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# 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





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# CIRPAS FACILITIES:

- **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





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# Twin Otter



TODWL two axis scanner



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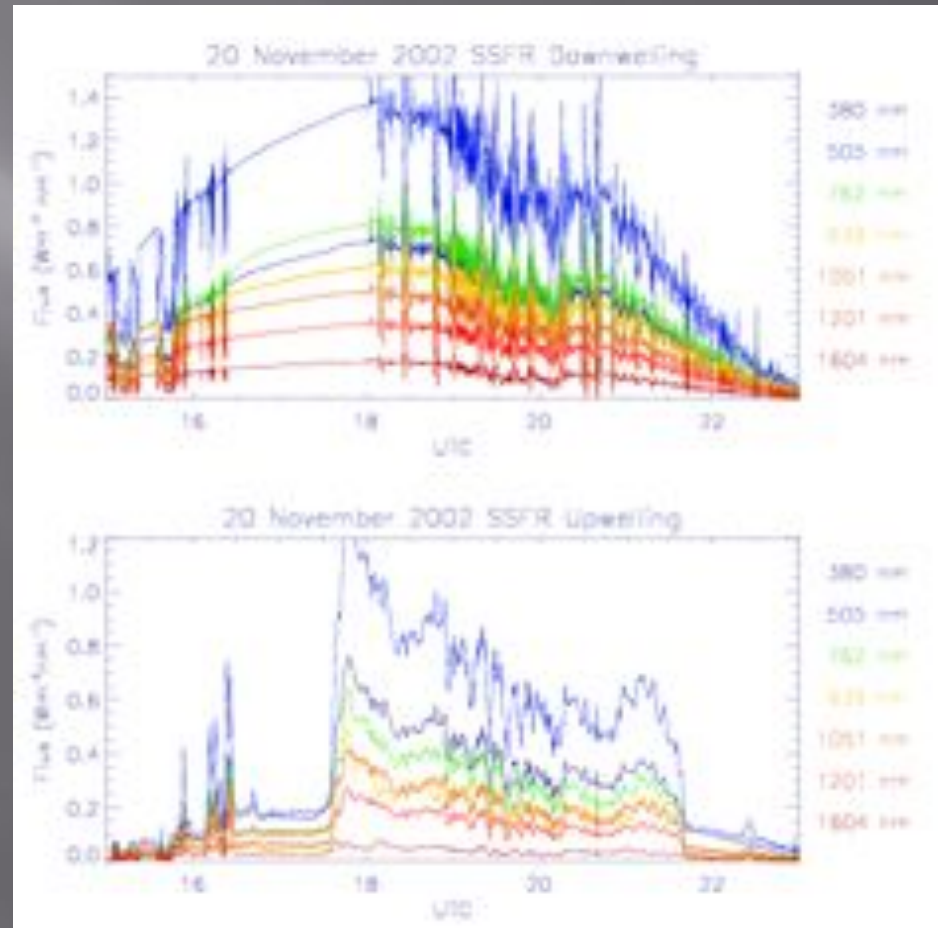
## CIRPAS Research Instrument Example Smart Towed Vehicle





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# NEW INSTRUMENTATION Stabilized Radiometer Platform





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# NEW INSTRUMENTATION

## MICRO-SIZED AIR-LAUNCHED EXPENDABLE METEOROLOGICAL SENSOR & CHAFF





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# Storm Penetrating A-10



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







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# Storm Penetrating A-10

	SPA-10	Storm T-28
Max sampling altitude	~30,000 to 35,000 ft	23,000 ft
Max on-station time with 115 mi mission radius	~2.75 h at 10,000 to 30,000 ft	~1 h at 20,000 to 23,000 ft
Payload	2,200 lb internal, 8000 lb external (more if altitude is limited)	500 lb external
Pylons	7 pylons with triple ejector racks plus 4 Additional pylons for a possible total of 25 instrument pods	2 each single pod pylons + 2 modified wingtip instruments
Mission Radius w/ 1h on-station at altitude	400 mi with 1 h at 30,000+ ft	100 mi with ~1 h at 20,000 ft
Ferry Range	1040 mi internal fuel only; 1500 mi with single external tank	500 mi
Payload Power	15 kW AC (fully isolated from aircraft power) from hydraulic generator	2 kW DC (fully isolated from aircraft power) from secondary generator on engine



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# Sentry Block 30 UAS

## Operational Niche, Key value to warfighter:

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



## Sensor / Payload Descriptions:

- EO/IR



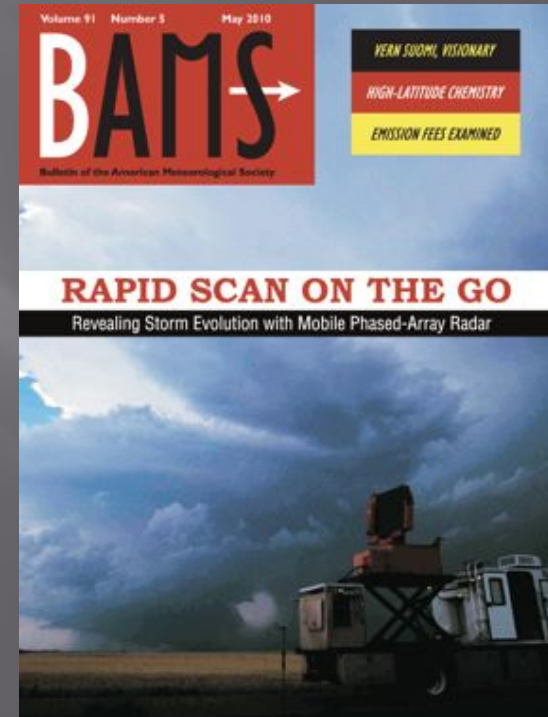


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# GROUND BASED ASSETS



**MWR-05X Mobile Storm  
Radar**





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# GROUND BASED ASSETS



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

**TPQ-37 Mobile Weather  
Radar**