GTMP-BKT **AirSTAR Operations Plan for Allen C. Perkinson/BAAF Airfield**
Blackstone, Virginia
100 W. Elm Street, Blackstone, Virginia 23824

Scope: The AirSTAR Generic Transport Model program will be utilizing Blackstone airfield for the purpose of pilot training for various Unmanned Aero Systems (UAS's). In order to support the operation safely it is required that procedures be put into place that minimize risk to personnel, personal property, and government equipment. This procedure meets the provisions for use of the airfield as endorsed and authorized by the NASA LaRC ASRB and the modified Flight Safety Release (FSR) for model flights.

Purpose: The purpose of this procedure is to provide a list of items that must be implemented as part of the standard operation of the AirSTAR GTM pilot training daily activity for Blackstone Airfield. These items include the communication, preflight set-up, and flights for daily operations at the airfield.

Communication:

1. For planning and scheduling, the AirSTAR GTM Flight Operations will contact the Allen C. Perkinson/BAAF airport manager by phone or e-mail to coordinate with the airfield schedule each week. http://www.fltplan.com/AirportInformation/BKT.htm

Point(s) of contact:
Airport Manager: (b) (6) ; 434-292-2193, email "(b) (6) (b) (6) >
LAFB Weather: 757-764-5908, Ft. Eustis Weather: 757-878-3343, or http://usairnet.com/cgi-bin/launch/code.cgi?sta=KPHF&model=avn&state=VA&Submit=Get+Forecast

2. File a Notam prior to operations according to the following procedure:

Filing of Notams, the procedure is as follows: Leesburg Flight Service

1) Call 1-866-225-7410 and press 9 to talk to the Notam individual
2) Notam request may be done no more than 3 days in advance but can be done up to the last minute. (However, they prefer a 1-day advance filing)
3) Provide the Flight Service Station briefer with the following information:
   a) Notam for Allen C. Perkinson/BAAF airfield
   b) Location of airfield (Radial and NM) from nearest VOR or Tacan
   c) Effective Time in Zulu that we will be operating the UAS's – **(local+5hrs)**
   d) Radius in Nautical miles that we plan to operate within operations area (Suggest a 2.5NM radius)
   e) Altitude that we will be working (1500ft and below)
   f) Record Notam number filed if available
   g) State tower frequency for monitoring and communication @ 126.2 Mhz

Preflight Set-up:

1. Pilot barriers will be utilized for peripheral protection. These must be in place prior to model take off. Pilot will remain between barriers during the entire operation of the model (take-off through landing).

2. Prior to each flight the tower trainmaster radio frequency 126.2 Mhz will be monitored.

3. Prior to each flight of the day, the transmitter radio frequency will be scanned for possible radio interference.

Flights:

1. During model flights, the pilot will maintain model operation below 1500 feet AGL.

2. Minimum FAA cloud ceiling requirement is 2000 ft. AGL plus intended flight altitude. For example for a flight altitude of 500 feet, the minimum cloud ceiling must be 500 ft. + 2000 ft. (2500 feet). Minimum visibility for operation is 5 miles.

3. Three spotters are required during model flights; one spotter will stand behind the pilot to advise the pilot on model position around the field perimeter, model altitude, and any local aircraft activity. The spotters will communicate and direct the pilot to change model direction or altitude as necessary in order to keep the model within the visual boundaries of the flying area and altitude limit.

3. A pilot will not take off within 15 minutes of aircraft scheduled arrival or departure. During model flights, the spotters will direct the pilot to land immediately upon illumination of the landing lights.

4. The UAS vehicles listed on the next page are approved by the ASRB for Flight Safety Release.

AirSTAR / GTM Vehicles Approved for ASRB Flight Safety Release

Vehicle	Manufacturer	Wingspan	Wing Area	Length	Weight (Dry)	Fuel Capacity	Fuel Type	Gross Wight	Speed (mph)	Propulsion	Total Thrust	Thrust : Weight	Mission	Flight Time	Wing Loading	ASRB
Identification / Owner	Name	inches	sq. inches	inches	lbs	ounces	K1, Nitro, Gas	lbs	mph	Type	lbsf()	Ratio	Profile	Minutes	oz./ft2	Approval
DV8R Turbine Trainer / VCU	PCM Models	84.0	UNK	87.0	27.0	100	K1	32.2	150	JetCat P-80	18	0.56	GTM Autonomous	10	~50	10/19/2005
KingCat / NASA	BVM Jets	94.0	1556	84.0	33.0	163	K1	41.5	200	JetCat P-120	27	0.65	GTM Pilot Training	12	60.0	3/10/2004
Ultra Stick 120 / NASA	Hanger 9	76.0	1230	60.6	11.0	22	Nitro	14.0	85	OS 1.4 (3.5 HP)	~10	0.71	Pilot Training / Safety Swit	12	27.7	5/13/2003
F100F / NASA	BVM Jets	69.0	1223	83.5	38.1	203	K1	48.6	> 200	Olympous 450	43	0.71	GTM Pilot Training	8	90.4	10/27/2004
FJ2 Fury / NASA	BVM Jets	37.5	738.72	37.5	19.0	72	K1	21.6	175	JetCat P-70	16	0.74	GTM Pilot Training	8	67.5	4/21/2003
L1011 S1 / NASA	PCM Models	85.0	1014.6	86.0	32.8	124	K1	37.9	135	JetCat P-120	27	0.71	GTM Pilot Training	12	86.1	6/10/2003
L1011 S2 / NASA	PCM Models	85.0	1014.6	86.0	33.3	124	K1	39.7	135	JetCat P-120	27	0.68	GTM Pilot Training	12	90.2	6/10/2003
L1011 Mod2 / NASA	PCM Models	85.0	1014.6	86.0	46.7	256	K1	60.0	135	2 ea. JetCat P-70's	32	0.53	GTM Pilot Training	12	136.3	10/1/2004
GTM T1 / NASA	NASA	94.0	868.32	96.0	43.8	218	K1	55.0	120	2ea. AMT 180's	44	0.80	GTM Pilot Training	13	145.9	1/18/2005
33% Edge 540 / NASA	Hanger 9	97.5	1730.6	85.0	22.5	32	Gas	25.0	60	Zenoah 80 (6 HP)	~18	0.72	AirSTAR Electronics Test	10	33.3	10/19/2005
T33 / NASA	BVM Jets	72.0	810	69.0	22.6	81	K1	25.6	180	AMT 180 SP	22	0.86	GTM Pilot Training	8	72.9	6/10/2003
MIG 117 / NASA, VCU	Goldberg	67.0	800	74.0	13.3	32	Nitro	15.0	74	OS 91 (2.8 HP)	~12	~.5	GTM Autonomous	20	43.2	7/13/2004
Eurosport / VCU	Composit-ARF	66.0	UNK	94.0	24.0	120	K1	30.0	150	JetCat P-120	27	0.90	VCU Operations	12	~50	2/22/2005
33% J3 Cub / NASA	ModelTech	132.0	2508	90.0	24.0	32	Gas	30.0	50	Zenoah 80	~18	~.5	AirSTAR Electronics Test	10	27.6	6/29/2004
Viper	Great Planes	52.0	504	41.3	3.0	6	Nitro	3.4	120	OS .46	~4	>1	GTM Pilot Training	8	15.5	4/21/2003