

Test of

## Bell AH-1Z Viper

Produced by Area-51 Simulations

The Bell AH-1Z is a twin engine, two crew attack helicopter developed by Bell Helicopters in the late 1990s and in the beginning of the 00s. The helicopter is developed for the United States Marine Corps and got the nickname Viper.

The Viper is based on the elder AH-1W Super Cobra and features a four bladed bearing less composite main rotor system, upgraded transmission and a new targeting sighting system. The Viper is a part of the H-1 upgrade program and is also called the Zulu Cobra in reference to its variant letter.

### Specs:

- **Produced by** *Bell Helicopters*
- **First flight** *December 8<sup>th</sup> 2000*
- **Introduction** *September 2010*
- **Role** *Attack helicopter*
- **Status** *In active service and production*
- **Built** *28+*
- **Unit cost** *US\$ 31 million*
- **Primary user** *United States Marine Corps*



I received this add-on directly from Area-51 Simulations and the download went perfectly and without any problems. The connection to the download server is really good and the file was downloaded in no time.

The installation was also quick and easy – I just had to apply the installation wizard, which is very user friendly, and after just a few second, the complete helicopter ad-on was installed.

After installation I opened the FSX folder and checked if the file was installed as I wanted it to – and of course it was, so I now opened FSX and went into my virtual hangar. Here I found the helicopter perfectly placed together with other add-ons that I have from Area-51 simulations.

I started my test by taking a walk around the outside of the helicopter. The model is very well made with various animations and details. The textures are good quality and the finish is done with precision. The lighting is okay and the model features various lights that are placed nicely around the helicopter. I checked the lights against pictures of the real Viper and it looks that the lights are all placed perfectly. The same goes for the various details that Area-51 Simulations has put into this helicopter.

The model features animations such as main rotor, tail rotor, canopy and various smaller detailed animations. In general this model is really very well made with lots of special details that characterize this specific helicopter.



After the outside walk around I went inside the helicopter and here I found both a 2D cockpit and a virtual cockpit. The 2D cockpit is fair with good quality gauges but a limited amount of animated buttons and switches.

The virtual cockpit features both a front (gunners) cockpit and a rear (pilots) cockpit and they are both well made with various animations, good textures quality, very nice depth and a really nice finish around all edges. However there are also here a limited variation of animated buttons and switches, which I would have preferred to gain more realism.

The included sound set is good and fits the model quite nicely, but is a lot different than the regular AH-1S model – this probably due to that this AH-1Z features a four bladed rotor instead of the AH-1Ss two bladed rotor, so I would expect it to be different. I tested the sound set in both stereo and 7.1 surround sound and both worked perfectly.

The flight dynamics are very interesting and I found that the Viper features a very sensitive “rudder” function, and actually reacts in general very quickly on all controls - This I did expect since this is an attack helicopter.

I didn't find it difficult to handle the helicopter when taxiing (flying low and slow) and when flying at various altitudes with various speeds. The helicopter was extremely steady and reacted quickly on my control inputs and was quite fun to fly.

The helicopter can turn 180 degrees in no time even though I was actually flying close to maximum indicated airspeed (IAS). The general handling was very realistic and the engines and the four bladed rotor provide more than enough lift, so you will have no problems climbing fast or hovering with low rpms.



I tested the helicopter on various flight including missions where I flew fast and low down between the trees. This was very exhilarating and it got my adrenalin pumping, but since the helicopter has such an overflow of lift and power combined with quick reactions on the controls, just makes these maneuvers and this way of flying, quite easy and very much fun.

I found the Viper to be very realistic but I had hoped for a more detailed virtual cockpit that would include additional animated buttons and switches, and due to the lack of that, the general realistic atmosphere inside the virtual cockpit is not perfect.

This helicopter I believe can be flown by simmers on all levels – if you are familiar with the B206 then this helicopter will be quite easy to learn to fly.

Included in this model is a lot of additional selective views and this is a very good part of this helicopter add-on – these views can all be selected from the top bar menu and are really well set. This enables the simmer to experience this helicopter ever more and I liked it very much.

This add-on is in general a very good quality add-on that features a very detailed exterior model, covered with good quality textures and has a great finish. Very precise placed lights that are all of fair quality with a clean and bright shine. You also get both a 2D and a double virtual cockpit that both are good with a really good depth in the virtual cockpits, and made with fair quality textures and a nice finish. However I would have liked to see more animations within the cockpits as more clickable buttons, switches and systems but overall you here have a good quality add-on.

I rate this add-on 3/5-stars and thank Area-51 Simulations for contributing to the flightsim community with this very special add-on. I am not sure that I have seen this Viper to flightsim before, so it was really a nice to get to experience it

Rays Aviation



## Specifications (AH-1Z)

### General characteristics

- Crew: 2: pilot, co-pilot/gunner (CPG)
- Capacity: 6,661 lb (3,021 kg)
- Length: 58 ft 3 in (17.8 m)
- Rotor diameter: 48 ft (14.6 m)
- Height: 14 ft 4 in (4.37 m)
- Disc area: 1,808 ft<sup>2</sup> (168.0 m<sup>2</sup>)
- Empty weight: 12,300 lb (5,580 kg)
- Useful load: 5,764 lb (2,620 kg)
- MTOW: 18,500 lb (8,390 kg)
- Power plant: 2 × General Electric T700-GE-401C turboshaft, 1,800 shp (1,340 kW) each
- Rotor systems: 4 blades on main rotor, 4 blades on tail rotor

### Performance

- Never exceed speed: 222 kts (255 mph, 411 km/h) in a dive
- Cruise speed: 160 kn (184 mph, 296 km/h)
- Range: 370 nmi (426 mi, 685 km)
- Combat radius: 125 nmi (144 mi, 231 km) with 2,500 lb (1,130 kg) payload
- Service Ceiling: 20,000+ ft (6,100+ m)
- Rate of climb: 2,790 ft/min (14.2 m/s)