



Normal Procedures

Cirrus SR-20 Transition Training

8/16/04

The Normal Procedures and guidelines found in this presentation are for Reference Only.

The procedures in this presentation have been taken from the Normal Procedures in the FAA Approved Airplane Flight Manual and Pilot's Operating Handbook (POH). These Procedures DO NOT SUPERSEDE the procedures in the POH. In the event of conflict, the POH shall take precedence.



General

- ▶ **This lesson will discuss:**
 - **Normal Procedures**
 - **Abnormal Procedures**
 - **Emergency Procedures**
 - **Checklist usage**
 - **Single Pilot Operations**
 - **Flight Profiles**



Normal Procedures

- ▶ **Used during normal flight operations**
- ▶ **Checklists**
 - **MFD vs. Paper Checklist**
 - **Techniques**
 - **Do-List**
 - **Flow Pattern**



Single Pilot Operations

- ▶ **Cockpit Organization**
 - **Aeronautical Charts**
 - **Radio Tuning and Communication**
 - **Autopilot**
 - **Briefings**
 - **Takeoff**
 - **Approach**



Flight Profile

- ▶ **Before Start** (*Do-List*)
- ▶ **Engine Start** (*Do-List*)
- ▶ **Before Taxi** (*Flow Pattern*)
 - Airport Diagram visible
- ▶ **Taxi** (*Flow Pattern*)
- ▶ **Before Takeoff** (*Flow Pattern*)
 - **Activation of Transponder and Landing Light should be delayed until cleared for takeoff. Strobe Light activation should also be delayed until cleared for takeoff if operating at night**



Flight Profile

► Takeoff (*Flow Pattern*)

- Verify
 - Final is clear
 - Standby items from before takeoff checklist are complete
 - Runway is clear
- Apply takeoff power
- 40 knots – Airspeed Crosscheck
- Accelerate to V_R
- Rotate
- Pitch for V_Y
- Continue V_Y climb to 1000 agl (or higher, as conditions dictate)



Flight Profile

- ▶ **Climb** (*Flow Pattern*)
 - 1000 AGL – Complete Climb Checklist
 - Transition to cruise climb (120 knots) if desired
- ▶ **Cruise** (*Flow Pattern*)
 - Top of climb – Complete Cruise Checklist
- ▶ **Descent** (*Flow Pattern*)
 - Descent Planning
 - Approach Briefing
- ▶ **Before Landing** (*Flow Pattern*)
 - Complete:
 - Visual Approach – Final descent for landing
 - Precision Approach – One dot high on glideslope
 - Non-precision Approach – 2NM from Final Approach Fix



Flight Profile

- ▶ **After Landing** (*Flow Pattern*)
 - Do not execute any of these items until clear of the landing runway
- ▶ **Shutdown** (*Flow Pattern*)



Normal Operations

VFR Traffic Pattern

- **Entry**
 - 110 KIAS
 - Power 22-24" MP (Approximately)
 - Before Landing Checklist Complete
- **Downwind**
 - 100 KIAS
 - Power: 20" MP (Approximately)
- **Abeam Touchdown Zone**
 - Airspeed: 100
 - Power: 12" MP (Approximately)
 - Flaps: 50%
- **Base**
 - 90 KIAS
 - Power: 12" MP (Approximately)
 - Flaps 100%
- **Final**
 - Airspeed 80 KIAS
 - Power: 12" MP (Approximately)



Normal Operations

Precision Instrument Approach

- **Initial Approach Fix/Final Vector (3 Minutes Prior)**
 - **Descent Checklist Complete**
 - **Airspeed: 120 KIAS (max)**
 - **Flaps 0%**
 - **Power: 2100-2300 RPMs MP (Approximately)**

- **Intermediate Section**
 - **Begin slowing for 100 KIAS**
 - **Flaps 0%**
 - **Power: 20" MP (Approximately)**

- **One Dot Below Glideslope**
 - **Airspeed: 100 KIAS**
 - **Flaps: 50%**



Normal Operations

Precision Instrument Approach (cont.)

- **Glideslope Intercept**
 - **Before Landing Checklist Complete**
 - **Airspeed: 100 KIAS (max)**
 - **Flaps: 50%**
 - **Power: 10-12" MP (Approximately)**

- **Decision Height**
 - **Visual contact is established, continue for landing**
 - **Autopilot: Disconnect**
 - **Flaps: As desired**
 - **Slow to appropriate final speed**
 - **Visual contact not established**
 - **Execute Missed Approach Procedure**



Normal Operations

Non-precision Instrument Approach

- **Initial Approach Fix/Final Vector (3 Minutes Prior)**
 - **Descent Checklist Complete**
 - **Airspeed: 120 KIAS (max)**
 - **Flaps 0%**
 - **Power 2100-2400 RPMs (Approximately)**
- **Intermediate Section**
 - **Begin Slowing for 100 KIAS**
 - **Flaps 0%**
 - **Power: 20" MP (Approximately)**
- **Final Approach Fix**
 - **Before Landing Checklist Complete**
 - **Airspeed: 100 KIAS (max)**
 - **Flaps: 50%**
 - **Power: 10-12" MP (Approximately)**
- **Missed Approach Point**
 - **Visual contact is established, continue for landing**
 - **Autopilot: Disconnect**
 - **Flaps: As Necessary**
 - **Slow to appropriate final speed**
 - **Visual contact not established**
 - **Execute Missed Approach Procedure**



Normal Operations

Circling Approach (Not recommended at night)

- **From Missed Approach Point**
 - **Visual contact is established, continue for landing**
 - **Autopilot: Disconnect**
 - **Airspeed: As Necessary**
 - **Flaps: As Desired**
 - **Visual contact not established**
 - **Execute Missed Approach Procedure**



Normal Operations

Holding

- **3 Minutes prior to holding fix**
 - **120 KIAS (max)**
 - **Power: 2100-2400 RPMs (Approximately)**

Missed Approach

- **Autopilot: Disconnect**
- **Power: Full power**
- **Pitch for V_y**
- **Retract flaps to 0%**

(ensure you have a positive rate of climb, are above obstacles and above 85 KIAS prior to retraction)

