

Test of

Boeing CH-47D Chinook

Produced by Virtavia

The Boeing CH-47 Chinook is a twin engine, tandem rotor, heavy-lift helicopter originally built by Boeing Vertol back in the early 1960's (today Boeing Rotorcraft Systems). It is primarily used by the military but there are also manufactured civilian versions and is sold to 16 nations.

The primary military roles include troop movement, artillery emplacement and battlefield resupply. It has a huge internal cargo area, a wide loading ramp and three external cargo hooks which can carry up to 26,000 pounds of external payload as containers, bulldozers or e.g. jeeps.

Specs:

- **Produced by** *Boeing Rotorcraft Systems*
- **First flight** *September 21st 1961*
- **Introduction** *1962*
- **Role** *Transport helicopter*
- **Status** *In production and active service*
- **Built** *1,179+*
- **Unit costs** *Average US\$ 35 million*
- **Primary users**
 - *United States Army*
 - *Japan Ground Self Defence Force*
 - *Royal Netherlands Air Force*
 - *Royal Air Force*



I got this add-on directly from Virtavia, and as usual the download went perfectly without any issues. The installation was also quick and easy and without any issues. Just use the installation wizard and that will do the rest.

When I had installed the CH-47 I opened FSX to view the helicopter and to see if everything was placed correctly, and of course it was. I filtered to the Virtavia folder and here the helicopter was perfectly placed with 3 liveries which actually are 3 versions. You get the US Army version where Virtavia has also included 2 soldiers in the back. These soldiers are very detailed and to be honest some

of the very best that I have ever seen in Flightsim. I have previously seen other modeled people in some aircrafts, but not near this level of detail. The second model is the RAF version the HC-1B which actually is a CH-47C model, and the third version is the Australian Army Aviation Corps version. Included in this package is also a manual which I found to be very useful.

After checking the installation I started an external view-around of the helicopter. This is a very well made helicopter that looks completely like the real Chinook. You have a model filled with high quality textures and a lot of details which I very much appreciate because that really contributes to an added realism. The finish is also very good and as far as I could see, the accuracy of the many details are very high – I compared the model to pictures of real Chinook's on the internet and the match was perfect.

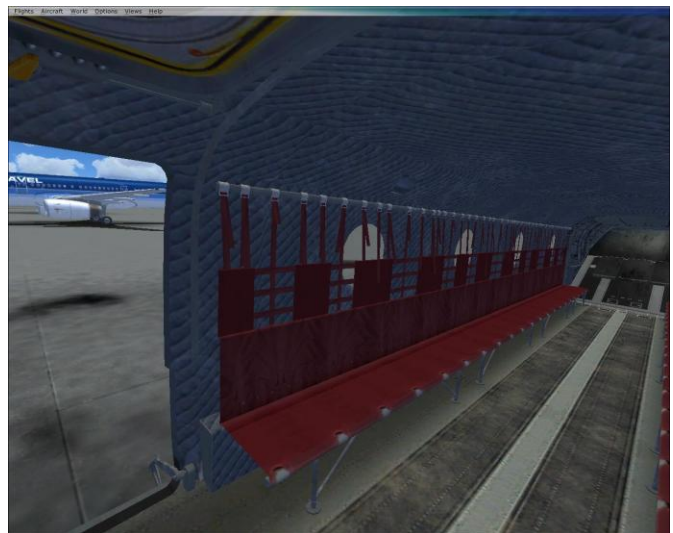
You will also see several animations on the external part of the helicopter as e.g. the wheels moving and the suspension on the wheels when touching down. Also you have door and cargo ramp animations as well as the twin rotors that also bend downward when the rotors are at a standstill. Indeed a very nice detail! I have seen and tried out quite a lot of Chinook's as freeware, and there is no question – This one is much better and you will quickly notice that you here have a quality product.



