

04 07 2014; 11:08:11AM DAS Application Started
04 07 2014; 11:08:11AM Opened Project C:\DAS 2.0\ac6_v2\
04 07 2014; 11:54:36AM Mission Editor Changes Applied
04 07 2014; 11:54:41AM Processing Requirement 4.3-1: Return Status :
Not Run

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No Project Data Available
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End of Requirement 4.3-1 =====
04 07 2014; 11:54:44AM Processing Requirement 4.3-2: Return Status :
Passed

=====
No Project Data Available
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End of Requirement 4.3-2 =====
04 07 2014; 11:54:46AM Requirement 4.4-3: Compliant

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End of Requirement 4.4-3 =====
04 07 2014; 11:55:05AM Processing Requirement 4.5-1: Return Status :
Passed

=====
Run Data
=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)

Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)

PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

INPUT

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.011000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Collision Probability = 0.000001
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

===== End of Requirement 4.5-1 =====
04 07 2014; 11:55:18AM Requirement 4.5-2: Compliant
04 07 2014; 11:55:20AM Processing Requirement 4.6 Return Status :
Failed

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Project Data

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INPUT

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True

PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)

Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)

Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.011000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.367226 (km)
PMD Apogee Altitude = 647.367226 (km)
PMD Inclination = 98.016897 (deg)
PMD RAAN = 0.024598 (deg)
PMD Argument of Perigee = 10.206428 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.367226 (km)
Suggested Apogee Altitude = 647.367226 (km)
Returned Error Message = LEO reentry PMD exceeds lifetime limit.

Released Year = 2040 (yr)
Requirement = 61
Compliance Status = Fail

=====

===== End of Requirement 4.6 =====

04 07 2014; 11:58:33AM Mission Editor Changes Applied
04 07 2014; 11:58:37AM Processing Requirement 4.6 Return Status :
Passed

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Project Data

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****INPUT****

Space Structure Name = Body Assembly

Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)

PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False

Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.020000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 634.710875 (km)
PMD Apogee Altitude = 655.460475 (km)
PMD Inclination = 98.016290 (deg)
PMD RAAN = 0.221089 (deg)
PMD Argument of Perigee = 136.111372 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 634.710875 (km)
Suggested Apogee Altitude = 655.460475 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2032 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:08:22PM Mission Editor Changes Applied
04 07 2014; 12:08:26PM Processing Requirement 4.6 Return Status :
Passed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)

PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)

PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.013000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 646.867474 (km)
PMD Apogee Altitude = 646.867474 (km)
PMD Inclination = 98.016762 (deg)
PMD RAAN = 0.067955 (deg)
PMD Argument of Perigee = 11.881428 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 646.867474 (km)
Suggested Apogee Altitude = 646.867474 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2036 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:08:52PM Mission Editor Changes Applied
04 07 2014; 12:08:57PM Processing Requirement 4.6 Return Status :
Failed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)

Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)

PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.118113 (km)
PMD Apogee Altitude = 647.118113 (km)
PMD Inclination = 98.016830 (deg)
PMD RAAN = 0.046217 (deg)
PMD Argument of Perigee = 11.075473 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.118113 (km)
Suggested Apogee Altitude = 647.118113 (km)
Returned Error Message = LEO reentry PMD exceeds lifetime limit.

Released Year = 2040 (yr)
Requirement = 61
Compliance Status = Fail

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:09:48PM Mission Editor Changes Applied
04 07 2014; 12:09:51PM Processing Requirement 4.6 Return Status :
Passed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)

Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)

Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)

PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete

Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 646.992973 (km)
PMD Apogee Altitude = 646.992973 (km)
PMD Inclination = 98.016796 (deg)
PMD RAAN = 0.057072 (deg)
PMD Argument of Perigee = 11.485944 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 646.992973 (km)
Suggested Apogee Altitude = 646.992973 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2037 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:13:00PM Mission Editor Changes Applied
04 07 2014; 12:13:04PM Processing Requirement 4.6 Return Status :
Failed

=====

Project Data

=====

INPUT

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)

Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)

Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)

RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012140 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.083113 (km)
PMD Apogee Altitude = 647.083113 (km)
PMD Inclination = 98.016820 (deg)
PMD RAAN = 0.049254 (deg)
PMD Argument of Perigee = 11.191959 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.083113 (km)
Suggested Apogee Altitude = 647.083113 (km)
Returned Error Message = LEO reentry PMD exceeds lifetime limit.

