll inputs. The horizontal stabilizer trim (through elevator trim MSFS inputs) can be seen while it actuates through its range of motion. The neatest thing noticeable was the tremendous detail of the piping and wiring underneath the spoilers when they are deployed. Additionally, just like on a real transport aircraft, the spoilers do not all raise at the same rate nor do they all extend to the same height.

The amount of minutiae associated with the landing gear is impressive. The tread of the tires can clearly be seen as well as the brake lines, the various struts, and hydraulic cylinders on the main gear trusses. One thing that is a little off in terms of the landing gear is that in some situations, the tires look “flat,” though this does not affect how the aircraft handles. This, of course, can be corrected by tweaking some sim settings for those who are truly concerned.

In the cockpit, you can see two pilots in uniform as well as some minor cockpit features. Upon opening the front entrance of the aircraft, there are several fine appointments that are noticeable. Inside you can see the bulkhead of the first seating area, a flight attendant seat in its stowed position as well as carpet that matches the aircraft livery.

The engine fans convincingly react to engine acceleration including the visual illusion that the fan reverses direction as it speeds up. Even the thrust reverser cascading doors (those that move aft) move when reverse thrust is selected. Unfortunately, not many flight sim add-on designers (including FeelThere) have figured out that thrust reverser systems fully deploy before allowing reverse thrust, i.e. the cascading door moves all the way to the open position regardless of the amount of reverse thrust requested. All exterior sounds are decent, though not quite the same as a real 777. It's missing that pseudo-grinding noise during engine spool-up.

### The Tech Side of Things...

Next, I wanted to check out the ground and flight handling characteristics. Although I have never flown the 777, I have quite some time at the helm of an L1011. I have to admit that the perspective from Wilco's 777 cockpit was in line with a large transport. The taxiing and maneuverability of the 777 appears to be a good representation of the real thing. Furthermore, the classic “taxi beyond the centerline and then turn” necessary on widebody aircraft works perfectly in this version of the 777. Handling during the takeoff roll was nominal for this type of aircraft.

At VR the aircraft moved slowly through its rotation, much like a heavily loaded transport should. Once airborne, though, the aircraft appeared to have a little too much performance, requiring 20+ degrees nose up to prevent the speed from escalating rapidly, even with reduced thrust settings. Once up and away from the airport, the aircraft bank and pitch characteristics are similar to other large aircraft. The perspective on landing is spot on for a big airplane, particularly if viewed from the FSX virtual cockpit. Landing is fairly easy with the help of the radio/radar altimeter voice callouts as you descend towards the runway. Easing back on the yoke between the 50 and 30 foot call outs while slowly reducing the thrust to idle yielded a nice landing. With spoilers deployed, full reverse thrust and brake actuation, deceleration seemed to be what one would expect for an airplane this size. Even the nose gear strut moves up and down, as does the cockpit perspective, as you decelerate or when you tap the brakes.







