

ATTACHMENT J

Excerpts from the FedEx 727 Instructor Guide

(7 pages)



AST 1 (S/O Support)

Overview: The purpose of AST 1 is twofold. The first two hours of the period will be used to familiarize the student with select maneuvers and flight characteristics of the aircraft, with major emphasis given to the visual landing/corresponding sight picture and V1 cut. The importance of getting the correct sight picture for landing cannot be over emphasized. Additionally, the power settings and pitch attitudes learned in the FTDs will be reviewed. Also, all low altitude stalls will be practiced.

The second two hours of the period will be used to expose the student to maneuvers that will be required on the proficiency check/rating ride. Exceptions to this are the two engine inop scenario and crosswind landing. This period not only gives the student a brief glimpse of what the proficiency check/rating ride looks like, but also provides a view of one's beginning skill level from which the student will work and measure progress throughout the syllabus.

Training Objectives:

- Practice all normal procedures utilizing full motion and visual capabilities.
- Gain FOM knowledge and understanding using sample FOM/JEPP workbook problem.
- Gain proficiency and confidence in visual landing skills, with emphasis on proper power settings and pitch attitudes.
- Review target pitch and power (FF) settings during transition from clean to dirty configuration.
- Introduce/practice most maneuvers required on a proficiency check/rating ride.
- Improve situational awareness (always know where you are).
- Never hurry unless you are dealing with a critical situation.

Briefing Items:

<ul style="list-style-type: none"> ___ Hurrying Equals Mistakes ___ CRM: Team Management/Communication/ ___ Situational Awareness/Decision Making ___ Taxi ___ Takeoff/Tail Strike Awareness ___ Profile B Climb ___ Target Pitch / FF (Clean to Dirty) ___ Visual Landings (Flaps 15 and 30) ___ CAT II/III Monitored Approach ___ Go Around/Missed Approach 	<ul style="list-style-type: none"> ___ Engine Failure at V1 (A Visual Maneuver Initially) ___ Hand Flown Flight Director (HFFD) One ___ Engine Inop Approach and Landing ___ Steep Turns ___ Stall Recovery: Clean/Takeoff/Land ___ Non-precision Approach VOR/LOC (Unmonitored) ___ RTO (View Rejected Takeoff Video) ___ Complete Section 5: Pilot FOM Workbook
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Reading Assignment:

CFM:

Chapter

2

Engine Fire/Severe Damage
 Engine Failure/Shutdown
 Post Shutdown
 One Engine Inop: In Range, Approach, Before Land
 Rejected Takeoff

7

Taxiing and Taxi Procedures
 Normal Takeoff
 Noise Abatement Profile B
 Visual Approach
 Non-precision Approaches (VOR and ILS G/S OTS)
 Flight Director ILS Approach
 ILS Autopilot Approach
 CAT II/IIIa Monitored Approach
 Autoland
 Go Around/Missed Approach
 Normal Landing
 Rejected Takeoff
 Takeoff-Engine Failure after V1
 One Engine Inop Approach and Landing

FOM:

Chapter

2

CRM: Team Management/ Communication/
 Situational Awareness/Judgement/ Decision Making

JEPPESEN MANUAL ATC TAB:

Chapter

2

Airport Lighting Aids
 Airport Marking Aids and Signs

4

Radio Communications Phraseology and Techniques

Suggested Scenario:

KMEM to KATL(FedEx 1551)

DEVICE SETUP	-100	-200
Initial Position	Ramp	Ramp
External Power	Available	Available
TOGW	142,500 Lbs.	166,000 Lbs.
ZFW.	110,000 Lbs.	136,000 Lbs.
Fuel	32,500 Lbs.	30,000 Lbs.
TOCG	26 %	26 %

- Departure ATIS: Memphis Departure Information ALPHA _____ Z observation; Winds 270/06; 20 SM; Clear; temperature 15°, dewpoint 10°; Altimeter 29.92; departing runways 18L and 18R. Inform controller on initial contact that you have information ALPHA.

