UAV Planner

UAV Planner is an advanced planning and scheduling application that provides automated route planning and sensor tasking for unmanned aerial vehicles. UAV Planner allows operators, designers, and engineers to model their UAV systems and perform operational scheduling and analysis using COTS software. UAV Planner is based on proven satellite collection planning software from Orbit Logic.

- Automated flight/route planning
- Restricted areas and terrain constraints
- Configurable aircraft and sensors
- Multi-vehicle collaboration
- Image collection planning
- Interactive 3D map visualization and animation
- Order management and fulfillment tracking
- In-flight re-tasking

3-D route plan view in STK

UAV Planner Ops Concept Overview

- Configure aircraft, sensors, and airstrips
- Define imaging orders
- Define sorties
- Plan sorties using algorithms or manual planning
- Transmit sortie plans for execution
- Replan sortie during flight as needed

Key Features

- Configurable aircraft and sensors
- Add and modify aircraft and flight models
- Define new sensor types
- Specify sensor packages on each aircr

Multi-vehicle collaboration

- Integrated order database
- Inter-sortie collaborative order fulfillment tracking
- Fleet view – multi-aircraft / multi-sortie animation

Automated Planning

- UAV Planner will automatically plan the flight path and collection schedule for an aircraft sortie within aircraft capabilities to maximize the value of collected imagery
- Multiple algorithms compete to optimize each sortie plan
- Prioritize or defer targets to influence algorithm solution
- Automatic plan adjustments fix violation

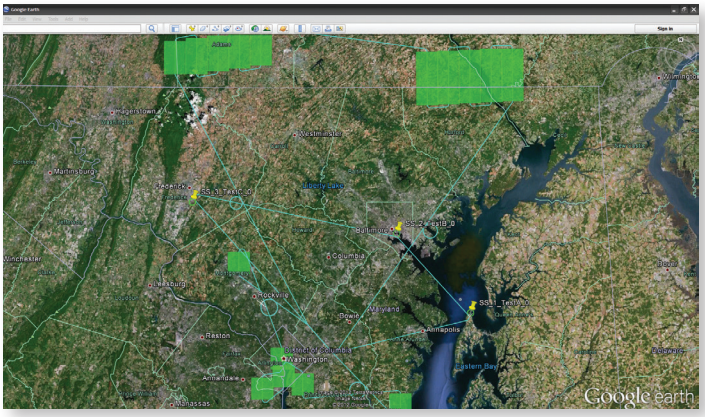
Manual Planning and Analysis

- Manually create or edit plans
- Constraint models notify the operator when a system or mission constraint has been violated

In-Flight Re-Tasking

- Re-plan starts from current aircraft position
- Algorithms optimize plan using the dynamically changing order database and restricted areas
- Maps display new and original plans

Fleet View in Google Earth



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