# Report Generated by Test Manager

**Title:** **Branch: 28-hexarotor-UTs-optimWIP**
**Author:** **Previous Commit Hash: 4c9e050a9e4fd2 297bc758cb25733d91e20464e6**
**Date:** **19-Oct-2025 14:14:40**

**Test Environment**

Platform:   PCWIN64
MATLAB:     (R2024a)

## Summary

| Name | Outcome | Duration (Seconds) |
|---|---|---|
| Results: 2025-Oct-19 14:12:17 | 16 ✅ | 140.848 |
| F16 | 9 ✅ | 130.101 |
| Vehicle Tests | 9 ✅ | 130.101 |
| actuators | ✅ | 3.269 |
| Iteration1 | ✅ | 3.269 |
| aero | ✅ | 2.106 |
| Iteration1 | ✅ | 2.106 |
| ground contact | ✅ | 1.303 |
| inertial dynamics | ✅ | 1.478 |
| Iteration1 | ✅ | 1.478 |
| vehicle | ✅ | 8.086 |
| Iteration1 | ✅ | 8.087 |
| engine | ✅ | 16.351 |
| addFM | ✅ | 0.882 |
| Iteration1 | ✅ | 0.881 |
| gravity | ✅ | 0.823 |
| FullSIL | ✅ | 94.07 |
| sensors | 4 ✅ | 4.794 |
| Sensor Tests | 4 ✅ | 4.794 |
| ins | ✅ | 1.12 |
| Iteration1 | ✅ | 1.12 |
| adc | ✅ | 0.99 |
| Iteration1 | ✅ | 0.99 |
| gps | ✅ | 0.957 |
| Iteration1 | ✅ | 0.958 |

# Results: 2025-Oct-19 14:12:17

| | |
|---|---|
| Result Type: | Result Set |
| Parent: | None |
| Start Time: | 19-Oct-2025 14:12:18 |
| End Time: | 19-Oct-2025 14:14:39 |
| Outcome: | Total: 16, <span style="color:green">Passed: 16</span> |

Back to Report Summary

## F16

### Test Result Information

| | |
|---|---|
| Result Type: | Test File Result |
| Parent: | Results: 2025-Oct-19 14:12:17 |
| Start Time: | 19-Oct-2025 14:12:18 |
| End Time: | 19-Oct-2025 14:14:28 |
| Outcome: | Total: 9, <span style="color:green">Passed: 9</span> |

### Test Suite Information

| | |
|---|---|
| Name: | F16 |

Back to Report Summary

## Vehicle Tests

### Test Result Information

| | |
|---|---|
| Result Type: | Test Suite Result |
| Parent: | F16 |
| Start Time: | 19-Oct-2025 14:12:18 |
| End Time: | 19-Oct-2025 14:14:28 |
| Outcome: | Total: 9, <span style="color:green">Passed: 9</span> |

### Test Suite Information

| | |
|---|---|
| Name: | Vehicle Tests |

Back to Report Summary

# actuators

## Test Result Information

Result Type:     Test Case Result
Parent:          [Vehicle Tests](#)
Start Time:      19-Oct-2025 14:12:18
End Time:        19-Oct-2025 14:12:21
Outcome:         Passed

## Test Case Information

Name:            actuators
Type:            Baseline Test

# Iteration1

## Test Result Information

Result Type:     Test Iteration Result
Parent:          [actuators](#)
Start Time:      19-Oct-2025 14:12:18
End Time:        19-Oct-2025 14:12:21
Outcome:         Passed

## Test Case Information

Name:            Iteration1
Type:            Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

### Verify Result

| Name |
|---|

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.angVel_radps, 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.forcesInBody_N(1), 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.forcesInBody_N(2), 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.forcesInBody_N(3), 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.momentsInBody_Nm(1), 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.momentsInBody_Nm(2), 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.momentsInBody_Nm(3), 0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad,0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad,0))

✅ Test Sequence/.../verifyControllerDisarmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad,0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.angVel_radps, 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.forcesInBody_N(1), 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.forcesInBody_N(2), 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.forcesInBody_N(3), 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.momentsInBody_Nm(1), 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.momentsInBody_Nm(2), 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.PropulsionBus.engineForcesMoments.momentsInBody_Nm(3), 0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad,0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad,0))

✅ Test Sequence/.../verifyControllerArmed:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad,0))

✅ Test Sequence/.../verifyAileronRate:verify(aileronCmdRate <= aileronDeflRateLimit_degps)

✅ Test Sequence/.../verifyAileronLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad, deg2rad(maxAilDefl_deg)))

✅ Test Sequence/.../verifyNegAileronRate:verify(abs(aileronCmdRate) <= aileronDeflRateLimit_degps)

✅ Test Sequence/.../verifyNegAileronLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posAileron_rad, -deg2rad(maxAilDefl_deg)))

✅ Test Sequence/.../verifyElevatorRate:verify(elevatorCmdRate <= elevatorDeflRateLimit_degps)

✅ Test Sequence/.../verifyElevatorLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorDefl_deg)))

✅ Test Sequence/.../verifyNegElevatorRate:verify(abs(elevatorCmdRate ) <= elevatorDeflRateLimit_degps)

✅ Test Sequence/.../verifyNegElevatorLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad, -deg2rad(maxElevatorDefl_deg)))

✅ Test Sequence/.../verifyRudderRate:verify(rudderCmdRate <= rudderDeflRateLimit_degps)

✅ Test Sequence/.../verifyRudderMax:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad, deg2rad(maxRudderDefl_deg)))

✅ Test Sequence/.../verifyNegRudderRate:verify(abs(rudderCmdRate) <= rudderDeflRateLimit_degps)

