# VIRTUAL UNITED STATES AIR FORCE
## AIR EDUCATION AND TRAINING COMMAND
## UNDERGRADUATE PILOT TRAINING – M2 RATING

This training sortie is designed to evaluate your ability to conduct a cross-country Instrument Flight Rules (IFR) flight in a high-performance aircraft. You will demonstrate your knowledge of IFR procedures, navigation via VOR/NDB, enroute operations, instrument approaches, and missed approach procedures in real-world weather conditions.

Both sorties must be flown on the **VATSIM network** using real-time weather updates. Flight planning should adhere to **standard IFR procedures** and published instrument approaches.

**Prerequisite:** Before starting the flying portion of the training for this rating, all associated academic materials must be thoroughly reviewed, and the 10-question open-book quiz must be completed with a score of **90% or higher**. This requirement must be met **prior to beginning any other sections** within this document.

## Simulator Requirements

Ensure the following settings are applied in your simulator:

- All realism settings set to 'Realistic'
- Real World Weather enabled (for realistic training scenarios)
    - Cloud Ceilings: Minimum 300 ft AGL
- Autopilot use is **authorized**

# UPT-201A: Daytime IFR Flight

**Objective:** Conduct an IFR cross-country flight from Laughlin AFB (KDLF) to Randolph AFB (KRND), following standard instrument procedures and executing an ILS approach.
**Location:** Laughlin AFB, Texas (KDLF) to Randolph AFB, Texas (KRND)
**Aircraft:** T-41 (C-172), T6 Texan II, or T-53A (SR20/22 - DA20/40)
**Time & Weather Requirements:**

- Flight must be conducted during daylight hours
- Real World Weather enabled (assess and apply the 'Go/No-Go' decision)

**Required Software:** JoinFS/FSRecorder, SimAcars & VATSIM client.
**Required Charts:** KDLF & KRND Airport Charts
**Performance Tolerances:** Heading ±5 degrees, Altitude ±50 ft

## Preflight & Departure

- Claim your mission on the vUSAF Events page.
- Start at KDLF ramp in a cold and dark configuration.
- Start JoinFS/FSRecorder, SimAcars, and VATSIM client
  - VATSIM CALLSIGN: AXXXX or as authorized by AETC/CC
- File an IFR flight plan with the following parameters:
  - Route: HINKO1 HINKO CSI CSI2
  - Altitude: Pilot Discretion (At or above 5,000 FT)
  - Flight Plan Remarks: vUSAF.us Student Pilot / vUSAF UPT Flight 201
- Conduct a full preflight inspection and engine startup.
- Taxi to the active runway (13R/31L)

## Takeoff & Climb

- Accomplish a Normal Takeoff Profile
- Conduct Departure procedure in accordance with the SID
- Avoid airspace conflicts with Laughlin 1, 2, and 3 MOAs, as well as Crystal MOA.

## Enroute & Arrival

- Check METAR for KRND to determine the active runway (15L or 33L).
- Monitor and adjust for enroute weather changes.
- Prepare for the ILS approach based on ATC guidance or published procedures.
- Descend via the STAR for appropriate runway

## ILS Approach & Missed Approach

- **If ATC is online**, request the ILS approach via:
  - WINKL for ILS15L
  - FINTO for ILS33L
- **If ATC is offline**, conduct the ILS approach and execute as per charts/procedure
- At decision height, execute a missed approach and follow published missed approach procedures.
- After executing the missed approach, self-vector for a full stop landing at KRND.
- Taxi to ramp but do not shut down as UPT-201B follows immediately.

## Post-Flight & Training Review

- End the SimACARS flight and Join FS Recordings
- Save the recorded flight as 'A### Sortie 201A'

# UPT-201B: Night IFR Flight

**Objective:** Conduct a night IFR cross-country return flight to Laughlin AFB, executing a precision ILS approach at night.
**Location:** Randolph AFB, Texas (KRND) to Laughlin AFB, Texas (KDLF)
**Aircraft:** T-41 (C-172), T6 Texan II, or T-53A (SR20/22 - DA20/40)
**Time & Weather Requirements:**

- Flight must be conducted at night
- Real World Weather enabled (assess and apply the 'Go/No-Go' decision)

**Required Software:** JoinFS/FSRecorder, SimAcars & VATSIM client.
**Required Charts:** KDLF & KRND Airport Charts
**Performance Tolerances:** Heading ±5 degrees, Altitude ±50 ft

## Preflight & Departure

- Adjust simulator time to night conditions.
- Start a new JoinFS Recording as well as a new SimACARS flight.
  - VATSIM CALLSIGN: AXXXX or as authorized by AETC/CC
- File a new IFR flight plan from KRND to KDLF with the following parameters:
  - Altitude: Pilot Discretion (At or above 6,000 FT)
  - Route: ALISS6 ALISS WEBOX WEBOX4
- Adjust altitude if weather prevents reaching 14,000 ft, documenting changes in your submission.

## Takeoff & Climb

- Accomplish a Normal Takeoff Profile
- Conduct standard departure and continue to KDLF as filed.

## Enroute & Arrival

- Check METAR for KDLF to determine the active runway (13C or 31C).
- Monitor and adjust for enroute weather changes.
- Prepare for the ILS approach based on ATC guidance or published procedures.
- Descend via the STAR for appropriate runway

## Night Approach & Landing at KDLF

- **If ATC is online**, request the ILS approach from WASOD for Runway 13C or 31C.
- **If ATC is offline**, conduct the ILS approach and execute as per charts/procedure
- Fly the ILS approach and execute a full stop landing at KDLF.
- Taxi to parking and shut down the aircraft.

## Post-Flight & Training Review

- Save the recorded flights as 'A### Sortie 201B'.
- File a PIREP via SimACARS
- Submit **both** flight recordings to instructors@vusaf.us with notes on deviations or weather impacts.
- Review instructor feedback and prepare for the next phase of training.