727 Pilot AST 1

Status B = Briefed ✓ = Complete I = Incomplete	Subsequent Completion Date & Initial	Maneuver or Procedure
		Captain Flight Deck Preparation
		F/O Flight Deck Preparation
		Normal Procedures
		Normal Checklists
		Taxi
		Profile B Climb
		Target Pitch / FF Demo (Clean to Dirty)
		Steep Turns
		Stall Recovery (Clean/Takeoff/Land)
		Approach Planning
		Go Around/Missed Approach
		Visual Landings (OM to Touchdown) (Flaps 15 and 30)
		Engine Failure at V1 (Initially a Visual Maneuver)
		VOR Approach and Landing
		ILS GS OTS Approach and Landing
		CAT II/IIIa Monitored Approach
		FD ILS Approach Engine Out (HFFD)
		One Engine Inop Approach and Landing
		RTO
Additional Items Accomplished		

727 Pilot AST 5

Status B = Briefed ✓ = Complete I = Incomplete	Subsequent Completion Date & Initial	Maneuver or Procedure
		Normal Procedures/Checklists
		Rejected Start
		MEL for Generator or CSD Inop
		Main Cargo Door Light Illuminated
		CAT IIIa Monitored Approach
		Lower Cargo Fire
		Radar Out Full Procedure Turn Procedures
		Crosswind Takeoff (29 knots)
		Landing Gear Lever Latch Failure
		Steep Turns
		Stall Recovery (Takeoff)
		Holding
		Loss of All Generators
		Battery Operation Only Approach and Landing (ELP Required)
		Loss of Engine Throttle Control
		Engine Fire Severe Damage (V1 Cut)
		One Engine Inop Approach and Landing
		One Engine Inop Go Around
		Second Engine Failure During Critical Phase of Flight
		Two Engine Inop Approach and Landing
		V1 Cut at High Altitude (Both Pilots) (ELP Required)
		In-flight Engine Restart
		RTO/Loss of All Generators on the Ground
		Second Engine Failure During Approach
		Special Noise Abatement Profile C Departure
		Visual Approach/Landing
		Crosswind Landings (Dry 25kts/Wet 15kts)
Additional Items Accomplished		



AST 6

Overview: The period should look and feel as much as possible like a proficiency check/rating ride would, with the instructor offering as little assistance as necessary. This is so that the student can begin to acclimate to a checkride environment from the otherwise training environment.

The student should plan to have a mini-comprehensive oral administered to him during the brief, with emphasis placed on Chapter 3 of the FOM.

Throughout all maneuvers, the student should be able to fly the aircraft within acceptable airspeed, altitude, and heading tolerances. Additionally, there should never be a time when the student is not in full control of the aircraft and/or situation. Inability to comply with either of these should be a warning flag indicating that additional training (ET's) may be warranted.

Training Objectives:

- Practice all required proficiency check/rating ride maneuvers with multiple approaches and landings.
- Demonstrate airspeed, altitude, and heading control within tolerances at all times.
- Demonstrate thorough procedural knowledge of all maneuvers.
- Demonstrate end level proficiency on nearly all maneuvers (minimum 90%).
- Demonstrate good situational awareness that ensures the student is always in control of every situation.

Briefing Items:

<ul style="list-style-type: none"> ___ Mini-Comp Oral (Powerpoint Exercise) ___ Review CFM Limitations ___ Review Phase Ones ___ Non Tower Operations (Arrival and Departure) ___ Circling Approach ___ Side Step Maneuver ___ LAHSO ___ MFWF 	<ul style="list-style-type: none"> ___ Ballast/MEL Fuel ___ Turbulence/Echo Avoidance ___ V1 Cut (Fuel Contamination) ___ Ditching ___ APU Fire ___ Any maneuver, procedure, or area of the FOM that most benefits the student's performance or confidence
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Visual Descent Point

- Intersection of 3 degree GS and MDA
- Mandatory if depicted on the profile view "v"
- Should be calculated for any Non-Precision approach
- Use chart in CFM to determine timing or distance from RWY
- Short cut
 - Take the first two digits from HAT and subtract as seconds from the missed approach timing
 - This gives you time from FAF to VDP

ASR Approach

- Plate shows all runways, ILS freq., and final headings
- Read the notes