After the external view-around I went inside the helicopter, and here I found both a nice virtual cargo/troop area and a very nice virtual cockpit. The cargo/troop area is well made with good textures and details - overall better than average. Hereafter I went into the cockpit and found a superb virtual cockpit. This was the old style cockpit with analogue instruments which fits this helicopter perfectly

because it is an old helicopter. Virtavia has also built the virtual cockpit to look old regarding the frames etc and I just love that!

In the virtual cockpit you will also find a lot of animations like controls, instruments and clickable buttons and I have to say that sitting in this virtual cockpit really gave me a superb feeling of actually being in a real Chinook cockpit. I have never tried to be in a real Chinook cockpit, but when I compared this virtual cockpit to pictures of the real cockpit, I have to say Wow – this is really well made and I can see that Virtavia has put in a lot of effort to create this virtual cockpit as real as possible, and they have done a very well job. There is a great depth in the virtual cockpit, high quality textures are used and the finish here is super.



I continued my test and now concentrated on the sound set. This is a sound set which I think was made especially for this helicopter and it is indeed very good. You have a deep chopper sound and actual you have it in stereo because you on this helicopter have two rotors instead on one. There is no question that when you hear this sound, you know that this is a huge helicopter coming towards you. I almost got the chills when I tested this sound set on the helicopter at fly-by view mode.

I tested the sound both internally and externally and also from a distance, and this is really a super cool sound set you get with this model. I again compared it to sound files that I found on youtube, and the resemblance was outstanding. I tested the sound in both ordinary stereo but also in 7.1 surround sound and both worked perfect. I have previously tested other add-ons from other companies, where the 7.1 created a sound issue, but that was not the case with this Chinook – it worked perfectly.

Overall this add-on is of a very high quality with many details and with a superb finish. It is very easy to see that Virtavia really has put in a lot of time and effort to make it as real as possible. Even though this helicopter has so many details and high quality textures, it didn't have any impact on my frames, and that is very positive.



My first test flight was from the Princess Juliana Airport (TNCM) on the island of St. Maarten in the Caribbean. Here I wanted to test ground handling, take-off, general flight dynamics and landings in the Chinook. I started up the Chinook and checked the controls, called the tower and got clearance to taxi to active runway. To taxi the Chinook is easy – just move your flight controls forward to start taxi

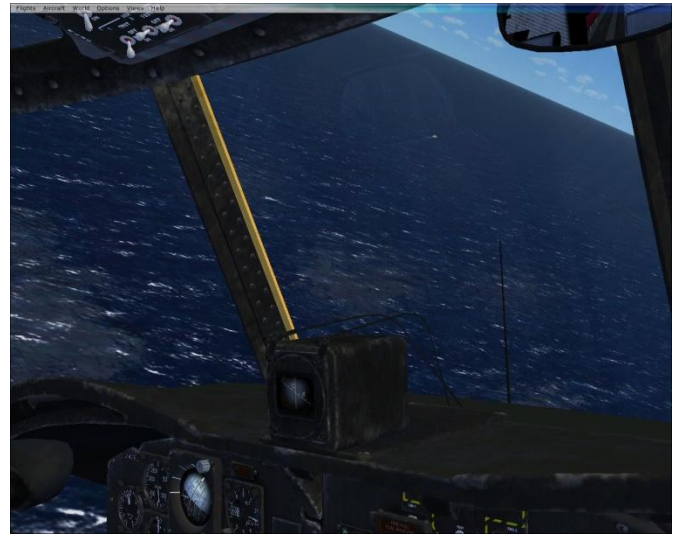
and then you can either control the helicopter by using the “rudder” function with your pedals or the “aileron” function using your stick/yoke.

