# **Report Generated by Test Manager**

Title: Branch: 29-fix-testVehicleSIL-again

Author: Previous Commit Hash: 7e1dbbeb6453cf

78829e2d3992c21fe1bbd2d075

Date: 19-Oct-2025 12:21:40

# **Test Environment**

Platform: PCWIN64 MATLAB: (R2024a)

# Summary

| Name                          | Outcome  | Duration (Seconds) |
|-------------------------------|----------|--------------------|
| Results: 2025-Oct-19 12:19:01 | 16 🕏     | 156.271            |
| <b>□</b> <u>F16</u>           | 9 🗸      | 145.546            |
| □ <u>Vehicle Tests</u>        | 9 🥥      | 145.547            |
| actuators                     | <b>②</b> | 7.123              |
| I <u>Iteration1</u>           | <b>Ø</b> | 7.122              |
| aero aero                     | <b>Ø</b> | 2.092              |
| I <u>Iteration1</u>           | <b>Ø</b> | 2.092              |
| ground contact                | <b>Ø</b> | 1.328              |
| inertial dynamics             | <b>Ø</b> | 1.455              |
| I <u>Iteration1</u>           | <b>Ø</b> | 1.454              |
| vehicle                       | <b>Ø</b> | 8.156              |
| I <u>Iteration1</u>           | <b>Ø</b> | 8.156              |
| engine                        | <b>Ø</b> | 16.305             |
| addFM addFM                   | <b>Ø</b> | 0.901              |
| I <u>Iteration1</u>           | <b>Ø</b> | 0.902              |
| gravity                       | <b>Ø</b> | 0.839              |
| <b>FullSIL</b>                | <b>Ø</b> | 105.668            |
| environment                   | 3 🗸      | 4.076              |
| Environment Tests             | 3 🗸      | 4.076              |
| Air                           | <b>Ø</b> | 1.098              |
| I <u>Iteration1</u>           | <b>Ø</b> | 1.097              |
| Earth                         | <b>Ø</b> | 2.093              |
| I <u>Iteration1</u>           | <b>②</b> | 2.093              |
| LocalTerrain                  | <b>②</b> | 0.733              |
| I <u>Iteration1</u>           | <b>Ø</b> | 0.734              |

| ■ sensors 4 ②       | 4.749 |
|---------------------|-------|
| Sensor Tests 4 🗸    | 4.749 |
| ins ins             | 0.992 |
| ■ Iteration1        | 0.993 |
| adc o               | 1.022 |
| ■ Iteration1        | 1.022 |
| ■ gps               | 0.973 |
| ■ Iteration1        | 0.973 |
| sensors             | 1.533 |
| I <u>Iteration1</u> | 1.532 |

# Results: 2025-Oct-19 12:19:01

Result Type: Result Set Parent: None

Start Time: 19-Oct-2025 12:19:03 End Time: 19-Oct-2025 12:21:39 Outcome: Total: 16, Passed: 16

**Back to Report Summary** 

#### **F16**

#### **Test Result Information**

Result Type: Test File Result

Parent: Results: 2025-Oct-19 12:19:01

Start Time: 19-Oct-2025 12:19:03 End Time: 19-Oct-2025 12:21:28 Outcome: Total: 9, Passed: 9

#### **Test Suite Information**

Name: F16

**Back to Report Summary** 

### **Vehicle Tests**

#### **Test Result Information**

Result Type: Test Suite Result

Parent: <u>F16</u>

Start Time: 19-Oct-2025 12:19:03 End Time: 19-Oct-2025 12:21:28 Outcome: Total: 9, Passed: 9

