* IAF Procedures [FTI 409.4]
  + A low altitude IAF is any fix that is labeled as an IAF or any PT/HILO PT fix.
  + Before reaching the IAF, recheck the weather, review/brief the IAP, obtain clearance for the approach, and complete the Approach Checklist (ABCC: ATIS, Brief, Checklist, Clearance)
  + Normally cross the IAF at 150 KIAS and maintain for the initial and intermediate segments of the approach, although 170 KIAS or other airspeeds may be flown for extended arcs/segments at pilot’s discretion or as directed by ATC.
  + At the initial approach fix execute the 6 T’s:
    - **Time.** As Required
    - **Turn.** Turn to intercept course
    - **Time.** As Required
    - **Transition.** Reduce power to initiate descent
    - **Twist.** Set the inbound, teardrop, or front course
    - **Talk.** Refer to NATOPS callouts.
  + Upon reaching the IAF, you have two choices, whether it is a PT or procedure track:
    - If your heading is within 90° of the procedural course, use normal lead points to intercept the course.
    - If your heading is NOT within 90° of the procedural course, overfly the IAF and turn in the shortest direction to intercept the procedural corse
    - **NOTE:** Do not ask for “maneuvering airspace” as this term is not found in the AIM and maneuvering for better alignment is not necessary. **PRIMARY LIED TO YOU!**
  + Assuming you are cleared for the approach, do not descend until outbound/abeam and on a parallel or intercept heading the PT course.
  + Do not confuse abeam the PT course with abeam the NAVAID or IAF, this may not necessarily be needle through the wing tip.
* Departure Procedures (DPs) [AIM 5.2.8]
  + Instrument departure procedures are preplanned IFR procedures which provide obstruction clearance from the terminal area to the appropriate en route structure.
  + If an obstacle penetrates what is called the 40:1 obstacle identification surface, then the procedure designer chooses how to establish obstacle clearance. Obstacles that are located within 1 NM of the DER and penetrate the 40:1 OCS are referred to as “low, close-in obstacles”.
  + DPs assume normal aircraft performance, and that all engines are operating. Development of contingency procedures, required to cover the case of an engine failure or other emergency in flight that may occur after liftoff, is the responsibility of the operator.
  + Unless specified otherwise, required obstacle clearance for all departures is based on the pilot crossing the departure end of the runway (DER) at least 35 feet above the DER elevation, climbing to 400 feet above the DER elevation before making the initial turn, and maintaining a minimum climb gradient of 200 feet per nautical mile.
  + There are two types of DPs
    - Obstacle Departure Procedures (ODP)
      * Printed either textually or graphically
      * Provide obstruction clearance via the least tasking route from the terminal area to the appropriate en route structure.
      * May be flown without ATC clearance unless an alternate departure procedure has been specifically assigned by ATC.
    - Standard Instrument Department (SID)
      * Always printed graphically
      * ATC procedures printed for pilot/controller use in graphic form to provide obstruction clearance and a transition from the terminal area to the appropriate en route structure.
      * Primarily designed for system enhancement and to reduce pilot/controller workload.
      * ATC clearance must be received prior to flying a SID
  + Diverse Departure
    - If an aircraft may turn in any direction from a runway within the limits of the assessment area and remain clear of obstacles, that runway passes what is called a diverse departure assessment and no ODP will be published.
  + Visual Climb Over the Airport (VCOA)
    - DPs established solely for obstacle avoidance that require a climb in visual conditions to cross the airport or an on-airport NAVAID in a specified direction, at or above a specified altitude.
  + Vectors
    - ATC may assume responsibility for obstacle clearance by vectoring the aircraft prior to reaching the minimum vectoring altitude by using a Diverse Vector Area (DVA).
    - ATC may also vector an aircraft off a previously assigned DP
  + In all cases, the 200 FPNM climb gradient is assumed and obstacle clearance is not provided by ATC until the controller begins to provide navigational guidance in the form of radar vectors.