✅ Test Sequence/.../verifyNegRudderMax:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posRudder_rad, -deg2rad(maxRudderDefl_deg)))

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | actuators |
| Harness: | actuatorsTestHarness |
| Harness Owner: | actuators |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | actuatorsTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 19.024000000000001 |
| Checksum: | 1035197211 3367557082 1635020878 828644898 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

[Back to Report Summary](#)

## aero

## Test Result Information

Result Type:       Test Case Result
Parent:            [Vehicle Tests](#)
Start Time:        19-Oct-2025 14:12:22
End Time:          19-Oct-2025 14:12:24
Outcome:           Passed

## Test Case Information

Name:              aero
Type:              Baseline Test

# Iteration1

## Test Result Information

Result Type:       Test Iteration Result
Parent:            [aero](#)
Start Time:        19-Oct-2025 14:12:22
End Time:          19-Oct-2025 14:12:24
Outcome:           Passed

## Test Case Information

Name:              Iteration1
Type:              Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|---|
| ✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(1),0)) |

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(3),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(2),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(3),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(airDataBus.airspeedInBody_mps(1),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(airDataBus.airspeedInBody_mps(2),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(airDataBus.airspeedInBody_mps(3),0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(airDataBus.alpha_rad,0))

✅ Test Sequence1/.../verifyZeroOutputs:verify(isClose(airDataBus.beta_rad,0))

✅ Test Sequence1/.../verifyAirspeed:verify(aeroForcesMomentsBus.forcesInBody_N(1) < 0)

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))

✅ Test Sequence1/.../verifyAirspeed:verify(aeroForcesMomentsBus.forcesInBody_N(3) < -20500 * lbf2N)

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0))

✅ Test Sequence1/.../verifyAirspeed:verify(aeroForcesMomentsBus.momentsInBody_Nm(2) < 0)

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(3),0))

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(airDataBus.airspeedInBody_mps(2),0))

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(airDataBus.airspeedInBody_mps(3),0))

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(airDataBus.alpha_rad,0))

✅ Test Sequence1/.../verifyAirspeed:verify(isClose(airDataBus.beta_rad,0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(aeroForcesMomentsBus.forcesInBody_N(3) > cruiseZForce)

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(aeroForcesMomentsBus.momentsInBody_Nm(2) > cruiseYMoment)

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(3),0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(airDataBus.airspeedInBody_mps(2),0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(airDataBus.airspeedInBody_mps(3),0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(airDataBus.alpha_rad,0))

✅ Test Sequence1/.../verifyElevatorDeflection:verify(isClose(airDataBus.beta_rad,0))

✅ Test Sequence1/.../verifyRudder:verify(aeroForcesMomentsBus.forcesInBody_N(2) > 0)

✅ Test Sequence1/.../verifyRudder:verify(aeroForcesMomentsBus.forcesInBody_N(3) < 0)

✅ Test Sequence1/.../verifyRudder:verify(aeroForcesMomentsBus.momentsInBody_Nm(1) > 0)

✅ Test Sequence1/.../verifyRudder:verify(aeroForcesMomentsBus.momentsInBody_Nm(2) < 0)

✅ Test Sequence1/.../verifyRudder:verify(aeroForcesMomentsBus.momentsInBody_Nm(3) < 0)

✅ Test Sequence1/.../verifyRudder:verify(isClose(airDataBus.airspeedInBody_mps(2),0))

✅ Test Sequence1/.../verifyRudder:verify(isClose(airDataBus.airspeedInBody_mps(3),0))

✅ Test Sequence1/.../verifyRudder:verify(isClose(airDataBus.alpha_rad,0))

✅ Test Sequence1/.../verifyRudder:verify(isClose(airDataBus.beta_rad,0))

✅ Test Sequence1/.../verifyAileron:verify(aeroForcesMomentsBus.momentsInBody_Nm(1) < 0)

✅ Test Sequence1/.../verifyAileron:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(2),cruiseYMoment))

✅ Test Sequence1/.../verifyAileron:verify(aeroForcesMomentsBus.momentsInBody_Nm(3) < 0)

✅ Test Sequence1/.../verifyAileron:verify(isClose(airDataBus.alpha_rad,0))

✅ Test Sequence1/.../verifyAileron:verify(isClose(airDataBus.beta_rad,0))

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | aero |
| Harness: | aeroTestHarness |
| Harness Owner: | aero |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | aeroTestHarness/Test Sequence1 |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 22 |
| Checksum: | 1204314850 3911341573 15874598 4021657899 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

# ground contact

### Test Result Information

Result Type:      Test Case Result
Parent:      Vehicle Tests
Start Time:      19-Oct-2025 14:12:24
End Time:      19-Oct-2025 14:12:25
Outcome:      Passed

## Test Case Information

Name:      ground contact
Type:      Baseline Test

## Verify Result

| Name |
| --- |
| ✅ Test Sequence1/.../verifyInitialization:verify(isVehicleAirborne == 0) |
| ✅ Test Sequence1/.../verifyInitialization:verify(groundCollision == 0) |
| ✅ Test Sequence1/.../verifyInitialization:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1),0)) |
| ✅ Test Sequence1/.../verifyInitialization:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2),0)) |
| ✅ Test Sequence1/.../verifyInitialization:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3),0)) |
| ✅ Test Sequence1/.../verifyInitialization:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1), 0)) |
| ✅ Test Sequence1/.../verifyInitialization:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2), 0)) |
| ✅ Test Sequence1/.../verifyInitialization:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3), 0)) |
| ✅ Test Sequence1/.../verifyStationary:verify(isVehicleAirborne == 0) |
| ✅ Test Sequence1/.../verifyStationary:verify(groundCollision == 0) |
| ✅ Test Sequence1/.../verifyStationary:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0)) |
| ✅ Test Sequence1/.../verifyStationary:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0)) |
| ✅ Test Sequence1/.../verifyStationary:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), -9298.6 * 9.81 )) |
| ✅ Test Sequence1/.../verifyStationary:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0)) |
| ✅ Test Sequence1/.../verifyStationary:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0)) |
| ✅ Test Sequence1/.../verifyStationary:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0)) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isVehicleAirborne == 0) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(groundCollision == 0) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0)) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0)) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), -9298.6 * 9.81 + 20000 )) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1),0)) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2),0)) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3),0)) |
| ✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0)) |

✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))

✅ Test Sequence1/.../verifyFastTaxi:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))

✅ Test Sequence1/.../verifyRotate:verify(isVehicleAirborne == 0)

✅ Test Sequence1/.../verifyRotate:verify(groundCollision == 0)

✅ Test Sequence1/.../verifyRotate:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), -9298.6 * 9.81 + 20000 ))

✅ Test Sequence1/.../verifyRotate:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1),0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2),0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3),0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))

✅ Test Sequence1/.../verifyRotate:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))

✅ Test Sequence1/.../verifyTakeoff:verify(isVehicleAirborne == 1)

✅ Test Sequence1/.../verifyTakeoff:verify(groundCollision == 0)

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(groundForcesMomentsBus.forcesInBody_N(1), 0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(groundForcesMomentsBus.forcesInBody_N(2), 0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(groundForcesMomentsBus.forcesInBody_N(3), 0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(1),0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(2),0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(groundForcesMomentsBus.momentsInBody_Nm(3),0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(1), 0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(2), 0))

✅ Test Sequence1/.../verifyTakeoff:verify(isClose(weightForcesMomentsBus.momentsInBody_Nm(3), 0))

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | groundContact |
| Harness: | groundContactTestHarness |
| Harness Owner: | groundContact |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | groundContactTestHarness/Test Sequence1 |

| Test Sequence Scenario: | Scenario_2 |
|---|---|
| Start Time: | 0 |
| Stop Time: | 2.028 |
| Checksum: | 1244405978 4079976263 897553408 2782662889 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

# inertial dynamics

## Test Result Information

| Result Type: | Test Case Result |
|---|---|
| Parent: | Vehicle Tests |
| Start Time: | 19-Oct-2025 14:12:26 |
| End Time: | 19-Oct-2025 14:12:27 |
| Outcome: | Passed |

## Test Case Information

| Name: | inertial dynamics |
|---|---|
| Type: | Baseline Test |

# Iteration1

## Test Result Information

| Result Type: | Test Iteration Result |
|---|---|
| Parent: | inertial dynamics |
| Start Time: | 19-Oct-2025 14:12:26 |
| End Time: | 19-Oct-2025 14:12:27 |
| Outcome: | Passed |

## Test Case Information

Name:          Iteration1
Type:          Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|---|
| ✅ Test Sequence1/.../Test1:verify(isClose(bodyStatesBus.aircraftPosInNED_m(1), 0.5*interval_time^2*aircraftForcesInNED_N(1)/aircraftMass + aircraftInitialPosInNED_m(1))) |
| ✅ Test Sequence1/.../Test1:verify(isClose(bodyStatesBus.aircraftVelInBody_mps(1), interval_time*aircraftForcesMomentsBus_forcesInBody_N(1)/aircraftMass + aircraftInitialVelInBody_mps(1))) |
| ✅ Test Sequence1/.../Test1:verify(isClose(bodyStatesBus.aircraftAccelInBody_mps2(1),aircraftForcesMomentsBus_forcesInBody_N(1)/aircraftMass)) |

## Simulation

### System Under Test Information

Model:                          inertialDynamics
Harness:                        inertialDynamicsTestHarness
Harness Owner:                  inertialDynamics
Release:                        Current
Simulation Mode:                normal
Override SIL or PIL Mode:       0
Configuration Set:              standardSILConfiguration
Test Sequence Block:            inertialDynamicsTestHarness/Test Sequence1
Test Sequence Scenario:         Scenario_1
Start Time:                     0
Stop Time:                      1.008
Checksum:                       2740628208 4264647383 940722363 2610557463

Simulation Logs:
'aircraftInitialEuler_rad' is defined, but is never used in the Test Sequence
block.  Delete this object.

Back to Report Summary

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for
this test.

Back to Report Summary

# vehicle

## Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | Vehicle Tests |
| Start Time: | 19-Oct-2025 14:12:27 |
| End Time: | 19-Oct-2025 14:12:36 |
| Outcome: | Passed |

## Test Case Information

| | |
|---|---|
| Name: | vehicle |
| Type: | Baseline Test |

# Iteration1

## Test Result Information

Result Type:    Test Iteration Result
Parent:         vehicle
Start Time:     19-Oct-2025 14:12:27
End Time:       19-Oct-2025 14:12:36
Outcome:        Passed

## Test Case Information

Name:           Iteration1
Type:           Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|---|
| ✅ Test Sequence/.../verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(1), 0 )) |
| ✅ Test Sequence/.../verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 )) |
| ✅ Test Sequence/.../verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0 )) |
| ✅ Test Sequence/.../verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(1),0)) |
| ✅ Test Sequence/.../verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2),0)) |
| ✅ Test Sequence/.../verifyZeroInputs:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(3),0)) |
| ✅ Test Sequence/.../verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(1), 0 )) |
| ✅ Test Sequence/.../verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 )) |
| ✅ Test Sequence/.../verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0 )) |
| ✅ Test Sequence/.../verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(1),0)) |
| ✅ Test Sequence/.../verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2),0)) |
| ✅ Test Sequence/.../verifyZeroInputsAgain:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(3),0)) |
| ✅ Test Sequence/.../verifyThrottle:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0) |
| ✅ Test Sequence/.../verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 )) |
| ✅ Test Sequence/.../verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0 )) |
| ✅ Test Sequence/.../verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(1),0)) |
| ✅ Test Sequence/.../verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2),0)) |