Released Year = 2040 (yr)
Requirement = 61
Compliance Status = Fail

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:14:32PM Mission Editor Changes Applied

04 07 2014; 12:14:36PM Processing Requirement 4.6 Return Status :
Failed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)

Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)

Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)

Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012200 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.068104 (km)
PMD Apogee Altitude = 647.068104 (km)
PMD Inclination = 98.016816 (deg)
PMD RAAN = 0.050556 (deg)
PMD Argument of Perigee = 11.241508 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.068104 (km)
Suggested Apogee Altitude = 647.068104 (km)
Returned Error Message = LEO reentry PMD exceeds lifetime limit.

Released Year = 2040 (yr)
Requirement = 61
Compliance Status = Fail

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:14:45PM Mission Editor Changes Applied

04 07 2014; 12:14:49PM Processing Requirement 4.6 Return Status :
Passed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)

Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)

Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)

Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)

Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)

Requirement = 61

Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing

Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)

Apogee Altitude = 650.000000 (km)

Inclination = 98.000000 (deg)

RAAN = 0.000000 (deg)

Argument of Perigee = 0.000000 (deg)

Mean Anomaly = 0.000000 (deg)

Area-To-Mass Ratio = 0.116000 (m²/kg)

Start Year = 2014.000000 (yr)

Initial Mass = 0.030000 (kg)

Final Mass = 0.030000 (kg)

Duration = 1.000000 (yr)

Station Kept = False

Abandoned = True

PMD Perigee Altitude = 606.456813 (km)

PMD Apogee Altitude = 624.052739 (km)

PMD Inclination = 98.008957 (deg)

PMD RAAN = 2.637518 (deg)

PMD Argument of Perigee = 130.728063 (deg)

PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)

Suggested Apogee Altitude = 624.052739 (km)

Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)

Requirement = 61

Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete

Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)

Apogee Altitude = 650.000000 (km)

Inclination = 98.000000 (deg)

RAAN = 0.000000 (deg)

Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012300 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.043075 (km)
PMD Apogee Altitude = 647.043075 (km)
PMD Inclination = 98.016810 (deg)
PMD RAAN = 0.052727 (deg)
PMD Argument of Perigee = 11.323596 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 647.043075 (km)
Suggested Apogee Altitude = 647.043075 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2039 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:32:07PM Processing Requirement 4.6 Return Status :
Passed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True

PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)
PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)

Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)

Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012300 (m²/kg)

Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)
Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.043075 (km)
PMD Apogee Altitude = 647.043075 (km)
PMD Inclination = 98.016810 (deg)
PMD RAAN = 0.052727 (deg)
PMD Argument of Perigee = 11.323596 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 647.043075 (km)
Suggested Apogee Altitude = 647.043075 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2039 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 12:42:48PM Mission Editor Changes Applied

04 07 2014; 12:43:07PM Processing Requirement 4.6 Return Status :
Passed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)

PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False

Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.012400 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 1.400000 (kg)

Final Mass = 1.400000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 647.018031 (km)
PMD Apogee Altitude = 647.018031 (km)
PMD Inclination = 98.016803 (deg)
PMD RAAAN = 0.054899 (deg)
PMD Argument of Perigee = 11.405073 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 647.018031 (km)
Suggested Apogee Altitude = 647.018031 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2038 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 13:02:28PM Project Data Saved To File
04 07 2014; 13:02:42PM Opened Project C:\DAS 2.0\ac6\
04 07 2014; 13:04:36PM Mission Editor Changes Applied
04 07 2014; 13:04:40PM Processing Requirement 4.6 Return Status :
Passed

=====

Project Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 627.513745 (km)
PMD Apogee Altitude = 644.788903 (km)

PMD Inclination = 98.013970 (deg)
PMD RAAN = 0.976949 (deg)
PMD Argument of Perigee = 138.395703 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 627.513745 (km)
Suggested Apogee Altitude = 644.788903 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

INPUT

Space Structure Name = Electronics
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 642.363154 (km)
PMD Apogee Altitude = 644.669061 (km)
PMD Inclination = 98.015873 (deg)
PMD RAAN = 0.355782 (deg)
PMD Argument of Perigee = 23.539492 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Suggested Perigee Altitude = 642.363154 (km)
Suggested Apogee Altitude = 644.669061 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2025 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 632.331338 (km)
PMD Apogee Altitude = 649.176235 (km)
PMD Inclination = 98.015148 (deg)
PMD RAAN = 0.591155 (deg)
PMD Argument of Perigee = 143.957347 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 632.331338 (km)
Suggested Apogee Altitude = 649.176235 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2023 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)
Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station Kept = False

