

LIST OF THRUST AREA/TECHNOLOGY GAPS

1. Directed Energy Weapons

- Coherent Beam Combining of Lasers
- High Power Lasers
- Microwaves
- Particle Beams

2. Stealth

- Material (Base, Paints, Adhesives)
- Redesign (Fuselage, Wings, Flaps, Cockpit)
- Multistatic Radars
- Schleiren Signature

3. Electronics

- Faster Processor
- Operating Software's
- Wide Band Operations
- Sensors & Actuators
- Next Generation Devices
- Antenna
- High Power Devices
- VLSI & MEMS
- Fault Tolerance Computers
- THz
- Photonics
- Night Vision

4. Quantum Computing

- Single Photon Generation
- Single Photon Detection
- Photonic Interconnects
- Quantum Key Distribution (QKD)
- Quantum Communication

5. Security

- Cryptanalysis
- Algorithms
- Cyber Systems: Hardware & Software
- Data Mining
- Decision Support