✅ Test Sequence/.../verifyThrottle:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(3),0))

✅ Test Sequence/.../verifyPitchIntoGround:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2), 0))

✅ Test Sequence/.../verifyPitchIntoGround:verify(isClose(vehicleBus.BodyStates.aircraftEulerAngles_rad(2) , 0))

✅ Test Sequence/.../verifyPitchIntoGround:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0))

✅ Test Sequence/.../verifyPitchIntoGround:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)

✅ Test Sequence/.../verifyPitchIntoGround:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))

✅ Test Sequence/.../verifydeflectElevator:verify(isClose(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2), 0, 'absTol', 0.01))

✅ Test Sequence/.../verifydeflectElevator:verify(isClose(vehicleBus.BodyStates.aircraftEulerAngles_rad(2), 0, 'absTol', 0.01 ))

✅ Test Sequence/.../verifydeflectElevator:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(3), 0, 'absTol', 0.01))

✅ Test Sequence/.../verifydeflectElevator:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)

✅ Test Sequence/.../verifydeflectElevator:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))

✅ Test Sequence/.../verifyRotate:verify(vehicleBus.AircraftForcesMoments.momentsInBody_Nm(2) > 0)

✅ Test Sequence/.../verifyRotate:verify(vehicleBus.BodyStates.aircraftEulerAngles_rad(2) > 0)

✅ Test Sequence/.../verifyRotate:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(3) < 0)

✅ Test Sequence/.../verifyRotate:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)

✅ Test Sequence/.../verifyRotate:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))

✅ Test Sequence/.../verifyFlying:verify(vehicleBus.BodyStates.aircraftPosInNED_m(3) < 0)

✅ Test Sequence/.../verifyFlying:verify(vehicleBus.BodyStates.aircraftEulerAngles_rad(2) > 0)

✅ Test Sequence/.../verifyFlying:verify(vehicleBus.AircraftForcesMoments.forcesInBody_N(1) > 0)

✅ Test Sequence/.../verifyFlying:verify(isClose(vehicleBus.AircraftForcesMoments.forcesInBody_N(2), 0 ))

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | F16 |
| Harness: | F16TestHarness |
| Harness Owner: | F16 |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | F16TestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 86.019999999999996 |
| Checksum: | 3572155589 2390394185 2796403885 1853855084 |

Simulation Logs:
The input bus to block 'actuators/Bus Creator1' does not match the bus specified by the bus object 'ActuatorBus' on the block dialog : Signal 'EngineBus' does not match the name 'ActuatorBus.PropulsionBus' of the corresponding bus element in the bus object. To disable this diagnostic, set the Configuration Parameters > Diagnostics > Connectivity > 'Element name mismatch' option to 'None'.

The input bus to block 'actuators/actuatorBus' does not match the bus specified by the bus object 'ActuatorBus' on the block dialog : Signal 'EngineBus' does not match the name 'ActuatorBus.PropulsionBus' of the corresponding bus element in the bus object. To disable this diagnostic, set the Configuration Parameters > Diagnostics > Connectivity > 'Element name mismatch' option to 'None'.

Remapping selected signal 'EngineBus.engineForcesMoments' to 'PropulsionBus.engineForcesMoments' in 'F16/Bus Selector4' to match the bus hierarchy. Save your file to make this change permanent.

Remapping selected signal 'EngineBus.fuelRate_kgps' to 'PropulsionBus.fuelRate_kgps' in 'F16/Bus Selector5' to match the bus hierarchy. Save your file to make this change permanent.

Remapping selected signal 'EngineBus.engineForcesMoments' to 'PropulsionBus.engineForcesMoments' in 'F16/Bus Selector2' to match the bus hierarchy. Save your file to make this change permanent.

The input bus to block 'F16/Bus Creator' does not match the bus specified by the bus object 'VehicleBus' on the block dialog : Signal 'AirData' does not match the name 'VehicleBus.AirDataBus' of the corresponding bus element in the bus object. To disable this diagnostic, set the Configuration Parameters > Diagnostics > Connectivity > 'Element name mismatch' option to 'None'.

The input bus to block 'F16/VehicleBus' does not match the bus specified by the bus object 'VehicleBus' on the block dialog : Signal 'AirData' does not match the name 'VehicleBus.AirDataBus' of the corresponding bus element in the bus object. To disable this diagnostic, set the Configuration Parameters > Diagnostics > Connectivity > 'Element name mismatch' option to 'None'.

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

# engine

## Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | [Vehicle Tests](#) |
| Start Time: | 19-Oct-2025 14:12:36 |
| End Time: | 19-Oct-2025 14:12:52 |
| Outcome: | Passed |

## Test Case Information

| | |
|---|---|
| Name: | engine |
| Type: | Baseline Test |

## Verify Result

| Name |
|---|
| ✅ Test Sequence/.../verifyControllerDisarm:verify(isClose(propulsionBus.engineForcesMoments.forcesInBody_N(1),0)) |
| ✅ Test Sequence/.../verifyThorttle:verify(isClose(thrust_lbf, propulsionBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1)) |
| ✅ Test Sequence/.../verifyMaxThrust:verify(propulsionBus.engineForcesMoments.forcesInBody_N(1) < 130000) |
| ✅ Test Sequence/.../verifyMaxThrust:verify(isClose(thrust_lbf, propulsionBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1)) |
| ✅ Test Sequence/.../verifyWithAirspeed:verify(isClose(thrust_lbf, propulsionBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1)) |
| ✅ Test Sequence/.../verifyIncreaseAirspeed:verify(isClose(thrust_lbf, propulsionBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1)) |