Abandoned = True
PMD Perigee Altitude = 628.834624 (km)
PMD Apogee Altitude = 639.996241 (km)
PMD Inclination = 98.013530 (deg)
PMD RAAN = 1.120671 (deg)
PMD Argument of Perigee = 151.360096 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 628.834624 (km)
Suggested Apogee Altitude = 639.996241 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2022 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Lid Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 621.087867 (km)
PMD Apogee Altitude = 639.267047 (km)
PMD Inclination = 98.012481 (deg)
PMD RAAN = 1.467415 (deg)
PMD Argument of Perigee = 138.356106 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 621.087867 (km)
Suggested Apogee Altitude = 639.267047 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2021 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = Wing
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 606.456813 (km)
PMD Apogee Altitude = 624.052739 (km)
PMD Inclination = 98.008957 (deg)
PMD RAAN = 2.637518 (deg)
PMD Argument of Perigee = 130.728063 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 606.456813 (km)
Suggested Apogee Altitude = 624.052739 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2020 (yr)
Requirement = 61
Compliance Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Area-To-Mass Ratio = 0.021400 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.700000 (kg)

Final Mass = 0.700000 (kg)
Duration = 1.000000 (yr)
Station Kept = False
Abandoned = True
PMD Perigee Altitude = 633.152937 (km)
PMD Apogee Altitude = 656.299197 (km)
PMD Inclination = 98.016196 (deg)
PMD RAAN = 0.252158 (deg)
PMD Argument of Perigee = 129.285649 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Suggested Perigee Altitude = 633.152937 (km)
Suggested Apogee Altitude = 656.299197 (km)
Returned Error Message = Passes LEO reentry orbit criteria.

Released Year = 2031 (yr)
Requirement = 61
Compliance Status = Pass

=====

===== End of Requirement 4.6 =====

04 07 2014; 13:04:43PM Processing Requirement 4.3-1: Return Status :
Not Run

=====

No Project Data Available

=====

===== End of Requirement 4.3-1 =====

04 07 2014; 13:04:45PM Processing Requirement 4.3-2: Return Status :
Passed

=====

No Project Data Available

=====

===== End of Requirement 4.3-2 =====

04 07 2014; 13:04:47PM Requirement 4.4-3: Compliant

===== End of Requirement 4.4-3 =====

04 07 2014; 13:05:02PM Processing Requirement 4.5-1: Return Status :
Passed

=====

Run Data

=====

****INPUT****

Space Structure Name = Body Assembly
Space Structure Type = Payload

Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.053000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.126000 (kg)
Final Mass = 0.126000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Electronics
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.026000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.184000 (kg)
Final Mass = 0.184000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Torque Rod
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.036500 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.008560 (kg)
Final Mass = 0.008560 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = Battery
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.059000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.020000 (kg)

Final Mass = 0.020000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

INPUT

Space Structure Name = Lid Assembly
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.073000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.050000 (kg)
Final Mass = 0.050000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

INPUT

Space Structure Name = Wing
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.116000 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.030000 (kg)
Final Mass = 0.030000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)
PMD Mean Anomaly = 0.000000 (deg)

****OUTPUT****

Collision Probability = 0.000000
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

****INPUT****

Space Structure Name = AeroCube6 complete
Space Structure Type = Payload
Perigee Altitude = 650.000000 (km)
Apogee Altitude = 650.000000 (km)
Inclination = 98.000000 (deg)
RAAN = 0.000000 (deg)
Argument of Perigee = 0.000000 (deg)
Mean Anomaly = 0.000000 (deg)
Final Area-To-Mass Ratio = 0.021400 (m²/kg)
Start Year = 2014.000000 (yr)
Initial Mass = 0.700000 (kg)
Final Mass = 0.700000 (kg)
Duration = 1.000000 (yr)
Station-Kept = False
Abandoned = True
PMD Perigee Altitude = -1.000000 (km)
PMD Apogee Altitude = -1.000000 (km)
PMD Inclination = 0.000000 (deg)
PMD RAAN = 0.000000 (deg)
PMD Argument of Perigee = 0.000000 (deg)

PMD Mean Anomaly = 0.000000 (deg)

OUTPUT

Collision Probability = 0.000001
Returned Error Message: Normal Processing
Date Range Error Message: Normal Date Range
Status = Pass

=====

===== End of Requirement 4.5-1 =====

04 07 2014; 13:05:10PM Requirement 4.5-2: Compliant

04 07 2014; 13:05:16PM *****Processing Requirement 4.7-1
Return Status : Passed

*****INPUT*****

Item Number = 1

name = Body Assembly
quantity = 1
parent = 0
materialID = 8
type = Box
Aero Mass = 0.126000
Thermal Mass = 0.126000
Diameter/Width = 0.100000
Length = 0.100000
Height = 0.050000

name = Body Assembly
quantity = 1
parent = 1
materialID = 8
type = Box
Aero Mass = 0.126000
Thermal Mass = 0.126000
Diameter/Width = 0.100000
Length = 0.100000
Height = 0.050000