**BRITISH AIRWAYS 777**



**A WORK OF FUNCTIONAL ART!**



**LOOK OUT IT'S COMING RIGHT AT US!**



**I'LL TAKE ONE AUSTRIAN LIVERY THANKS**



**THE DELTA LIVERY**



**SLEEK LINES OF THE 777**



**GEAR DOWN... AND WE'RE READY TO LAND...**

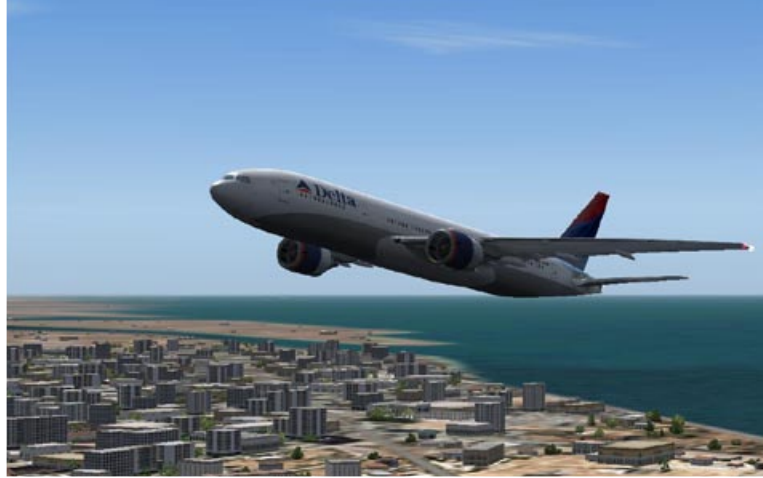


**HOW DO THEY EXPECT ME TO LAND WITH NO RUNWAY IN THE SCREENSHOT?**

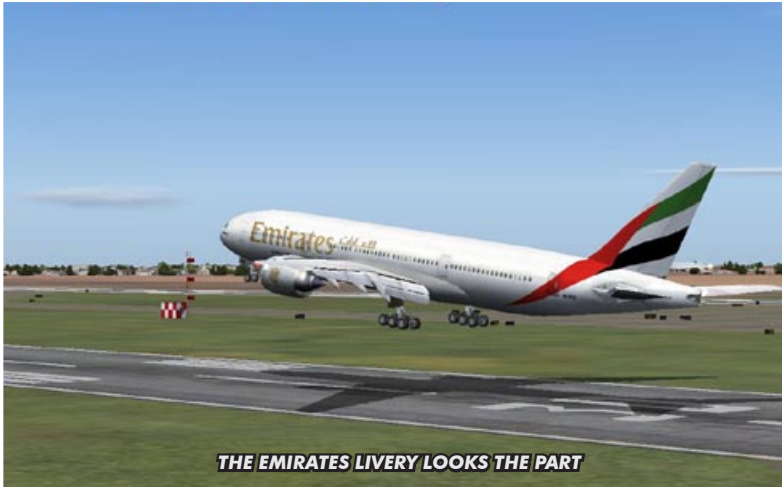




AHH! THAT'S BETTER!



SOMETHING OLD, SOMETHING NEW, SOMETHING BORROWED,  
KLM BLUE!



THE EMIRATES LIVERY LOOKS THE PART



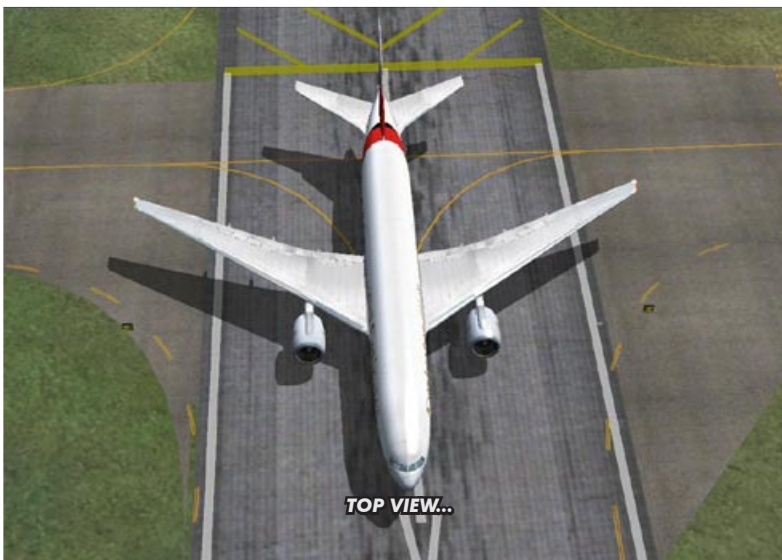
WHY DOES THAT SHADOW ALWAYS FOLLOW ME?



SIDE PROFILE



REVERSE THURST... PLEASE



TOP VIEW...



In the cockpit, the default idle engine speed sound isn't quite the same as being in the 777, but when the engines begin to change thrust setting it gets better. Taking a look around, it is quickly apparent that FeelThere did their homework when replicating the appearance of a 777 cockpit. I've been in several 777 cockpits and simulators and even compared the sim's cockpit to actual 777 pictures and Wilco's version comes pretty close. On the rear part of the center pedestal, pilots will find their radios and trim which all work. Unfortunately not much else does, which is too bad, as it is nice to be able to be able to trigger things like the engine fire handles, if need be. There is an extra CDU (FMC control) in the center of this back pedestal area and it works just like the "main" CDU.

On the engine control pedestal, the primary items like the thrust levers, fuel cutoff switches, spoilers and stabilizer trim all work. Some minor items in the surrounding area are just for looks. The overhead panel is essentially a photo-real representation. Alas, only about half of the switches and knobs on the overhead work, which will disappoint hardcore realists. I was a little surprised that you cannot control wing anti-ice, which can be important to have at times (at least in the real world!) Also, when carrying as much fuel as is necessary for long trips, being able to dump fuel is pretty much a mandatory requirement, though FeelThere omitted this option.