✅ Test Sequence/.../verifyIncreaseAltitude:verify(isClose(thrust_lbf, propulsionBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | engineModelF16 |
| Harness: | engineModelF16TestHarness |
| Harness Owner: | engineModelF16 |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | engineModelF16TestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 38.003999999999998 |
| Checksum: | 1919719264 197051287 2377558008 1774720500 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

## addFM

### Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | [Vehicle Tests](#) |
| Start Time: | 19-Oct-2025 14:12:52 |
| End Time: | 19-Oct-2025 14:12:53 |
| Outcome: | Passed |

## Test Case Information

Name:        addFM
Type:        Baseline Test

# Iteration1

## Test Result Information

Result Type:   Test Iteration Result
Parent:        [addFM](#)
Start Time:    19-Oct-2025 14:12:52
End Time:      19-Oct-2025 14:12:53
Outcome:       Passed

## Test Case Information

Name:        Iteration1
Type:        Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

### Verify Result

| Name |
|---|
| ✅ Test Sequence1/.../Test1:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + engineForcesMomentsBus.forcesInBody_N + groundForcesMomentsBus.forcesInBody_N + weightForcesMomentsBus.forcesInBody_N))) |
| ✅ Test Sequence1/.../Test1:verify(all(isClose(aircraftForcesMomentsBus.momentsInBody_Nm, engineForcesMomentsBus.momentsInBody_Nm + aeroForcesMomentsBus.momentsInBody_Nm + weightForcesMomentsBus.momentsInBody_Nm))) |
| ✅ Test Sequence1/.../Test2:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + engineForcesMomentsBus.forcesInBody_N + groundForcesMomentsBus.forcesInBody_N + weightForcesMomentsBus.forcesInBody_N))) |

✅ Test Sequence1/.../Test2:verify(all(isClose(aircraftForcesMomentsBus.momentsInBody_Nm, aeroForcesMomentsBus.momentsInBody_Nm + engineForcesMomentsBus.momentsInBody_Nm + weightForcesMomentsBus.momentsInBody_Nm)))

✅ Test Sequence1/.../verifyPitchIntoGround:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + engineForcesMomentsBus.forcesInBody_N + groundForcesMomentsBus.forcesInBody_N + weightForcesMomentsBus.forcesInBody_N)))

✅ Test Sequence1/.../verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(1), 0))

✅ Test Sequence1/.../verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(2), engineForcesMomentsBus.momentsInBody_Nm(2) + aeroForcesMomentsBus.momentsInBody_Nm(2) + weightForcesMomentsBus.momentsInBody_Nm(2)))

✅ Test Sequence1/.../verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(3), engineForcesMomentsBus.momentsInBody_Nm(3) + aeroForcesMomentsBus.momentsInBody_Nm(3) + weightForcesMomentsBus.momentsInBody_Nm(3)))

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | addFM |
| Harness: | addFMTestHarness |
| Harness Owner: | addFM |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | addFMTestHarness/Test Sequence1 |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 3.016 |
| Checksum: | 2405791290 3021241631 2400769033 306058281 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

[Back to Report Summary](#)

# gravity

## Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | [Vehicle Tests](#) |
| Start Time: | 19-Oct-2025 14:12:53 |
| End Time: | 19-Oct-2025 14:12:54 |
| Outcome: | Passed |

## Test Case Information

| | |
|---|---|
| Name: | gravity |
| Type: | Baseline Test |

### Verify Result

| Name |
|---|
| ✅ Test Sequence1/.../Test1:verify(isClose(weightForcesMoments.forcesInBody_N(1), 0)) |
| ✅ Test Sequence1/.../Test1:verify(isClose(weightForcesMoments.forcesInBody_N(2), 0)) |
| ✅ Test Sequence1/.../Test1:verify(isClose(weightForcesMoments.forcesInBody_N(3), weight_N)) |
| ✅ Test Sequence1/.../Test1:verify(isClose(sum(weightForcesMoments.momentsInBody_Nm(1:3)), 0)) |
| ✅ Test Sequence1/.../Test2:verify(isClose(weightForcesMoments.forcesInBody_N(1), -weight_N * sin(pitch_rad))) |
| ✅ Test Sequence1/.../Test2:verify(isClose(weightForcesMoments.forcesInBody_N(2), 0)) |
| ✅ Test Sequence1/.../Test2:verify(isClose(weightForcesMoments.forcesInBody_N(3), weight_N * cos(pitch_rad))) |
| ✅ Test Sequence1/.../Test2:verify(isClose(sum(weightForcesMoments.momentsInBody_Nm(1:3)), 0)) |
| ✅ Test Sequence1/.../Test3:verify(isClose(weightForcesMoments.forcesInBody_N(1), -weight_N * sin(pitch_rad))) |
| ✅ Test Sequence1/.../Test3:verify(isClose(weightForcesMoments.forcesInBody_N(2), weight_N * sin(roll_rad) * cos(pitch_rad))) |
| ✅ Test Sequence1/.../Test3:verify(isClose(weightForcesMoments.forcesInBody_N(3), weight_N * cos(roll_rad) * cos(pitch_rad))) |
| ✅ Test Sequence1/.../Test3:verify(isClose(sum(weightForcesMoments.momentsInBody_Nm(1:3)), 0)) |

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | gravity |
| Harness: | gravityTestHarness |
| Harness Owner: | gravity |

| Release: | Current |
|---|---|
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | gravityTestHarness/Test Sequence1 |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 0.028000000000000001 |
| Checksum: | 371801570 4075467097 1945074898 1201465379 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

