

UMFO INTERMEDIATE (1542.163) Event Guidance

General items common to all events:

- All X's are only 1.5
- Now using Cold Mic. Switch to cold mic when you bring the gear and flaps up. Switch back to hot mic after lowering the gear (in the terminal area), and anytime for SOF.
- 5 touch and go's from the landing pattern required for each block (except F4201).
- Fly at 270 KTAS instead of 240 KTAS for enroute travel.
- SNFOs brief and debrief the entire flight. IPs fill in gaps.

Single aircraft INAV (I4301-2)

Mission objectives:

- **Plan, brief, and execute a single aircraft instrument flight at 270 KTAS mostly in the High Altitude structure.**
 - Fewer turnpoints calls in the high altitude structure allows student to get ahead of the aircraft. Focus on details like: entering next frequency and navaid, anticipating the next radio call, have the next chart out and ready prior to needing it, studying the approach plate enroute if necessary, etc.

Training Objectives:

- **To familiarize the SNFO with the Enroute High Altitude structure.**
 - Fly Enroute High Altitude Structure for at least one leg. Hi-Altitude Approaches optional, but brief it thoroughly on deck. All MIFs are all a 4 now, so performance must up to CTS to pass EOB.
- **To familiarize the SNFO with GPS navigation and procedures.**
 - 2 approaches per flight. Required: GPS holding, GPS approach, PAR/ASR.
 - Make one flight a GPS flight (only one). They load the flight plan, navigate with it, load the approach, and check the RAIM (STA 5 page). Take away their jet log on this flight, and give them a sheet with Leg Distance, Total Distance Remaining, and EFR at each point. They should derive the rest of the information for the turnpoint calls from actual GS and FF. Ensure they are navigating from the chart. SNFOs should always back up their position with nearest NAVAID. "Fail" their GPS on one leg and make them switch to the backup nav source while you "troubleshoot." Return the GPS once the objective is met.
- **Re-gain SNFO proficiency in the landing pattern.**
 - 5 x landing pattern. Knock off the rust on the first flight. Recommend reviewing it in the brief.
- **Gain proficiency in professional briefing.**
 - Student briefs entire flight. SNFO should have a basic working knowledge of emergencies by now. Focus on briefing the conduct of the flight exactly as they expect it to happen.
 - Use the guide. Debrief should only focus on what did NOT go according to brief.

3 options for your route (future stereo routes):

Route	I/V	Type	Depart	TAS	Alt	Route of Flight	To	ETE	TTE
1	IFR	TEX2/G	NPA	270	210	JAYDI INBRD CEW MGM RMG GQO	CHA	1+15	1+15
	IFR	TEX2/G	CHA	270	180	DUMBB RMG MGM CEW PENSI NPA	NPA	1+15	1+15
<i>2 approaches at Chattanooga. 1 approach at PNS, 1 at NPA.</i>									
2	IFR	TEX2/G	NPA	270	200	TEEZY JERYS PLEBE MCB MLU	MLU	1+05	1+05
	IFR	TEX2/G	MLU	270	190	MCB PCU HSA (R D 0+20 HSA NPA)		0+45	
	IFR		HSA	270	150	GPT VICKI JERYS TEEZY NPA	NPA	0+25	1+30
<i>2 approaches at Monroe. 1 approach at Stennis, 1 at NPA.</i>									
3	IFR	TEX2/G	NPA	270	200	TEEZY JERYS GCV MEI (R D 0+20 MEI TCL)		0+40	
	IFR		MEI	270	130	NOSRY LDK	TCL	0+20	1+20
	IFR	TEX2/G	TCL	270	200	MEI SJI PENSI NPA	NPA	1+00	1+00
<i>1 approach at Key Field, 1 at Tuscaloosa; 1 approach at PNS, 1 at NPA</i>									

Section INAV (F4101-4)

Mission overview: Administratively move a section from point A to point B using instrument navigation.

Mission Objectives:

- **Introduction to section instrument navigation at 270 KTAS. High or Low Altitude Enroute Structure.**

Training Objectives:

- **Gain proficiency with section Admin tasks.**
 - One SNFO should lead the entire flight. Lead changes only as necessary to accomplish training objectives.
- **Each SNFO needs 4 approaches as Lead and 4 as Wing. Average of 2 per flight.**
 - Each SNFO should see the Lead Low, Wing T&G, Section Missed Approach, and Section Drag from the Lead and Wing position.