## The Hardware...

As far as the instrumentation goes, the Primary Flight Display (PFD) basically works like a real Boeing PFD. The Engine Indication and Crew Alerting System (EICAS) shows a variety of messages on the center screen, just like in the real aircraft. Oddly, the primary EICAS page does not show Engine Pressure Ratio (EPR) even though the Wilco manual refers to it. I contacted the developers about this and they responded that all of their virtual 777 aircraft have GE engines and therefore only show N1. Thus sim drivers are left with N1 for thrust settings in addition to the other engine instruments on the secondary EICAS page. One nice feature of all the cockpit screens is that they can be enlarged by clicking on them for a more detailed view. This is especially helpful when trying to read EICAS messages.

There are three digital standby instruments that are located in the middle of the panel which look just like those on a real 777. I noticed that, at times, the indications on the standby gauges lagged what the other instruments showed, but there is a way to tweak the instrument displays in the aircraft set up utility that can help alleviate this issue. Some other things that are worth exploring are the various available system status pages. Simply click on the appropriate button on the far right of the glareshield and you can check out a variety of aircraft systems. Moreover, you can exhibit the aircraft checklists on a screen for in-flight use.

The Wilco 777 boasts a wide assortment of avionics. The Traffic Collision Avoidance System shows nearby aircraft and their relation to your 777 simply by turning the aircraft transponder to TA/RA mode. While I did notice local traffic changing to the correct color based on the level of conflict with the 777 (yellow when close, red when even closer), no voice warnings or evasion commands were given. So, technically, the TCAS is not quite 100% functional. The Wilco 777 also has a Ground Proximity Warning System (GPWS) which gives a variety of warnings when the aircraft is doing things it should not. Regrettably, this

system does not supply full functionality either. Several warnings are missing and/or not given when needed. The aircraft also has weather radar. This is selected on the display control panel on the glareshield. The unit will go through a test function for a few seconds before beginning to detect weather. I have to say that the radar function does not produce a lifelike image, but it does make it pretty obvious where you should not fly.

Probably one of the most important pieces of avionics in all big aircraft is their Flight Management Control System, which is operated through the CDU. The Wilco 777 CDU is accessed on the rear center pedestal or in its own window through a button on the bottom of the cockpit screen. All of the important buttons work and the functions associated with them appear to perform like a Boeing CDU should. Overall, the Wilco CDU is pretty easy to program particularly with the help of the supplied manual. However, this is where the utility of this bit of avionics ends.

I went through a normal preflight planning sequence using the CDU. Everything seemed to go well until I went to select Standard Instrument Departures (SIDs) and Standard Terminal Arrival Routes (STARs). I could pick the SID and STAR I wanted, but the CDU would not allow me to choose the transition (sub-route associated with SIDs and STARs). Oddly, the transitions were "available," i.e. shown on the screen, but were not selectable. Once airborne, I made some changes to the route of flight and the CDU got utterly confused. I have noticed this kind of problem with at least one other FeelThere product, so perhaps they need to do some revamping of the FMS/FMC software.

## But wait... there's more!

The product also comes with some additional, very helpful features. First and foremost is the paper manual that is in the box with the CD. It goes through many of the basics necessary to fly the 777. Although not all of the information in the book matches what you see on the sim, users will find the 777 easy to fly with the assistance of manual. This guide and operating checklists are supplied in PDF form on the CD.

777 drivers will also enjoy the 15 highly detailed liveries available for download including big names like British Airways, Delta, Emirates and Air New Zealand. Two other fixtures that are extremely helpful in setting up the aircraft for flight are installed along with the add-on. One is a fuel planner which takes the guess work out of determining how much fuel to put on board. For example, it will help you figure out how much "go juice" you'll need to get from New Delhi to London. Lastly, there is a load planner which allows you to pick how much cargo you're going to carry and where it is located in the baggage pits. In addition, the number of passengers and their distribution in the cabin can be set using this utility.

## Debrief...

By and large, the Wilco 777 is a neat add-on with tremendous details and excellent aircraft handling characteristics. The views from the aircraft accurately give the perception of being in a big bird cockpit. The majority of the important switches, buttons, screens and systems are operational by the sim pilot. While there are some things that do not quite work as they should, the Wilco 777 provides flight sim users with an upgraded heavy Boeing experience which will allow them to provide their virtual passengers access to much of the world. RRP - US\$39.95. ➔