*****OUTPUT*****

Item Number = 1

name = Body Assembly
Demise Altitude = 77.991855
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = Body Assembly
Demise Altitude = 71.014535
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

*****INPUT*****

Item Number = 2

name = Electronics
quantity = 1
parent = 0
materialID = 23
type = Box
Aero Mass = 0.184000
Thermal Mass = 0.184000
Diameter/Width = 0.090000
Length = 0.090000
Height = 0.035000

name = Electronics
quantity = 1
parent = 1
materialID = 23
type = Box
Aero Mass = 0.184000
Thermal Mass = 0.184000
Diameter/Width = 0.090000
Length = 0.090000
Height = 0.035000

*****OUTPUT*****

Item Number = 2

name = Electronics
Demise Altitude = 77.996715
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = Electronics
Demise Altitude = 72.995543
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

*****INPUT*****

Item Number = 3

name = Torque Rod
quantity = 3
parent = 0
materialID = -1
type = Cylinder
Aero Mass = 0.008560
Thermal Mass = 0.008560

Diameter/Width = 0.003980

name = Torque Rod
quantity = 3
parent = 1
materialID = -1
type = Cylinder
Aero Mass = 0.008560
Thermal Mass = 0.008560
Diameter/Width = 0.003980
Length = 0.078740

*****OUTPUT****

Item Number = 3

name = Torque Rod
Demise Altitude = 77.998410
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = Torque Rod
Demise Altitude = 75.430043
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

*****INPUT****

Item Number = 4

name = Battery
quantity = 2
parent = 0
materialID = 56
type = Cylinder
Aero Mass = 0.020000
Thermal Mass = 0.020000
Diameter/Width = 0.018000

name = Battery
quantity = 2
parent = 1
materialID = 56
type = Cylinder
Aero Mass = 0.020000
Thermal Mass = 0.020000
Diameter/Width = 0.018000
Length = 0.065000

*****OUTPUT****

Item Number = 4

name = Battery

Demise Altitude = 77.988465
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = Battery
Demise Altitude = 0.000000
Debris Casualty Area = 0.804433
Impact Kinetic Energy = 3.594854

*****INPUT****

Item Number = 5

name = Lid Assembly
quantity = 2
parent = 0
materialID = 8
type = Box
Aero Mass = 0.050000
Thermal Mass = 0.050000
Diameter/Width = 0.100000
Length = 0.100000
Height = 0.005000

name = Lid Assembly
quantity = 2
parent = 1
materialID = 8
type = Box
Aero Mass = 0.050000
Thermal Mass = 0.050000
Diameter/Width = 0.100000
Length = 0.100000
Height = 0.005000

*****OUTPUT****

Item Number = 5

name = Lid Assembly
Demise Altitude = 77.993512
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = Lid Assembly
Demise Altitude = 0.000000
Debris Casualty Area = 0.904397
Impact Kinetic Energy = 5.117477

*****INPUT****

Item Number = 6

name = Wing
quantity = 2
parent = 0
materialID = 8
type = Flat Plate
Aero Mass = 0.030000
Thermal Mass = 0.030000
Diameter/Width = 0.100000
Length = 0.100000

name = Wing
quantity = 2
parent = 1
materialID = 8
type = Flat Plate
Aero Mass = 0.030000
Thermal Mass = 0.030000
Diameter/Width = 0.100000
Length = 0.100000

*****OUTPUT****

Item Number = 6

name = Wing
Demise Altitude = 77.990308
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = Wing
Demise Altitude = 0.000000
Debris Casualty Area = 0.980000
Impact Kinetic Energy = 1.468282

*****INPUT****

Item Number = 7

name = AeroCube6 complete
quantity = 1
parent = 0
materialID = 8
type = Box
Aero Mass = 0.700000
Thermal Mass = 0.700000
Diameter/Width = 0.100000
Length = 0.100000
Height = 0.050000

name = AeroCube6 complete
quantity = 1

parent = 1
materialID = 8
type = Box
Aero Mass = 0.700000
Thermal Mass = 0.700000
Diameter/Width = 0.100000
Length = 0.100000
Height = 0.050000

*****OUTPUT****

Item Number = 7

name = AeroCube6 complete
Demise Altitude = 77.996808
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

name = AeroCube6 complete
Demise Altitude = 67.677925
Debris Casualty Area = 0.000000
Impact Kinetic Energy = 0.000000

===== End of Requirement 4.7-1 =====
04 07 2014; 13:05:30PM Project Data Saved To File