Admin:

- **Preflight**
 - Normal NATOPS preflight
 - Note position of other aircraft
- **Line/Taxi**
 - Normal per FTI
- **Takeoff**
 - SNFO should also clear the groove crossing the hold short and recommend runway side for takeoff.
 - SNFO selects cold mic once aircraft clean.
- **Departure**
 - Lead SNFO should direct cruise or ATC spread (co-altitude combat spread) position for Wingman as appropriate. Consider departure procedures and weather.
- **Enroute Procedures**
 - Standard INAV procedures in each cockpit. Emphasize proper formation comm. procedures. Wing SNFO should maintain high navigation SA.
 - Lead SNFO should check Wing's fuel status at least every 20 minutes.
 - If traveling in ATC spread, remember that Wing is responsible for deconfliction. TacForm geometry works co-altitude. Check turns IAW the navigation do not need to be called. The Wing SNFO should direct his pilot to be sucked or acute prior to the check turn as necessary to maintain position. For 45 turns or Tac turns, the Lead SNFO should direct the call over Tac as normal.
- **Pre-Descent/Terminal Area**
 - Get ATIS – develop recovery gameplan. Notify Wingman as necessary.
 - Individually: review field brief & approach brief (give new ones if necessary), and complete Descent Checklists.
 - Lead/Wing SNFOs ensure Wingman positioned correctly for approach runway.
 - Switch to hot mic when lowering the gear. Re-select cold mic once aircraft clean.
 - SNFOs should see Lead Low Wing T&Go, Section Missed Approach, and Section Drag from Lead and Wing positions over the 4 flights. Section Drag is only to a full stop.
 - Section break is not a plus item, but an option if training objectives have been met. The request to ATC for a “depart and reenter” or “vectors to the initial” should accomplish this.
 - Lead SNFO should inform ATC that you want to go to “the Tower pattern” if there intending to bounce after approaches. In the landing pattern, Wing aircraft takes Lead's KATT callsign + 1.
- **Landing**
 - Landing in formation, Lead should take downwind side. SNFOs should recommend landing side. Lead SNFO gains landing clearance for the section. Wing SNFO reports “dash-2, gear” after Lead reports gear status.
 - Wing IP makes “slow” call.
- **Post Landing**
 - Lead SNFO will not direct a switch to Tower on GCA rollout until after a “slow” call is received.
 - Lead clears the runway and switches to Ground to call for taxi clearance. Wing auto switches to ground when clear of the runway.

- SNFOs recommend taxi side to IP. Conduct individual checklists.
- Wing SNFO reports aircraft status to Lead. Lead SNFO calls Base with “in and up/down” status for flight.

TacAdmin: N/A

Mission Conduct:

- **Route of flight**
- **Instrument Approaches**
- **Airfield Study**

Tac Form (F4201)

Mission overview: Execute individual takeoffs to join up airborne and complete tactical maneuvering in a working area.

Mission Objectives:

- Safely and effectively coordinate a join-up using a Georef/Nav rendezvous.
- Execute called and uncalled TacForm turns as Lead and Wing.

Training Objectives:

- Gain proficiency in executing section Admin and TAC Admin tasks.
- Ensure SNFO understanding of maneuver geometry and altitude safety WRT rendezvous' and tactical formation.
- VFR section recovery, weather permitting (3 sec break, fan break).

Admin:

- **Mission Planning**
 - Both aircraft file identical individual clearances. Plan for a working area clear of clouds.
 - Wingman must call BaseOps to input flight plan. Add one to Lead's call sign.
- **Preflight**
 - Normal per FTL.
- **Line/Taxi**
 - SNFOs get individual ATIS and clearance. Wingman gives an "*up and ready*" call over Tac.
 - Lead initiates comm check and Nav check. Then says, "*With no questions, ready to taxi.*"
 - Each SNFO calls Base and Ground for individual taxi.
- **Takeoff**
 - Wing calls for takeoff no sooner than 2 minutes after Lead's takeoff roll.
 - SNFO selects cold mic once aircraft clean.
- **Departure**
 - Lead executes IFR/VFR game plan to proceed to working area/rendezvous point.
 - Wing navigates to Lead's working area. If ATC clearance into working area is required (e.g. MOA), request to "*follow my playmate, KATT 6XX.*" ATC may ask you to accept MARSAs (Military Accepts Reduced Separation of Aircraft). If so, answer "*yes.*"
- **Area Entry**
 - Lead establishes working area for the flight. Inform Wing of deviations from the briefed plan.
 - For the R2908, ask Pensacola Departure for the "*status of the 2908.*" If cold, inform them you intend to proceed there VFR. When able, cancel IFR and switch to area common, 362.8. Ask "*99, anybody working R2908?*" From there, announce your intentions to work that area for the next ___ minutes or deconflict with other aircraft already working it. If the R2908 is hot, you will have to flex to another working area.
 - Request two low blocks when working in the MOA.
 - If using Area 1, deconflict using BTN 15.
 - Lead SNFO directs frequency changes as appropriate for working area.
- **Area Exit**
 - Lead SNFO directs switch to ATC frequency and directs "*Fence Out.*"
 - Lead SNFO check out of the area as a section. Either announce your intentions on area common, "*KATT 6XX, flight of two, departing R2908 to the North,*" or exit the MOA per normal Contact procedures on BTN 5 VHF.
- **RTB**
 - Nav plan for RTB
 - ATIS plan
 - Recovery plan.
 - Lead/Wing ensure Wingman correctly positioned for recovery 5 nm prior to initial.
 - Switch to hot mic when lowering the gear. Re-select cold mic once aircraft clean.

- **Landing / Post Landing**
 - Same as Section INAV

Tactical Admin:

- **Fence Checks**
 - Lead SNFO initiates “Fence In” and G-Warm once initial rendezvous is complete.
- **G-Warm**
 - Combat spread, ≥ 220 KIAS.
- **Speed & Angels**
 - TacForm turns performed at 200 KIAS.
 - Lead SNFO holds call for next turn until Wing within +/- 10° of abeam.
- **KIO/Terminate**
 - Lead SNFO announces intentions for called or uncalled turns. Terminate at end of each set.

Mission Conduct:

- **Georef/Nav Rendezvous**
 - Brief planned rejoin point, altitude, turn direction, and airspeed. Inform Wing of any airborne changes to the brief.
 - SNFOs navigate to the rendezvous point and make required radio calls (e.g. “point one”, “visual”).
 - Wing SNFO reports airspeed/closure and altitude deviations during rendezvous. Maintain at least 500’ of stepdown until on bearing line with closure under control. Then step up for a co-altitude rendezvous.
- **TacForm**
 - Lead SNFO calls the turns. Wing IP responds.
 - Perform one of each turn type - first called, then uncalled. Use extra turns as necessary for area management.
 - TAC turn into & away
 - 45 turn into & away
 - In-place turn into & away
 - Cross Turn
 - Shackle
 - SNFOs direct turns and roll outs to make turn geometries work.
- **Tail Chase Exercise**
 - Lead SNFO direct “90 left (or right) for tail chase, go” to place Wingman in trail.
 - Wing IP calls “clear to maneuver.” Both aircraft set max power.
 - Lead IP maneuvers while Wing IP maneuvers to stay 1000’ in trail at 5-7 o’clock. SNFOs must call Wingman position to IP and monitor pilot airwork/airspace boundaries.
 - Ends with Terminate call.
- **Lead change**
 - Rejoin to parade and signal Lead change via hand signals.
- **Lost Sight Exercise**
 - Initiated with Lead in a turn AND a climb/descent. Lead will continue the climb/descent for at least 1000’ of separation from Wing.
 - SNFOs make all required radio calls for the exercise. Execute the full 30 seconds of separation. (In an actual lost sight scenario, IPs will make the radio calls. SNFOs will back up their execution and airwork.)
 - At the end, Lead SNFO will direct a new rendezvous point and clear Wingman to rejoin.
- **Repeat Sequence (Georef/Nav Rendezvous, TacForm, TailChase, Lead change)**

Section VNAV (F4301-3, F4490)

Mission overview: Execute a section low-level ingress using the VR-1024.

