Simulation > Hardware in-the-loop

VECTOR-HIL Simulator

The VECTOR-HIL is the most advanced training simulator developed by UAV Navigation.

Key Features:

- Test VECTOR in real flight configuration
- Realistic training environment for UAV operators
- Realistic simulation of sensor failures
- Platform customizable, 3D model view
- Simulate adverse weather conditions
- Naval operations

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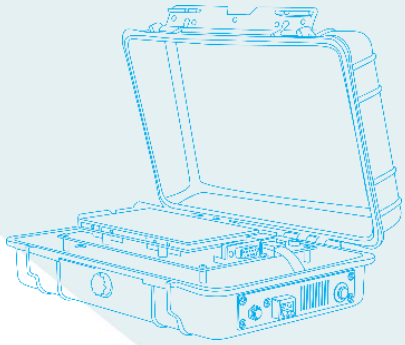
Functions:

- **Display the 3D platform** and environment on Flight Gear.
- **Emulate the aircraft dynamics** based on a complex dynamic and parameterized model.
- **Emulate the behaviour of an estimator suite (AHRS).**
- **Emulate different payload and sensors** such as: Laser Altimeter, Weight on wheels (WOW), RPM sensor etc…
- Read the PWM output from the AP to emulate the servo actuator in each control surface. Also, it is possible to simulate sensor failure, noise, disturbances and servo malfunction.
- **Perform complete Pre-flight procedures.**



VECTOR-HIL - Standard Logic Set

Technical Specs:

ELECTRICAL AND I/O	
Voltage Supply	9 to 36 Volts DC.
Power Consumption	6W
Power Connector	Female 2.5 mm barrel jack (positive polarity)
System Connector	Ethernet RJ45
MECHANICAL / ENVIRONMENTAL	
Size (mm, L x W x H)	250 x 170 x 90
Weight	1300 g
Temperature range	-40ºC to + 60ºC

Features	SIL	HIL
GCS software training tool	✓	✓
Simulation fidelity	Logic Level	Generic / Custom
Advanced and emergency procedure simulation	Basic	Advanced
Physical Aircraft Model	Generic	Custom
FlightGear interface	Basic	Advanced
Instructor Position	-	✓
Sea operations	-	✓
Customization	-	✓
Iron Bird Integration	-	✓
GCS software training tool		✓

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