[Back to Report Summary](#)

# FullSIL

## Test Result Information

| Result Type: | Test Case Result |
|---|---|
| Parent: | [Vehicle Tests](#) |
| Start Time: | 19-Oct-2025 14:12:54 |
| End Time: | 19-Oct-2025 14:14:28 |
| Outcome: | Passed |

## Test Case Information

| Name: | FullSIL |
|---|---|
| Type: | Baseline Test |

## Simulation

### System Under Test Information

| Model: | VehiclePlant |
|---|---|
| Harness: | VehiclePlantTestHarness |

Harness Owner:                    VehiclePlant
Release:                          Current
Simulation Mode:                  normal
Override SIL or PIL Mode:         0
Configuration Set:                standardSILConfiguration
Test Sequence Block:              VehiclePlantTestHarness/Test Sequence
Test Sequence Scenario:           Scenario
Start Time:                       0
Stop Time:                        280.00400000000002
Checksum:                         3741715814 389861614 4232404438 650717578


Simulation Logs:
The input bus to block 'F16/Bus Creator' does not match the bus specified
by the bus object 'VehicleBus' on the block dialog : Signal 'AirData' does not
match the name 'VehicleBus.AirDataBus' of the corresponding bus element in
the bus object. To disable this diagnostic, set the  Configuration Parameters >
Diagnostics > Connectivity > 'Element name mismatch' option to 'None'.

The input bus to block 'F16/VehicleBus' does not match the bus specified
by the bus object 'VehicleBus' on the block dialog : Signal 'AirData' does not
match the name 'VehicleBus.AirDataBus' of the corresponding bus element in
the bus object. To disable this diagnostic, set the  Configuration Parameters >
Diagnostics > Connectivity > 'Element name mismatch' option to 'None'.

'SensorsBus' is defined, but is never used in the Test Sequence block.  Delete this
object.


'VehicleBus' is defined, but is never used in the Test Sequence block.  Delete this
object.


Warning issued while simulating Model block 'VehiclePlantTestHarness/
VehiclePlant'.

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

## sensors

### Test Result Information

| | |
|---|---|
| Result Type: | Test File Result |
| Parent: | [Results: 2025-Oct-19 14:12:17](#) |
| Start Time: | 19-Oct-2025 14:14:29 |
| End Time: | 19-Oct-2025 14:14:33 |
| Outcome: | Total: 4, Passed: 4 |

### Test Suite Information

| | |
|---|---|
| Name: | sensors |

# Sensor Tests

### Test Result Information

| | |
|---|---|
| Result Type: | Test Suite Result |
| Parent: | [sensors](#) |
| Start Time: | 19-Oct-2025 14:14:29 |
| End Time: | 19-Oct-2025 14:14:33 |
| Outcome: | Total: 4, Passed: 4 |

### Test Suite Information

Name:                Sensor Tests

# ins

## Test Result Information

Result Type:         Test Case Result
Parent:              Sensor Tests
Start Time:          19-Oct-2025 14:14:29
End Time:            19-Oct-2025 14:14:30
Outcome:             Passed

## Test Case Information

Name:                ins
Type:                Baseline Test

# Iteration1

## Test Result Information

Result Type:         Test Iteration Result
Parent:              ins
Start Time:          19-Oct-2025 14:14:29
End Time:            19-Oct-2025 14:14:30
Outcome:             Passed

## Test Case Information

Name:                Iteration1
Type:                Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|------|
| ✅ Test Sequence/.../checkInsStatic:verify(isClose(INSSensorBus.GyroSensorBus.x_radps, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsStatic:verify(isClose(INSSensorBus.GyroSensorBus.y_radps, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsStatic:verify(isClose(INSSensorBus.GyroSensorBus.z_radps, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsStatic:verify(isClose(INSSensorBus.AccelSensorBus.x_mps2, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsStatic:verify(isClose(INSSensorBus.AccelSensorBus.y_mps2, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsStatic:verify(isClose(INSSensorBus.AccelSensorBus.z_mps2, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.GyroSensorBus.x_radps, 0.1, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.GyroSensorBus.y_radps, 0.2, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.GyroSensorBus.z_radps, 0.3, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.MagSensorBus.x_Gauss, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.MagSensorBus.y_Gauss, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.MagSensorBus.z_Gauss, 0, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.AccelSensorBus.x_mps2, 1, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.AccelSensorBus.y_mps2, 2, 'atol', 0.01)) |
| ✅ Test Sequence/.../checkInsDynamic:verify(isClose(INSSensorBus.AccelSensorBus.z_mps2, 3, 'atol', 0.01)) |

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | ins |
| Harness: | insTestHarness |
| Harness Owner: | ins |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | insTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 10.008000000000001 |
| Checksum: | 677169283 1337975363 3752592478 3123190075 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

## adc

### Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | [Sensor Tests](#) |
| Start Time: | 19-Oct-2025 14:14:30 |
| End Time: | 19-Oct-2025 14:14:31 |
| Outcome: | Passed |

### Test Case Information

| | |
|---|---|
| Name: | adc |
| Type: | Baseline Test |

## Iteration1

### Test Result Information

| | |
|---|---|
| Result Type: | Test Iteration Result |
| Parent: | [adc](#) |
| Start Time: | 19-Oct-2025 14:14:30 |
| End Time: | 19-Oct-2025 14:14:31 |
| Outcome: | Passed |

