**Sample Critical Technical Parameters (CTPs)**

**Intercept Range: 10 km against air or ground targets**

**Rate of Fire: Four missiles launched in 30 seconds**

**Fusing System: Laser proximity Fuse, Mechanical Impact Fuse**

**Response: Initial target detection to missile launch – 5 secs**

**Mobility: Cross Country Speed = 60 KPH**

**Cruising range = 400 Km**

**Survivability Move = 750m/90sec**

**Lethality: Greater than 9 cm armor penetration**

**Reliability: Mean-time-between-system-abort (MTBSA) > 100 Hrs**

**Mean-time-to-repair (MTTR) < 2 Hrs**

**Missile: Missile capacity – 8 missiles**

**Mach 3+**

**Maneuverability – 60g’s**

**Identify the CTPs that apply to the COIs (may have to make up some CTPs and adjust some numbers)**

**9. Is the (UAV Name) interoperable with other C4I systems?**

**Accuracy: Target location is within 10 m**

**10. Will the (UAV Name) detect the threat in a combat environment at adequate range to allow successful engagement?**

**Detect Range: max 70 km**

**Detect Speed: within 1 km/hr**

**11. Will the human factors aspects of the (UAV Name) support completion of the aircrafts mission? (Human Factors)**

**Video clarity: Screen resolution is 10 megapixel/square inch**

**12. Is the (UAV Name) firepower satisfactory for the strike mission? (Compatibility)**

**Lethality: Greater than 9 cm armor penetration**

**Rate of fire: Four missiles launched in 30 seconds**

**Identify the function of each COI and the capabilities of each function**

|  |  |
| --- | --- |
| **COI/Function** | **Capability** |
| **9. Interoperability** | * **Work with sensors** * **Work with navigation systems** |
| **10. Targeting** | * **Detect enemy threat** |
| **11. HSI** | * **Ability to interface with UAV** |
| **12. Firepower** | * **Ability for rapid engagement** * **Ability to take out enemy threats** * **Ability to self-destruct** |

**Identify the Test Objectives for each COI in the Test Objective Matrix (TOM). The rest of the COIs will be Test E-1 to E-8 (E=Effectiveness, S=Suitability).**

|  |  |  |
| --- | --- | --- |
| **COI** | **Test Objectives and Sub-Objectives** | **Test** |
| **9. Interoperability** | **To determine the accuracy of the data transfer** | **S-1** |
| **10. Targeting** | **To determine the accuracy of the sensors**   * **Range (E-9a)** * **Speed (E-9b)** | **E-9** |
| **11. HSI** | **To determine the clarity of the video** | **S-2** |
| **12. Firepower** | **To determine the impact of the weapons**   * **Lethality (E-10a)** * **Rate of fire (E-10b)** | **E-10** |