# Milestone Review Flysheet 2018-2019

| Institution | School Name |
|---|---|

| Milestone | (PDR, CDR, or FRR) |
|---|---|

| Vehicle Properties | |
|---|---|
| Total Length (in) | |
| Diameter (in) | |
| Gross Lift Off Weigh (lb) | |
| Airframe Material(s) | |
| Fin Material and Thickness (in) | |
| Coupler Length(s)/Shoulder Length(s) (in) | |

| Motor Properties | |
|---|---|
| Motor Brand/Designation | |
| Max/Average Thrust (lb) | |
| Total Impulse (lbf-s) | |
| Mass Before/After Burn (lb) | |
| Liftoff Thrust (lb) | |
| Motor Retention Method | |

| Stability Analysis | |
|---|---|
| Center of Pressure (in. from nose) | |
| Center of Gravity (in. from nose) | |
| Static Stability Margin (on pad) | |
| Static Stability Margin (at rail exit) | |
| Thrust-to-Weight Ratio | |
| Rail Size/Type and Length (in) | |
| Rail Exit Velocity (ft/s) | |

| Ascent Analysis | |
|---|---|
| Maximum Velocity (ft/s) | |
| Maximum Mach Number | |
| Maximum Acceleration (ft/s^2) | |
| Target Apogee (ft) | |
| Predicted Apogee (From Sim.) (ft) | |

| Recovery System Properties - Overall | |
|---|---|
| Total Descent Time (s) | |
| Total Drift in 20 mph winds (ft) | |

| Recovery System Properties - Energetics | | |
|---|---|---|
| Ejection System Energetics (ex. Black Powder) | | |
| Energetics Mass - Drogue Chute (grams) | Primary | |
| | Backup | |
| Energetics Mass - Main Chute (grams) | Primary | |
| | Backup | |
| Energetics Mass - Other (grams) - If Applicable | Primary | |
| | Backup | |

| Recovery System Properties - Recovery Electronics | |
|---|---|
| Primary Altimeter Make/Model | |
| Secondary Altimeter Make/Model | |
| Other Altimeters (if applicable) | |
| Rocket Locator (Make/Model) | |
| Additional Locators (if applicable) | |
| Transmitting Frequencies (all - vehicle and payload) | ***Required by CDR*** (Complete on pages 3 and 4) |
| Describe Redundancy Plan (batteries, switches, etc.) | |
| Pad Stay Time (Launch Configuration) | |

| Recovery System Properties - Drogue Parachute | | | | |
|---|---|---|---|---|
| Manufacturer/Model | | | | |
| Size or Diameter (in or ft) | | | | |
| Main Altimeter Deployment Setting | | | | |
| Backup Altimeter Deployment Setting | | | | |
| Velocity at Deployment (ft/s) | | | | |
| Terminal Velocity (ft/s) | | | | |
| Recovery Harness Material, Size, and Type (examples - 1/2 in. tubular Nylon or 1 in. flat Kevlar strap) | | | | |
| Recovery Harness Length (ft) | | | | |
| Harness/Airframe Interfaces | | | | |
| Kinetic Energy of Each Section (Ft-lbs) | Section 1 | Section 2 | Section 3 | Section 4 |
| | | | | |

| Recovery System Properties - Main Parachute | | | | |
|---|---|---|---|---|
| Manufacturer/Model | | | | |
| Size or Diameter (in or ft) | | | | |
| Main Altimeter Deployment Setting (ft) | | | | |
| Backup Altimeter Deployment Setting (ft) | | | | |
| Velocity at Deployment (ft/s) | | | | |
| Terminal Velocity (ft/s) | | | | |
| Recovery Harness Material, Size, and Type (examples - 1/2 in. tubular Nylon or 1 in. flat Kevlar strap) | | | | |
| Recovery Harness Length (ft) | | | | |
| Harness/Airframe Interfaces | | | | |
| Kinetic Energy of Each Section (Ft-lbs) | Section 1 | Section 2 | Section 3 | Section 4 |
| | | | | |

# Milestone Review Flysheet 2018-2019

| Institution | School Name | Milestone | (PDR, CDR, or FRR) |
|---|---|---|---|

| Payload | |
|---|---|
| Payload 1 (official payload) | Overview |
| | |
| Payload 2 (non-scored payload) | Overview |
| | |

| Test Plans, Status, and Results | |
|---|---|
| Ejection Charge Tests | |
| Sub-scale Test Flights | |
| Vehicle Demon-stration Flights | |
| Payload Demon-stration Flights | |

# Milestone Review Flysheet 2018-2019

| Institution | School Name | Milestone | (PDR, CDR, or FRR) |
|---|---|---|---|

| Transmitter #1 | | | |
|---|---|---|---|
| Location of transmitter: | | | |
| Purpose of transmitter: | | | |
| Brand | | RF Output Power (mW) | |
| Model | | Specific Frequency used by team (MHz) | |
| Handshake or frequency hopping? (explain) | | | |
| Distance to closest e-match or altimeter (in) | | | |
| Description of shielding plan: | | | |

| Transmitter #2 | | | |
|---|---|---|---|
| Location of transmitter: | | | |
| Purpose of transmitter: | | | |
| Brand | | RF Output Power (mW) | |
| Model | | Specific Frequency used by team (MHz) | |
| Handshake or frequency hopping? (explain) | | | |
| Distance to closest e-match or altimeter (in) | | | |
| Description of shielding plan: | | | |

| Transmitter #3 | | | |
|---|---|---|---|
| Location of transmitter: | | | |
| Purpose of transmitter: | | | |
| Brand | | RF Output Power (mW) | |
| Model | | Specific Frequency used by team (MHz) | |
| Handshake or frequency hopping? (explain) | | | |
| Distance to closest e-match or altimeter (in) | | | |
| Description of shielding plan: | | | |

| Transmitter #4 | | | |
|---|---|---|---|
| Location of transmitter: | | | |
| Purpose of transmitter: | | | |
| Brand | | RF Output Power (mW) | |
| Model | | Specific Frequency used by team (MHz) | |
| Handshake or frequency hopping? (explain) | | | |
| Distance to closest e-match or altimeter (in) | | | |
| Description of shielding plan: | | | |

# Milestone Review Flysheet 2018-2019

| Institution | School Name | Milestone | (PDR, CDR, or FRR) |
|---|---|---|---|

| Transmitter #5 | | | |
|---|---|---|---|
| Location of transmitter: | | | |
| Purpose of transmitter: | | | |
| Brand | | RF Output Power (mW) | |
| Model | | Specific Frequency used by team (MHz) | |
| Handshake or frequency hopping? (explain) | | | |
| Distance to closest e-match or altimeter (in) | | | |
| Description of shielding plan: | | | |

| Transmitter #6 | | | |
|---|---|---|---|
| Location of transmitter: | | | |
| Purpose of transmitter: | | | |
| Brand | | RF Output Power (mW) | |
| Model | | Specific Frequency used by team (MHz) | |
| Handshake or frequency hopping? (explain) | | | |
| Distance to closest e-match or altimeter (in) | | | |
| Description of shielding plan: | | | |

| Additional Comments |
|---|
| |