#### **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 12:19:03 End Time: 19-Oct-2025 12:19:10

Outcome: Passed

#### **Test Case Information**

Name: actuators Type: Baseline Test

# Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>actuators</u>

Start Time: 19-Oct-2025 12:19:03 End Time: 19-Oct-2025 12:19:10

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **Verify Result**

| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.angVel_radps, 0))  |      |
|---|------|
| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(1), 0)  | )    |
| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(2), 0)  | )    |
| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(3), 0)  | )    |
| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody_Nm(  | (1), |
| 0))   |      |
| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody_Nm(  | (2), |
| 0))   |      |
| Test Sequence//verifyControllerDisarmed:verify(isClose(actuatorBus.EngineBus.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.EngineBus.angVel_radps, 0))   |      |
| Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(1), 0))  |      |
| Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(2), 0))  |      |
| Test Sequence//verifyControllerArmed:verify(isClose(actuatorBus.EngineBus.engineForcesMoments.forcesInBody_N(3), 0))  |      |
| $ \begin{tabular}{ll} \hline & \textbf{VerifyControllerArmed:} verify (is Close (actuator Bus. Engine Bus. engine Forces Moments. moments In Body\_Nm (1), and the control of the cont$  | 0))  |
| $ \hline \textbf{\textit{VerifyControllerArmed:}} Verify (is Close (actuator Bus. Engine Bus. engine Forces Moments. moments In Body\_Nm (2), and the sum of the$  | 0))  |
| $ \hline \textbf{\textit{VerifyControllerArmed:}} \textbf{\textit{Verify(isClose(actuatorBus.EngineBus.engineForcesMoments.momentsInBody\_Nm(3),}} \\ \textbf{\textit{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(maxAilI   | )efl |
| _deg)))   |      |
| Test Sequence//verifyElevatorRate:verify(elevatorCmdRate <= elevatorDeflRateLimit_degps)  |      |
| Test Sequence//verifyElevatorLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.ServosBus.ServosF16Bus.posElevator_rad, deg2rad(maxElevatorBus.Servos  | or   |
| Defl_deg)))   |      |
| Test Sequence//verifyNegElevatorRate:verify(abs(elevatorCmdRate ) <= elevatorDeflRateLimit_degps)   |      |
| Test Sequence//verifyNegElevatorLimit:verify(isClose(actuatorBus.ServosBus.ServosF16Bus.posElevator_rad, -deg2rad(maxElevator_rad, -deg2rad)  | iev  |
| atorDefl_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(maxRudder  |
| Defl 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:

Stop Time: 19.02400000000001

Checksum: 1217362366 3671309518 923207239 1239864682

#### 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 12:19:10 End Time: 19-Oct-2025 12:19:12

Outcome: Passed

#### **Test Case Information**

Name: aero

Type: Baseline Test

# Iteration1

### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>aero</u>

Start Time: 19-Oct-2025 12:19:10 End Time: 19-Oct-2025 12:19:12

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **Verify Result**

| Name  |         |
|---|---------|
| Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(1),0))   | - i     |
| Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(2),0))   | i<br>-4 |
| Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.forcesInBody_N(3),0))   | - i     |
| Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody_Nm(1),0)) | _ i     |
| Test Sequence1//verifyZeroOutputs:verify(isClose(aeroForcesMomentsBus.momentsInBody Nm(2),0)) | į       |

| 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) > cruiseYMo   | ment)  |
| 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    | ,,<br> |

#### **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: 2854743191 1458617529 2284628752 3323507110

Test Logs:

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

# **Back to Report Summary**

# ground contact

# **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 19-Oct-2025 12:19:13 End Time: 19-Oct-2025 12:19:14

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.

# **Back to Report Summary**

# inertial dynamics

### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 19-Oct-2025 12:19:14 End Time: 19-Oct-2025 12:19:15

Outcome: Passed

#### **Test Case Information**

Name: inertial dynamics Type: Baseline Test

### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result
Parent: <u>inertial dynamics</u>
Start Time: 19-Oct-2025 12:19:14
End Time: 19-Oct-2025 12:19:15

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **Verify Result**

| Name   |
|--|
| Test Sequence1//Test1:verify(isClose(bodyStatesBus.aircraftPosInNED_m(1), 0.5*interval_time^2*aircraftForcesInNED_N(1)/aircr |
| aftMass + aircraftInitialPosInNED_m(1)))   |
| Test Sequence1//Test1:verify(isClose(bodyStatesBus.aircraftVelInBody_mps(1), interval_time*aircraftForcesMomentsBus_forcesI  |
| nBody_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:

<u>'aircraftInitialEuler\_rad'</u> is defined, but is never used in the Test Sequence block. <u>Delete this object.</u>

# **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 12:19:16 End Time: 19-Oct-2025 12:19:24

Outcome: Passed

# **Test Case Information**

Name: vehicle

Type: Baseline Test

#### Iteration1

### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>vehicle</u>

Start Time: 19-Oct-2025 12:19:16 End Time: 19-Oct-2025 12:19:24

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **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 ))                  |
|   | Zest 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: 86.0199999999999