Mission Objectives:

- **Coordinate effectively within a section to safely transit to/from and execute Low-Level Route.**
 - The same SNFO should not lead both flights out of NAS Pensacola (i.e. F4301 and F4303).
- **Plan and execute a Low Altitude Ingress. Accurately update ETAs while visually navigating to acquire the target.**

Training Objectives:

- **Manage timeline and airborne profile to meet route entry time.**
 - Drive the brief, walk, and takeoff times. Adjust airspeed in flight as necessary.
- **Low-Level Navigation using the MTR system.**
 - Use IAW AP-1/B. Must remain within route structure.
- **Off target task management**
 - Prioritize. Aviate, Navigate, Communicate.
- **2 approaches (1 Lead/1 Wing) and 5 touch & go's in block.**

Admin:

- **Mission Planning**
 - Route entry times drive takeoff time.
- **Preflight/Line/Taxi**
 - Normal per FTI
- **Takeoff**
 - Section or Interval
 - SNFO should clear the groove crossing the hold short and recommend runway side for takeoff.
 - SNFO selects cold mic once aircraft clean.
- **Departure**
 - Lead SNFO should direct cruise or ATC spread (co-altitude combat spread) position for Wingman as appropriate. Consider departure procedures and weather.
- **Enroute Procedures**
 - Standard INAV procedures in each cockpit.
 - Use Wing to contact FSS for weather, winds, and altimeter.
- **Route Entry**
 - Cancel IFR once sure of VFR navigation to route entry point.
 - Lead SNFO switches radios to UHF 255.4 and AUX Tac.
 - Lead SNFO initiates "Fence In" and G-Warm.
 - Lead SNFO makes FSS call.
 - Set altimeter, airspeed, and squawk prior to route entry.
 - Time Hack over Tac
- **Route Exit**
 - Lead SNFO calls "off the route" with FSS. Reset transponder.
 - Lead SNFO directs positive switch to ATC freq and directs "fence out."
 - Off target rendezvous
 - Once joined, flight reports "fenced out."
- **RTB**
 - Lead SNFO executes IFR/VFR navigation game plan.
 - ATIS plan
 - Section Recovery plan (e.g. approaches, break, touch & go's)
 - Descent Checklist, Review Field Brief and Approach Brief
 - Ensure Wingman positioned correctly for recovery 5 nm from initial.

- Switch to hot mic when lowering the gear. Re-select cold mic once aircraft clean.
- **Landing**
 - Landing in formation, Lead should take downwind side. SNFOs should recommend landing side. Lead SNFO gains landing clearance for the section. Wing SNFO reports “dash-2, gear” after Lead reports gear status.
 - Wing IP makes “slow” call.
- **Post Landing**
 - Lead SNFO will not direct a switch to Tower on GCA rollout until after a “slow” call is received.
 - Lead clears the runway and switches to Ground to call for taxi clearance. Wing auto switches to ground when clear of the runway.
 - SNFOs recommend taxi side to IP. Conduct individual checklists.
 - Wing SNFO reports aircraft status to Lead. Lead SNFO calls Base with “in and up/down” status for flight.

Tactical Admin:

- **Fence Checks**
 - Report in/out with fuel state.
- **G-Warm**
 - Combat Spread, ≥ 220 knots.
- **Time Hack**
 - “Standby, standby, Hack.”
- **TacForm Turns**
 - All turns are called.
 - Turn to the leg heading.
- **Off Target Rendezvous**
 - Brief plan to get from combat spread at route altitude to cruise position for IFR/VFR navigation to RTB.

Mission Conduct:

- **Low Level Route Brief**
 - Brief the route in its entirety. On each leg identify:
 - Points to/from, heading, altitude, airspeed, MCF
 - Corridor width and any altitude restrictions
 - All hazards
 - Divert fields
 - Intermediate Checkpoint
 - Turnpoint Description
- **Low Level Procedures**
 - Include turn type with 2 min prior call. Move heading bug?
 - Mark on Top procedures
 - Overfly the turnpoints. Initiate call for turn 2-3 seconds prior to crossing.
 - Mark on Top as Lead SNFO calls for the turn. Heads up during the turn.
 - Wings Level Calls
 - Course Corrections
 - 7° for 1 minute corrects for $\frac{1}{2}$ NM off course
 - Speed Corrections
 - None. Update ETA.
 - Fuel Management
 - MCF
- **Target Attack Brief**
 - Target Description Review
 - Attack via Shackle