飞机起落架测试报告

|  |  |
| --- | --- |
| 测试大纲 | /TestStand/飞机起落架测试大纲\_v1.0.0.0.docx |
| CSV激励文件 | /TestStand/LandingGear\_Stimulus\_v1.0.0.0.csv |
| CSV测试文件 | /TestStand/LandingGear\_Test\_v1.0.0.0.csv |
| TestStand测试序列 | /TestStand/Demo-VeriStandStep-TS2017.seq\_v1.0.0.0.seq |
| Word报告模板 | /TestStand/Word Report/LandingGearTestReportTemplate\_v1.1.0.0.dotx |

|  |  |
| --- | --- |
| 测试开始时间 | Wednesday, June 7, 2023, 13:35:54 |
| 测试结束时间 | Wednesday, June 7, 2023, 13:37:47 |
| 操作员 | administrator |
| UUT编号 |  |
| 测试结果 | Failed |

# 功能测试

## 激励给定

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | 阶段 | 激励文件标签 | 激励开始时间 System Time [s] | 激励结束时间 System Time [s] |
| 1 | 启动阶段 | #Startup | 117.6 | 138.7 |
| 2 | 测试阶段 | #Action | 139.0 | 202.7 |
| 3 | 停止阶段 | #Cleanup | 203.0 | 203.0 |

## 测试指标：N电机电流不超过0.4A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| System Time [s] | N Motor Current [A] | Low Limit [A] | High Limit [A] | Test Result |
| 139.0 | -0.00426463 | -0.2 | 0.4 | Passed |
| 141.5 | 0.385135 | -0.2 | 0.4 | Passed |
| 143.9 | 0.384748 | -0.2 | 0.4 | Passed |
| 146.2 | 0.384361 | -0.2 | 0.4 | Passed |
| 148.7 | -0.00413575 | -0.2 | 0.4 | Passed |
| 151.3 | -0.00413575 | -0.2 | 0.4 | Passed |
| 153.5 | -0.00445794 | -0.2 | 0.4 | Passed |
| 155.9 | -0.0551062 | -0.2 | 0.4 | Passed |
| 158.3 | -0.0842644 | -0.2 | 0.4 | Passed |
| 160.8 | -0.0346471 | -0.2 | 0.4 | Passed |
| 163.4 | -0.00416797 | -0.2 | 0.4 | Passed |
| 165.9 | -0.00391022 | -0.2 | 0.4 | Passed |
| 168.3 | -0.00429685 | -0.2 | 0.4 | Passed |
| 170.8 | -0.00397466 | -0.2 | 0.4 | Passed |
| 173.4 | -0.00410353 | -0.2 | 0.4 | Passed |
| 175.9 | -0.00413575 | -0.2 | 0.4 | Passed |
| 178.4 | -0.00397466 | -0.2 | 0.4 | Passed |
| 181.2 | -0.00420019 | -0.2 | 0.4 | Passed |
| 183.7 | -0.00400688 | -0.2 | 0.4 | Passed |
| 186.2 | -0.00420019 | -0.2 | 0.4 | Passed |
| 188.8 | -0.0040391 | -0.2 | 0.4 | Passed |
| 191.3 | -0.00397466 | -0.2 | 0.4 | Passed |
| 193.8 | -0.00368469 | -0.2 | 0.4 | Passed |

## 测试指标：实际执行位置/角度与仿真数据误差不超过10%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| System Time  [s] | Simulated Position  [degree] | Actual Position  [degree] | Accuracy  [%] | Accuracy Limit  [%] | Test Result |
| 139.7 | 20.9766 | 21.0419 | -0.311403 | 10 | Passed |
| 142.1 | 54.9379 | 54.4386 | 0.908797 | 10 | Passed |
| 144.5 | 99.3343 | 98.757 | 0.581165 | 10 | Passed |
| 146.9 | 138.987 | 138.974 | 0.00958376 | 10 | Passed |
| 149.3 | 138.987 | 138.976 | 0.00804831 | 10 | Passed |
| 151.8 | 138.987 | 138.976 | 0.00855575 | 10 | Passed |
| 154.1 | 138.987 | 138.979 | 0.00628444 | 10 | Passed |
| 156.5 | 119.066 | 119.621 | -0.46609 | 10 | Passed |
| 159.0 | 71.2545 | 71.8648 | -0.856432 | 10 | Passed |
| 161.4 | 25.7198 | 26.3677 | -2.51901 | 10 | Passed |
| 164.0 | 20.9766 | 21.0432 | -0.317716 | 10 | Passed |
| 166.6 | 20.9766 | 21.0436 | -0.31931 | 10 | Passed |
| 169.0 | 20.9766 | 21.0415 | -0.309553 | 10 | Passed |
| 171.5 | 20.9766 | 21.0426 | -0.314799 | 10 | Passed |
| 174.1 | 49.2461 | 46.8184 | 4.92959 | 10 | Passed |
| 176.6 | 95.9192 | 93.5512 | 2.46874 | 10 | Passed |
| 179.2 | 139.557 | 141.683 | -1.52392 | 10 | Passed |
| 181.8 | 139.557 | 141.727 | -1.55492 | 10 | Passed |
| 184.4 | 139.557 | 141.733 | -1.55948 | 10 | Passed |
| 186.9 | 139.557 | 141.736 | -1.56176 | 10 | Passed |
| 189.5 | 106.544 | 109.314 | -2.60021 | 10 | Passed |
| 192.0 | 58.7135 | 61.8622 | -5.36275 | 10 | Passed |
| 194.6 | 14.3171 | 20.7877 | -45.1943 | 10 | Failed |

## 测试数据记录