Checksum: 2184461690 750684721 2704972700 135817865

Test Logs:

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

# **Back to Report Summary**

# engine

# **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 19-Oct-2025 12:19:24 End Time: 19-Oct-2025 12:19:41

Outcome: Passed

#### **Test Case Information**

Name: engine

Type: Baseline Test

# **Verify Result**

| Name  |
|---|
| Test Sequence//verifyControllerDisarm:verify(isClose(engineBus.engineForcesMoments.forcesInBody_N(1),0))                      |
| Test Sequence//verifyThorttle:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))         |
| Test Sequence//verifyMaxThrust:verify(engineBus.engineForcesMoments.forcesInBody_N(1) < 130000)                               |
| Test Sequence//verifyMaxThrust:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))        |
| Test Sequence//verifyWithAirspeed:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1))     |
| Test Sequence//verifyIncreaseAirspeed:verify(isClose(thrust_lbf, engineBus.engineForcesMoments.forcesInBody_N(1), 'atol', 1)) |
| Test Sequence//verifyIncreaseAltitude:verify(isClose(thrust_lbf, engineBus.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: 38.00399999999998

Checksum: 3632656878 226596412 27427538 2773569956

#### Test Logs:

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

#### **Back to Report Summary**

#### addFM

#### **Test Result Information**

Result Type: Test Case Result Parent: Vehicle Tests

Start Time: 19-Oct-2025 12:19:41 End Time: 19-Oct-2025 12:19:42

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 12:19:41 End Time: 19-Oct-2025 12:19:42

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **Verify Result**

| Name   |
|--|
| Test Sequence1//Test1:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + e  |
| $ngine Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces Bus. forces Bus. forces Bus. for each force B$              |
| ))   |
| Test Sequence1//Test1:verify(all(isClose(aircraftForcesMomentsBus.momentsInBody_Nm, engineForcesMomentsBus.momentsInI  |
| Body_Nm + aeroForcesMomentsBus.momentsInBody_Nm + weightForcesMomentsBus.momentsInBody_Nm)))   |
| Test Sequence1//Test2:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.forcesInBody_N + e  |
| $ngine Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces Bus. forces Bus. forces Bus. for each force Bus. forces Bus. for each force Bus. for $              |
| ))   |
| Test Sequence1//Test2:verify(all(isClose(aircraftForcesMomentsBus.momentsInBody_Nm, aeroForcesMomentsBus.momentsInB  |
| ody_Nm + engineForcesMomentsBus.momentsInBody_Nm + weightForcesMomentsBus.momentsInBody_Nm)))  |
| Test Sequence1//verifyPitchIntoGround:verify(all(isClose(aircraftForcesMomentsBus.forcesInBody_N, aeroForcesMomentsBus.f   |
| $orces In Body\_N + engine Forces Moments Bus. forces In Body\_N + ground Forces Moments Bus. forces In Body\_N + weight Forces Moments Bus. forces Bus. f$ |
| s.forcesInBody_N)))  |
| Test Sequence1//verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(1), 0))   |
| Test Sequence1//verifyPitchIntoGround:verify(isClose(aircraftForcesMomentsBus.momentsInBody_Nm(2), engineForcesMomen   |
| $ts Bus. moments In Body\_Nm(2) + aero Forces Moments Bus. moments In Body\_Nm(2) + weight Forces Moments Bus. mome$                            |
| ))   |

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 12:19:42 End Time: 19-Oct-2025 12:19:42 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: 0.02800000000000001

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 12:19:43 End Time: 19-Oct-2025 12:21:28

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: Error\_Generator\_3

Start Time: 0

Stop Time: 280.0040000000002

Checksum: 1417193510 12782118 1430295359 339169230

### Simulation Logs:

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

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

Warning issued while simulating Model block '<u>VehiclePlantTestHarness/</u> VehiclePlant'.

