

## Requirements for Scenario Planner

### Level One

1. Display a map of area of interest.
2. Ability to display overlays over the general map.
3. Ability to draw different shapes and place them anywhere on the map.
4. Ability to run stand alone on a PC or Laptop
5. The ability to draw scenarios given only way points.
6. The ability to draw scenarios from a starting point given only range and bearings from that point.
7. The ability to display instrumentation coverage.
8. Be able to change scale of area of interest.
9. Easy to use.

### Level Two

1. Ability to transition to real-time range display.
2. Coordinate launch times for actual time of arrival from different types of vehicle.
3. Simulate launch times and be able to change other vehicle launch time to correspond to time of arrival.
4. Ability to input information on various types of vehicles. Performance characteristics, etc.
5. Generate nominal trajectories based on information input. Must match those provided by APL or which ever organization is providing
6. Simulate flights.
7. Display range sensor status
8. Flag out of parameters sensors
9. Flag out of parameters launch or target vehicle performance.
10. Display decision aids for out of parameters functions.
11. Be able to work backwards – given a specific meeting time, give the planned launch times.
12. Given various launch positions/aspect angles, accurately project a vehicle's performance.
13. Accept NTADS GOG files and plot these.
14. Generate own GOG files and export in NTADS format.
15. Display velocity Vs time.
16. Be able to coordinate the flight of x number of vehicles.
17. Display sensors in different colors
18. Display vehicle using NTDS symbols with speed leaders

### Level Three

1. Monitor the real time flight and plot it against the projected.
2. Used to build the VID/SID tables.
3. Be the source of the IP instead of waiting for it to be generated.

### Level Four

1. Post operation replay from a given time.
2. Post operation plots of given parameters.