### Test Case Information

| | |
|---|---|
| Name: | Iteration1 |
| Type: | Baseline Test |

## Iteration Settings

### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|---|
| ✅ Test Sequence/.../checkSensors:verify(isClose(ADCSensorBus.BaroSensorBus.altitude_m, 0, 'atol', 20)) |
| ✅ Test Sequence/.../checkSensors:verify(isClose(ADCSensorBus.BaroSensorBus.pressure_pa, 101325, 'atol', 100)) |
| ✅ Test Sequence/.../checkSensors:verify(isClose(ADCSensorBus.BaroSensorBus.temperature_degC, 15, 'atol', 2)) |
| ✅ Test Sequence/.../checkSensors:verify(isClose(ADCSensorBus.DiffPressureSensorBus.differential_pressure_pa, 0, 'atol', 100)) |
| ✅ Test Sequence/.../checkSensors:verify(isClose(ADCSensorBus.DiffPressureSensorBus.temperature_degC, 15, 'atol', 2)) |
| ✅ Test Sequence/.../checkSensors10kft:verify(isClose(ADCSensorBus.BaroSensorBus.altitude_m, 3048, 'atol', 20)) |
| ✅ Test Sequence/.../checkSensors10kft:verify(isClose(ADCSensorBus.BaroSensorBus.pressure_pa, 69681.66, 'atol', 100)) |
| ✅ Test Sequence/.../checkSensors10kft:verify(isClose(ADCSensorBus.BaroSensorBus.temperature_degC, -4.8, 'atol', 2)) |
| ✅ Test Sequence/.../checkSensors10kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.differential_pressure_pa, 0, 'atol', 100)) |
| ✅ Test Sequence/.../checkSensors10kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.temperature_degC, -4.8, 'atol', 2)) |
| ✅ Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.BaroSensorBus.altitude_m, 6096, 'atol', 20)) |
| ✅ Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.BaroSensorBus.pressure_pa, 46563.26, 'atol', 100)) |
| ✅ Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.BaroSensorBus.temperature_degC, -24.624, 'atol', 2)) |
| ✅ Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.differential_pressure_pa, 0, 'atol', 100)) |
| ✅ Test Sequence/.../checkSensors20kft:verify(isClose(ADCSensorBus.DiffPressureSensorBus.temperature_degC, -24.624, 'atol', 2)) |
| ✅ Test Sequence/.../checkDiffPress:verify(ADCSensorBus.DiffPressureSensorBus.differential_pressure_pa > 0) |

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | adc |
| Harness: | adcTestHarness |
| Harness Owner: | adc |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |

| Test Sequence Block: | adcTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 0.032000000000000001 |
| Checksum: | 2809421967 1308668717 4053094731 2792199182 |

Simulation Logs:
Warning issued while simulating Model block 'adcTestHarness/adc'.

[Back to Report Summary](#)

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

[Back to Report Summary](#)

## gps

### Test Result Information

| Result Type: | Test Case Result |
| Parent: | Sensor Tests |
| Start Time: | 19-Oct-2025 14:14:31 |
| End Time: | 19-Oct-2025 14:14:32 |
| Outcome: | Passed |

### Test Case Information

| Name: | gps |
| Type: | Baseline Test |

# Iteration1

## Test Result Information

| | |
|---|---|
| Result Type: | Test Iteration Result |
| Parent: | gps |
| Start Time: | 19-Oct-2025 14:14:31 |
| End Time: | 19-Oct-2025 14:14:32 |
| Outcome: | Passed |

## Test Case Information

| | |
|---|---|
| Name: | Iteration1 |
| Type: | Baseline Test |

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|---|
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.lat_deg, referenceLatitude_deg)) |
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.lon_deg, referenceLongitude_deg)) |
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.alt_m, terrainHeightNED_m, 'atol', 0.5)) |
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.vel_mps, 0, 'atol', 0.5)) |
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.vel_n_mps, 0, 'atol', 0.5)) |
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.vel_e_mps, 0, 'atol', 0.5)) |
| ✅ Test Sequence/.../checkGpsStatic:verify(isClose(GPSSensorBus.vel_d_mps, 0, 'atol', 0.5)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.lat_deg, referenceLatitude_deg)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.lon_deg, referenceLongitude_deg)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.alt_m, 3048 + terrainHeightNED_m)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.vel_mps, norm([10 20 30]), 'rtol', 0.8)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.vel_n_mps, 10, 'rtol', 0.1)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.vel_e_mps, 20, 'rtol', 0.1)) |
| ✅ Test Sequence/.../checkHighDynamic:verify(isClose(GPSSensorBus.vel_d_mps, 30, 'rtol', 0.1)) |

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | gps |
| Harness: | gpsTestHarness |
| Harness Owner: | gps |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | gpsTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 0.016 |
| Checksum: | 1297848071 2767701485 3129243928 1222317831 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

[Back to Report Summary](#)

## sensors

### Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | Sensor Tests |
| Start Time: | 19-Oct-2025 14:14:32 |
| End Time: | 19-Oct-2025 14:14:33 |
| Outcome: | Passed |

**Test Case Information**

| | |
|---|---|
| Name: | sensors |
| Type: | Baseline Test |

# Iteration1

### Test Result Information

| | |
|---|---|
| Result Type: | Test Iteration Result |
| Parent: | [sensors](#) |
| Start Time: | 19-Oct-2025 14:14:32 |
| End Time: | 19-Oct-2025 14:14:33 |
| Outcome: | Passed |

### Test Case Information

| | |
|---|---|
| Name: | Iteration1 |
| Type: | Baseline Test |

#### Iteration Settings

##### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

### Simulation

#### System Under Test Information

| | |
|---|---|
| Model: | sensors |
| Harness: | sensorsTestHarness |
| Harness Owner: | sensors |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | sensorsTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |

| Stop Time: | 0.20000000000000001 |
| Checksum: | 3166609996 3451383475 1534701048 1753185450 |

Simulation Logs:
No data is logged for the model 'sensorsTestHarness'.

'SensorsBus' is defined, but is never used in the Test Sequence block. Delete this object.

