

Product: UAS  
Subsystem: N/A

**Notes:**  
UAS = Unmanned Aerial System  
UGV = Unmanned Ground Vehicle

| Market Requirements |   |            |     |   |                                      |         |  |  |  |  |  |  |  |  |  |
|---------------------|---|------------|-----|---|--------------------------------------|---------|--|--|--|--|--|--|--|--|--|
| 1                   | The UAS shall be capable of autonomous flight.                  | Importance | 20% | 1 | Flight Time                          | Minutes |  |  |  |  |  |  |  |  |  |
| 2                   | The UAS shall be capable of avoiding static obstacles.          | 20%        |     | 2 | Post Processing Time                 | Minutes |  |  |  |  |  |  |  |  |  |
| 3                   | The UAS shall be capable of visual object classification.       | 20%        |     | 3 | Autonomus Flight Time                | Minutes |  |  |  |  |  |  |  |  |  |
| 4                   | The UAS shall be capable of delivering a payload.               | 20%        |     | 4 | Percent of Waypoints Hit             | Percent |  |  |  |  |  |  |  |  |  |
| 5                   | The UAS shall be capable of safe operation.                     | 10%        |     | 5 | Average Minimum Distance to Waypoint | Meters  |  |  |  |  |  |  |  |  |  |
| 6                   | The UAS shall be capable of a timely completion of the mission. | 10%        |     | 6 | Percent of Obstacles Hit             | Percent |  |  |  |  |  |  |  |  |  |

| Measured | Predicted | Target Values | Upper Acceptable | Ideal | Lower Acceptable | Importance | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 13 | 14 |
|----------|-----------|---------------|------------------|-------|------------------|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| 30       | 30        | 20            | 40               | 20    | 15               | 6%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 0        | 5         | 0             | 10               | 0     | 0                | 2%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 15       | 30        | 20            | 40               | 20    | 15               | 8%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 100      | 100       | 100           | 100              | 100   | 100              | 2%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 4.57     | 3         | 0             | 5                | 0     | 0                | 10%        |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 2        | 0         | 0             | 20               | 0     | 0                | 20%        |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 50       | 80        | 90            | 100              | 100   | 75               | 4%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 80       | 95        | 100           | 100              | 100   | 75               | 6%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 80       | 95        | 100           | 100              | 100   | 0                | 6%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 60       | 80        | 100           | 100              | 100   | 75               | 4%         |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 58       | 25        | 5             | 75               | 5     | 0                | 10%        |   |   |   |   |   |   |   |   |   |    |    |    |    |
| Y        | Y         | Y             | Y                | Y     | Y                | 10%        |   |   |   |   |   |   |   |   |   |    |    |    |    |
| 3        | 2         | 0             | 15               | 0     | 0                | 2%         |   |   |   |   |   |   |   |   |   |    |    |    |    |

|                 |
|-----------------|
| Market Response |
|-----------------|