When I got to the runway I got take-off clearance from the tower. I slowly applied throttle and lifted this heavy helicopter off the ground. I started a hover at 10’ and turned the helicopter with the rudder function, 360 degrees over the runway just to get a feeling of the sensitivity of the pedals. Hereafter I gained a little airspeed and flew from the one end of the runway to the other, this was to get the feeling of the sensitivity of the stick and also to get a feeling of how quickly I could get my airspeed down to 0 knots. I also flew a little backwards just to try it and I did these cruises over the runway for 10 or 15 minutes, and when I felt comfortable with the Chinook, I applied full throttle and lowered the nose to gain airspeed and off I went.

I now toured the island testing the helicopter in both slow and low angle turns – going to quick and high angle turns and in general just testing different ways of flying the helicopter. The flight dynamics are quite accurate in regards to what I had expected. The helicopter reacts very quickly on my control inputs and is actually not that difficult to fly. You do need to understand that this is a huge helicopter and it does have limits, but when you begin to understand how this bird flies and what it can do and not do, you will love flying it.

I tested the landings at the second airport on St. Maarten – Grand Case Airport (TFFG). To land a Chinook can on the other hand be a little tricky, but practice makes perfect, and this is also the case with the Chinook. When you have landed this helicopter a few times you quite quickly get the feeling of how to do it – I would say that you should be able to land the helicopter on a runway within just a few tries at the beginning, but to make a spot landing with this helicopter, will acquire a lot of practice, and you need to be very patient in the beginning.





My second test flight was from the US Airfield Bagram (OAIX) near Kabul in Afghanistan. This flight was to simulate a real mission of flying troops to a specific destination “under the radar” – I setup the flight to be an early morning where the weather conditions were calm winds and light fog. Here I didn’t taxi to the runway, but took off just outside the hangar. I sat the cruise altitude to be 150’ above ground level with maximum airspeed and flew the helicopter on manual the whole time. This was very much fun to fly this big bird at such a low level where the terrain is so up and down. This kind of flying does contribute to get familiar to the helicopter very fast – you learn only to use small corrections because the helicopter is so sensitive but after flying like this for about 15 minutes, you are totally tuned in on the helicopter.

When arriving to the destination in the middle of no-where I opened the cargo ramp and sat the helicopter smoothly but quickly on the ground, unloaded all troops and quickly took off again and headed back to base. This was a flight that could have been real, and this was indeed very much fun. After spending more and more time in this helicopter I love it more and more.



I decided to have a third test flight to test the flight dynamics of the helicopter in various weather conditions, which is something I try for almost all add-ons. Here I used the Airfield at Alice Springs (YBAS) in Australia. I sat up weather conditions as fog, thunderstorm, gray and rainy etc and spiced it all up with various winds with gusting of 15-30 knots coming as +/- 45 degrees and up to full cross wind.

I spend about one whole hour testing the helicopter under these conditions, and even though it's a big helicopter, it is actually quite sensitive towards foul weather. It was indeed challenging but also very much fun – but to land the Chinook in e.g. a thunderstorm is difficult. One might say that to land a helicopter shouldn't be a problem because you don't need to worry about the helicopter stalling as in regular aircrafts, and that is partly correct, but you instead have other issues that are more difficult in the helicopter than a regular aircraft.

It did take me a lot of tries to land the helicopter in the thunderstorm with severe cross wind settings, but at the end I learned to land it quite okay on the runway. I don't think I'll ever be able to make a spot landing in these conditions, but hey – I am not a professional Chinook pilot.

This helicopter can be flown by simmers on all levels. If you are not familiar with helicopters, then I would suggest you wait, and get some practice in the Robinson R22 or the Bell 206B, but if you are already familiar with the EH-101 Merlin, then no problem!

Overall you here have a helicopter of very high quality and with many details. A superb sound set that matches the helicopter perfectly and a model where you get both a virtual cockpit and a virtual cargo/troop area with good textures and a nice finish. I rate this helicopter with 4/5 stars because I really find it very good. Thank you Virtavia for providing the flightsim community with this great add-on which I think is the best CH-47 Chinook add-on available today.



Rays Aviation



