Docket No. SA-533

Exhibit No. 2-U

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

Flight Profiles & Briefings

(4 Pages)

ATTACHMENT 20



PROCEDURES AND TECHNIQUES

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ATR42 PILOT HANDBOOK

FLIGHT PROFILES AND BRIEFINGS

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PILOT BRIEFINGS

A. Captain's Brief First Flight

- (1) "I expect standard calls and procedures throughout the flight. If there are any lights, malfunctions or failures prior to V that necessitate an abort, the Captain will call the abort. The abort procedure will be to have the captain take control. brake as necessary, and reverse. If an engine failure occurs after V, the PF will call "Power Loss." When a positive rate is established the PNF will call "Positive Rate," the PF will then call "Gear Up." After the gear has been selected up the PF will call for confirmation of up-trim and autofeather. If there is no up-trim the PF will call for RTO power, if there is no autofeather the PF will call for memory items. The PNF memory calls will be power lever reduce "not below 48"" condition lever feather fuel shutoff, each being confirmed by the PF before any action takes place. The flight will continue to acceleration altitude and follow up with the engine flameout takeoff procedures.
- Note: This will be reviewed as often as the Captain feels necessary, but at least on the initial flight of a crew and upon returning from days off.

B. Flying Pilot Takeoff Brief

- (1) This will be my Takeoff on runway 16R. Our bugs are set at _____. Acceleration altitude is ____. Our departure instructions are: _____. If we have to return, we will fly left traffic, back to this runway. Do you have any questions?
- C. Flight Instruments Brief
 - (1) I am showing a heading of 360° no flags, altimeter 29.92, 3200 feet, RMIs both set to VOR, zero on the VSI, airspeed and engine instruments checked and normal.

D. Low RVR Brief

(1) Upon completion of the Normal Takeoff Brief, if a Low RVR Takeoff is necessary, the PF will brief the PNF as follows; This is a 600 RVR Takeoff. During the takeoff roll, my scan will be outside the aircraft, maintaining a visual on the runway. I would like you to keep your scan inside the aircraft and advise me of any deviations or problems. If we have

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an engine failure after V₁, we will continue the takeoff and proceed to our takeoff alternate of

E. Approach Brief

(1) This will be the ILS runway 5L approach to the Indianapolis airport. The effective date is May 1, 2005. The airport elevation is 798 feet. The ILS frequency is 109.3 and set. The NDB frequency is 266 and set. Once we cross the marker, we can descend to 2800 feet and our outbound heading will be 227°. We will go outbound for one minute. The initial procedure turn heading will be right to 182° and then left to 002°. Our inbound course will be 047 and set. Once established inbound, we will remain at 2800 feet to glide slope intercept. Our crossing altitude at the marker will be 2733 feet. After glide slope intercept, we will go down to a decision height of 984 feet which is 200' above the surface and set in the radar altimeter. We need 1800 RVR for the approach. In the event of a miss the call will be, Max. Power, Flaps 15°, Postive Rate, Gear UP, "Heading, Low Bank, IAS."At acceleration altitude, I'll call for the Cimb Sequence Balked Landing or After Takeoff Checks. We will climb to 1200 feet, then climbing left turn to 3000 feet direct to the Indianapolis VOR, Frequency 116.3, and hold. We will do a parallel entry. I would like you to tune and identify all frequencies for me. I would like standard calls and procedures. Keep me advised of any deviations in altitude, airspeed, and course, and I would like a progressive brief on the approach. After landing I anticipate a left turn on Delta and then a right turn on Romeo. We will plan a single engine taxi to the ramp. Do you have any questions?

F. Visual Approach Brief

(1) This will be a Visual Approach, left traffic, for runway 21, backed up with the ILS. Our bug will be set at _____. The Inbound course is 028, localizer frequency is 108.7 final approach altitude is 2800 feet and the Missed approach point is at 4 DME. If we have to go around we'll make a right climbing turn to 4100 feet direct to PHORT and hold unless directed otherwise. Standard calls and procedures. After landing I anticipate a right turn off the runway and taxi straight into the ramp. As this is the last flight of the day we will be doing a two engine taxi to the ramp. Do you have any questions?



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G. Circling Brief

(1) Upon completion of the appropriate Approach Brief, if a Circling Maneuver is necessary, the PF will brief the PNF as follows: "During the circling maneuver, my scan will be outside the aircraft, maintaining a visual on the runway. I would like you to keep your scan inside the aircraft and advise me of any deviations in altitude or airspeed."

H. Engine Securing Brief

- (1) When securing an engine, the procedures will be performed by the PNF and confirmed by the PF. Once the crew has identified the failed engine and confirmed that it has autofeathered, the PF will call for the Engine Fire or Flameout Checklist. In the event of an engine failure, the memory items will be accomplished without the initial use of the checklist. In either case the responses will be as follows:
 - (a) The PNF will call "PL reduce not below 48°." The PNF will place an index finger on the correct PL, the PF will visually verify that the PNF has identified the correct PL and respond "confirmed." At this time the PNF will move the PL to 48 PLA.
 - (b) The PNF will call "CL feather fuel shutoff." The PNF will place an index finger on the correct CL, the PF will visually verify that the PNF has identified the correct CL and respond "confirmed." At this time the PNF will move the CL to feather then fuel shutoff.
 - (c) If an engine failure with autofeather occurs after V₁, no checklist items are to be completed until reaching Acceleration Altitude.
 - (d) If an engine failure without autofeather occurs after V₁, the Captain may elect to perform the memory items prior to reaching acceleration altitude, if the aircraft performance is questionable. If the aircraft performance is not questionable, the memory items will be performed after reaching acceleration altitude and attaining VmLB0.
 - (e) The secondary items will be completed via the checklist after reaching Acceleration Altitude and the aircraft has been configured for en route climb.

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