***T-44A Briefing Guides***



EVENT: **I4105**

**SYLLABUS NOTES:**

Emphasis for I4105 is VOR and TACAN approaches.

c. Minimum of 4 approaches per event and include at least 2 procedure turn approaches. Normal two-engine approaches should be emphasized in this block, but may introduce minor malfunctions.

d. Each event shall include a minimum of one approach with the FD and one without.

e. Holding should be accomplished and graded on at least two events, one of which should be GPS holding.

f. All events shall include a missed approach and should include at least two circling missed approaches in the block.

g. One approach per event with IP as PF and SMA as PM, emphasizing CRM callouts and radio communications.

h. SMAs shall bring one DD 175 flight plan per SMA and one DD 175-1 per aircraft for their planned profile to every brief. SMAs shall draft a flight plan that will execute the required maneuvers for the events.

**SPECIAL SYLLABUS REQUIREMENTS:** IP demonstrate SSE approach to SSE missed approach.

**DISCUSS ITEMS:** Pilot Controlled Lighting, Lost Comm. (FIH/LOA) (IFR – VMC vs. IMC), Windshear, Visual Approach, Partial Panel Approach Procedures, Needle Only Approach Procedures, SSE Approach Procedures.

**Pilot Controlled Lighting –** Depicted using negative symbology as a white L inside a black oval. Next to a frequency on your IAP.

AIM Info –

Para 2-1-8

b. All lighting is illuminated for a period of 15 minutes from the most recent time of activation and may not be extinguished prior to end of the 15 minute period (except for 1−step and 2−step REILs which may be turned off when desired by keying the mike 5 or 3 times respectively).

**c.** Suggested use is to always initially key the mike 7 times; this assures that all controlled lights are turned on to the maximum available intensity. If desired, adjustment can then be made, where the capability is provided, to a lower intensity (or the REIL turned off) by keying 5 and/or 3 times. Due to the close proximity of airports using the same frequency, radio controlled lighting receivers may be set at a low sensitivity requiring the aircraft to be relatively close to activate the system. Consequently, even when lights are on, always key mike as directed when overflying an airport of intended landing or just prior to entering the final segment of an approach. This will assure the aircraft is close enough to activate the system and a full 15 minutes lighting duration is available. Approved lighting systems may be activated by keying the mike (within 5 seconds) as indicated in TBL 2−1−3.

FIH has the information and visual depictions of airfield approach lighting and stuff. Good stuff. B-30.

**Lost communications (FIH/LOA) (IFR – VMC vs. IMC) –**

FIH Lost Comm – Route **A**ssigned. Last assigned by ATC.

**V**ectored. To the fix, route, or airway specified in the vector clearance.

**E**xpected. ATC has advised may be expected in a further clearance.

**F**iled. By the route filed in the flight plan.

Altitude **A**ssigned. The altitude or flight level last assigned.

**M**inimum. MSA for IFR flight.

**E**xpected. Altitude ATC advised may be expected in further clearance.

VFR- Land as soon as practicable.

IFR – if assigned a fix, leave the fix as close to EFC time as possible or land as close to estimated time of arrival as possible. If not assigned a fix, proceed to a fix where an approach begins and proceed either at EFC time or ETA as possible.

LOA Lost Comm – If unable to proceed VFR attempt to contact NGP Tower and:

1. Climb to last heading or route assigned, maintain 1,600’
2. Comm can’t be established, w/in 3 mins., climb to 2,600’.
3. After 2,600’ go to fix serving NGP and execute approach.

In GCA Pattern:

No comm. After 1 minute, go to fix for NGP and execute approach.

On GCA Final:

Contact Tower, if unable, intercept an instrument approach for the runway in use and execute an approach. If unable, climb 1,600’ and go to fix for NGP approach.

**Windshear –**

Wind shear is defined as a sudden change in wind speed or direction over a short distance in the atmosphere. This can be a horizontal change going from a headwind to a tailwind (as in descending and all of a sudden your headwind shifts to a tailwind and you lose IAS and lift). It can also mean a shift in the vertical plane (as in a microburst where you hit a wall giving you lift followed by a severe downdraft). Often turbulence is associated with it and the greater the change in speed or direction in a given area, the more severe the turbulence will be.

Major causes of wind shear are the jet stream, land and sea breezes, fronts, inversions, and thunderstorms.

Make a radio call when able. Avoid the use of the terms “negative” and “positive” to describe the windshear in your PIREP. The recommended method for wind shear reporting is to state the loss or gain of airspeed and the altitudes at which it was encountered.

Comply with NATOPS procedure and get the aircraft under control. Recognize it by seeing a substantial, uncommanded increase/decrease on your VSI and altimeter and airspeed.

**Partial panel approach/ESIS procedures –**

Remain VMC and land if this is an option.

Secure the big 5 (windshield wipers, windshield heat, AC, heater, vent blower) and brief wet compass characteristics.

Advise controller and request a no-gyro approach.

Turn at standard rate turns until advised not to. Initiate turns immediately and stop them immediately as instructed.

**Needle only approach procedures –** Choices are VOR or TACAN.

VOR – Fly using RMI needles. Just like flying an NDB approach.

TACAN – Use the needle on the HSI for approach. Same as NDB.

For inbound course intercepts, put heading bug on the inbound course. The head will fall to the heading bug on an intercept heading.

For outbound put heading bug on outbound course. Tail will rise to bug.

**SSE approach procedures –**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Precision** | **Non-Precision** | **Radar Approach PAR** | **Radar Approach ASR** |
| **SSE Configuration** | 1/2 dot below glideslope at glideslope intercept altitude | In safe position to land | 10 sec gear warning | (1) 10 sec gear warning  (2) Safe position to land |

For circling, configure when you are on a normal glidepath to the landing runway. This is not always the 180. If you are lower than your normal pattern altitude, delay your descent and configuration until you intercept your normal glide path.

On the ASR you have the option to configure with a 10 second gear warning if you are going to use recommended altitudes and descend on a stable glide path. If you get well below those altitudes, you most clean up the gear until in a safe position to land.