# **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: <u>Results: 2025-Oct-19 12:19:01</u>

Start Time: 19-Oct-2025 12:21:29 End Time: 19-Oct-2025 12:21:33 Outcome: Total: 3, Passed: 3

#### **Test Suite Information**

Name: environment

**Back to Report Summary** 

# **Environment Tests**

#### **Test Result Information**

Result Type: Test Suite Result Parent: environment

Start Time: 19-Oct-2025 12:21:29 End Time: 19-Oct-2025 12:21:33 Outcome: Total: 3, Passed: 3

#### **Test Suite Information**

Name: Environment Tests

**Back to Report Summary** 

# Air

#### **Test Result Information**

Result Type: Test Case Result
Parent: Environment Tests
Start Time: 19-Oct-2025 12:21:29
End Time: 19-Oct-2025 12:21:30

Outcome: Passed

#### **Test Case Information**

Name: Air

Type: Baseline Test

#### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: Air

Start Time: 19-Oct-2025 12:21:29 End Time: 19-Oct-2025 12:21:30

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **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 12:21:30
End Time: 19-Oct-2025 12:21:32

Outcome: Passed

#### **Test Case Information**

Name: Earth

Type: Baseline Test

#### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: Earth

19-Oct-2025 12:21:30 Start Time: End Time: 19-Oct-2025 12:21:32

Outcome: Passed

#### **Test Case Information**

Iteration1 Name: **Baseline Test** Type:

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **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:

standardSILConfiguration **Configuration Set:** 

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 12:21:32
End Time: 19-Oct-2025 12:21:33

Outcome: Passed

# **Test Case Information**

Name: LocalTerrain Type: Baseline Test

### Iteration1

#### **Test Result Information**

Result Type: Test Iteration Result

Parent: <u>LocalTerrain</u>

Start Time: 19-Oct-2025 12:21:32 End Time: 19-Oct-2025 12:21:33

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

#### **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: 0.004000000000000001

Checksum: 1661112760 514905542 80377983 1575265004

#### Simulation Logs:

No data is logged for the model 'LocalTerrainTestHarness'.

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

**Back to Report Summary** 

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 File Result

Parent: <u>Results: 2025-Oct-19 12:19:01</u>

Start Time: 19-Oct-2025 12:21:33 End Time: 19-Oct-2025 12:21:38 Outcome: Total: 4, Passed: 4

#### **Test Suite Information**

Name: sensors

**Back to Report Summary** 

# **Sensor Tests**

#### **Test Result Information**

Result Type: Test Suite Result

Parent: sensors

Start Time: 19-Oct-2025 12:21:33 End Time: 19-Oct-2025 12:21:38 Outcome: Total: 4, Passed: 4

#### **Test Suite Information**

Name: Sensor Tests

**Back to Report Summary** 

#### ins

#### **Test Result Information**

Result Type: Test Case Result Parent: Sensor Tests

Start Time: 19-Oct-2025 12:21:33 End Time: 19-Oct-2025 12:21:34

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 12:21:33 End Time: 19-Oct-2025 12:21:34

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **Verify Result**

| ✓ 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: 10.00800000000001

Checksum: 677169283 1337975363 3752592478 3123190075

### Test Logs:

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

# **Back to Report Summary**

# adc

#### **Test Result Information**

Result Type: Test Case Result Parent: Sensor Tests

Start Time: 19-Oct-2025 12:21:34 End Time: 19-Oct-2025 12:21:35

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 12:21:34 End Time: 19-Oct-2025 12:21:35

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

Parameter Name | Value

| TestSequenceScena | Scenario_1 |
|-------------------|------------|
| rio               |            |

# **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: 0.03200000000000001

Checksum: 1104384803 2190219993 1982550312 115166805

# 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 12:21:35 End Time: 19-Oct-2025 12:21:36

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 12:21:35 End Time: 19-Oct-2025 12:21:36

Outcome: Passed

# **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

# **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

# **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 12:21:36 End Time: 19-Oct-2025 12:21:38

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 12:21:36 End Time: 19-Oct-2025 12:21:38

Outcome: Passed

#### **Test Case Information**

Name: Iteration1
Type: Baseline Test

# **Iteration Settings**

#### **Test Overrides**

| Parameter Name    | Value      |
|-------------------|------------|
| TestSequenceScena | Scenario_1 |
| rio               |            |

#### **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: 0.2000000000000001

Checksum: 2546553817 1139126873 1496895507 1797210819

Simulation Logs:

No data is logged for the model 'sensorsTestHarness'.

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

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**