THE AIRCRAFT FLEET

UV 18-A Twin Otter

Pelican (2)

Sentry BK 30
UAV (5)

SPA-10
FACILITIES:

- Marina Facility
  - 3500 ft runway - manned operations only
  - 30,000 sq ft maintenance hangar
  - Instrumentation and Calibration Laboratory
  - Maintenance and Payload integration shops
  - Offices
• Camp Roberts Facility
  - Friendly airspace for UAV testing and training (R2503).
  - Military ground maneuvers (equipment, personnel)
  - 3500 x 60 ft runway
  - 2000 sq ft hangar
  - Office Space
CIRPAS Research Instrument Example
Smart Towed Vehicle
NEW INSTRUMENTATION
Stabilized Radiometer Platform
NEW INSTRUMENTATION
MICRO-SIZED AIR-LAUNCHED EXPENDABLE METEOROLOGICAL SENSOR & CHAFF
A-10 has 11 hard points on wings and belly where 8000 lbs of instruments may be suspended. It has a belly bay where 2200 lbs of stuff may be mounted.

Engineering test flights are planned in mid-year 2013 (including tests of baseline instruments and communication). Progressive science flights are planned in latter half of 2013.
<table>
<thead>
<tr>
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<th>SPA-10</th>
<th>Storm T-28</th>
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<tbody>
<tr>
<td>Max sampling altitude</td>
<td>~30,000 to 35,000 ft</td>
<td>23,000 ft</td>
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<tr>
<td>Max on-station time with 115 mi mission radius</td>
<td>~2.75 h at 10,000 to 30,000 ft</td>
<td>~1 h at 20,000 to 23,000 ft</td>
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<tr>
<td>Payload</td>
<td>2,200 lb internal, 8000 lb external (more if altitude is limited)</td>
<td>500 lb external</td>
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<td>Pylons</td>
<td>7 pylons with triple ejector racks plus 4 Additional pylons for a possible total of 25 instrument pods</td>
<td>2 each single pod pylons + 2 modified wingtip instruments</td>
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<tr>
<td>Mission Radius w/ 1h on-station at altitude</td>
<td>400 mi with 1 h at 30,000+ ft</td>
<td>100 mi with ~1 h at 20,000 ft</td>
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<tr>
<td>Ferry Range</td>
<td>1040 mi internal fuel only; 1500 mi with single external tank</td>
<td>500 mi</td>
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<tr>
<td>Payload Power</td>
<td>15 kW AC (fully isolated from aircraft power) from hydraulic generator</td>
<td>2 kW DC (fully isolated from aircraft power) from secondary generator on engine</td>
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</table>
Sensor / Payload Descriptions:

- EO/IR

Operational Niche, Key value to warfighter:

- Med Endurance, Med payload platform.
- Small Footprint, Easily transportable, Ruggedized UAV
GROUND BASED ASSETS

MWR-05X Mobile Storm Radar
TPQ-37 Mobile Weather Radar

S-Band Full Phased Array
Peak power: 120 KWatts
PRF: 3 kHz
Range Resolution: 150 m
Dwell time (integration time): 250 ms
Scan time: 4 beams per second