Warning issued while simulating Model block 'sensorsTestHarness/sensors'.

Back to Report Summary

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

Back to Report Summary

# environment

## Test Result Information

| Result Type: | Test File Result |
| Parent: | Results: 2025-Oct-19 14:12:17 |
| Start Time: | 19-Oct-2025 14:14:34 |
| End Time: | 19-Oct-2025 14:14:38 |
| Outcome: | Total: 3, Passed: 3 |

## Test Suite Information

Name:             environment

## Environment Tests

### Test Result Information

Result Type:      Test Suite Result
Parent:           [environment](environment)
Start Time:       19-Oct-2025 14:14:34
End Time:         19-Oct-2025 14:14:38
Outcome:          Total: 3, Passed: 3

### Test Suite Information

Name:             Environment Tests

## Air

### Test Result Information

Result Type:      Test Case Result
Parent:           [Environment Tests](Environment Tests)
Start Time:       19-Oct-2025 14:14:34
End Time:         19-Oct-2025 14:14:35
Outcome:          Passed

### Test Case Information

Name:             Air
Type:             Baseline Test

## Iteration1

### Test Result Information

Result Type:      Test Iteration Result

| Parent: | [Air](Air) |
| --- | --- |
| Start Time: | 19-Oct-2025 14:14:34 |
| End Time: | 19-Oct-2025 14:14:35 |
| Outcome: | Passed |

## Test Case Information

| Name: | Iteration1 |
| --- | --- |
| Type: | Baseline Test |

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
| --- | --- |
| TestSequenceScenario | Scenario_1 |

### Verify Result

| Name |
| --- |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.windSpeedInNED_mps(1), 4)) |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.windSpeedInNED_mps(2), 3)) |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.windSpeedInNED_mps(3), 2)) |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.airTemperature_K, 288.15)) |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.airPressure_Pa, 1.01325e5)) |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.airDensity_kgpm3, 1.225)) |
| ✅ Test Sequence/.../Test1:verify(isClose(AirEnvironmentBus.speedOfSound_mps, 340.29412435)) |

## Simulation

### System Under Test Information

| Model: | Air |
| --- | --- |
| Harness: | AirTestHarness |
| Harness Owner: | Air |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |

| | |
|---|---|
| Test Sequence Block: | AirTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 3.004 |
| Checksum: | 2333579960 118194984 3293710571 2811700376 |

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.

Back to Report Summary

# Earth

### Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | Environment Tests |
| Start Time: | 19-Oct-2025 14:14:35 |
| End Time: | 19-Oct-2025 14:14:37 |
| Outcome: | Passed |

### Test Case Information

| | |
|---|---|
| Name: | Earth |
| Type: | Baseline Test |

## Iteration1

### Test Result Information

| | |
|---|---|
| Result Type: | Test Iteration Result |
| Parent: | Earth |
| Start Time: | 19-Oct-2025 14:14:35 |
| End Time: | 19-Oct-2025 14:14:37 |

Outcome:                    Passed

## Test Case Information

Name:            Iteration1
Type:            Baseline Test

### Iteration Settings

#### Test Overrides

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Verify Result

| Name |
|---|
| ✅ Test Sequence1/.../verifyAircraftZChange:verify(gravLow_mps2 > EarthEnvironmentBus.gravityScalar_mps2) |

## Simulation

### System Under Test Information

Model:                          Earth
Harness:                        EarthTestHarness
Harness Owner:                  Earth
Release:                        Current
Simulation Mode:                normal
Override SIL or PIL Mode:       0
Configuration Set:              standardSILConfiguration
Test Sequence Block:            EarthTestHarness/Test Sequence1
Test Sequence Scenario:         Scenario_1
Start Time:                     0
Stop Time:                      7
Checksum:                       1175429799 1798864983 927034458 1191542450

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

[Back to Report Summary](#)

# LocalTerrain

## Test Result Information

| | |
|---|---|
| Result Type: | Test Case Result |
| Parent: | [Environment Tests](#) |
| Start Time: | 19-Oct-2025 14:14:37 |
| End Time: | 19-Oct-2025 14:14:38 |
| Outcome: | Passed |

## Test Case Information

| | |
|---|---|
| Name: | LocalTerrain |
| Type: | Baseline Test |

# Iteration1

## Test Result Information

| | |
|---|---|
| Result Type: | Test Iteration Result |
| Parent: | [LocalTerrain](#) |
| Start Time: | 19-Oct-2025 14:14:37 |
| End Time: | 19-Oct-2025 14:14:38 |
| Outcome: | Passed |

## Test Case Information

| | |
|---|---|
| Name: | Iteration1 |
| Type: | Baseline Test |

### Iteration Settings

**Test Overrides**

| Parameter Name | Value |
|---|---|
| TestSequenceScenario | Scenario_1 |

## Simulation

### System Under Test Information

| | |
|---|---|
| Model: | LocalTerrain |
| Harness: | LocalTerrainTestHarness |
| Harness Owner: | LocalTerrain |
| Release: | Current |
| Simulation Mode: | normal |
| Override SIL or PIL Mode: | 0 |
| Configuration Set: | standardSILConfiguration |
| Test Sequence Block: | LocalTerrainTestHarness/Test Sequence |
| Test Sequence Scenario: | Scenario_1 |
| Start Time: | 0 |
| Stop Time: | 0.0040000000000000001 |
| Checksum: | 1661112760 514905542 80377983 1575265004 |

Simulation Logs:
No data is logged for the model 'LocalTerrainTestHarness'.

'TerrainEnvironmentBus' is defined, but is never used in the Test Sequence block.  Delete this object.

Back to Report Summary

Test Logs:
No baseline criteria evaluation performed as no baseline data is available for this test.