Docket No. **SA-509**

Exhibit No. 2D

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

USAIR FLIGHT OPERATIONS MANUAL
DESCENT & APPROACH

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INSTRUMENT APPROACHES

Instrument approaches shall be made in accordance with Company policy and procedures, Operations Specifications, Federal Aviation Regulations, and the appropriate approach plates, which shall be checked by each flight crewmember before commencing approach.

A number of foreign instrument approach procedures are published without specifying an altitude in the missed approach procedures. The omission of an altitude for missed approach is intentional, in order to allow the air traffic controller to adjust the air traffic flow to the particular situation at any given time.

Where an instrument approach is available to the runway of intended landing, the appropriate navigation aid should be tuned, identified, and monitored even during VFR approaches and landings as an aid in assuring that the proper runway will be used.

APPROACH BRIEFING

An approach briefing shall be completed prior to each approach and landing. The approach briefing shall consist of the following items, except when conducting visual approaches:

1. Name of Approach
2. Inbound Course & Frequency
3. FAF Altitude
4. Minimums/Missed Approach Point (if applicable)
5. Initial Altitude and Heading of Missed Approach (if applicable)

When conducting visual approaches, the following items are required to be briefed:

1. Runway of intended landing
2. Inbound Course and Frequency

Additionally, the following shall be briefed for all approaches (if applicable). Special considerations such as, but not limited to:

1. Airport Advisory Page Information
2. Braking Action
3. Windshear

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VOR/DME APPROACH

On aircraft equipped with two operational DME receivers, a VOR/DME approach is approved provided both receivers have been tuned to the same VOR/DME station and both readouts are giving the same distance from the station. Unless the second VOR/DME receiver is required for a cross-check fix, both receivers should continue to be tuned to the primary VOR/DME station and distance from the station should be cross-checked throughout the approach.

TUNING NAVIGATION RECEIVERS

All navigation receivers shall be correctly tuned when utilized. VOR's, if incorrectly ← tuned to within 50 kHz of a frequency (***Example:*** *109.45 instead of 109.40*), have reportedly given false course indications.

ENSURING AVAILABILITY OF VITAL COMMUNICATIONS

To ensure that vital communications are available in situations where main electrical power may be lost, if operating with one engine generator inoperative, No. 1 VHF communications equipment shall be used for ATC communications. Also, if heavy precipitation or turbulence is expected or encountered, the No. 1 VHF radio should be used for ATC communications. If the APU generator is usable in flight, under similar conditions, the APU should be started and electrical switches positioned so as to provide immediate APU generator power to the buses in the event of main generator failure.

FLIGHT DIRECTOR APPROACH

During a flight director approach, consistent with MEL, enroute, and approach requirements, (such as checking intersections, etc.), both sets of instruments should normally be utilized in identical modes and with the same course, heading, radio, and other associated data fed in. This provides continuous cross-check capabilities which should be utilized to the extent possible throughout the approach. When flying the flight director or auto-coupler approach it should be kept in mind that the most important monitoring data displayed on flight director instruments is the raw data. The computed command information is a tool used to achieve the desired result — on course, on glideslope. Flight director commands shall never be followed blindly without cross ← reference to raw data display, as well as other flight instruments, altimeters, airspeeds, etc.

When the altitude hold feature is in use, close monitoring of aircraft altitude is vitally important.

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DC-9 PILOT'S HANDBOOK
PRELIMINARY LANDING

ALTIMETERS/FLT INSTS . . . . . PNF/PF . . . . . ___.___/CHKD

ALTIMETERS: When appropriate, set the altimeters.

FLIGHT INSTRUMENTS: Set altitude alerter to landing barometric pressure and crosscheck.

LANDING DATA/EPR . . . . . PNF/PF . . . . . CHKD/SET

LANDING DATA: Determine landing weight, either using the gross weight bezel or other means. Check landing weight is within limits for runway and runway surface conditions. Determine flap setting for landing (Flaps 40 is the primary flap setting). Set V_{REF} for landing weight and flap setting.

EPR: Set EPR for go-around for field conditions using the GO-AROUND EPR tables in the V-Speed Charts.

SHOULDER HARNESS . . . . . PNF/PF . . . . . FASTENED

Each occupant of a seat with a shoulder harness must fasten it for landing.

APPROACH BRIEFING . . . . . C . . . . . COMPLETE

The required approach briefing for each approach and landing is normally accomplished by the PF.

Brief the following items as applicable for all approaches:

— Airport Advisory page information.
— Braking action.
— Windshear.

Brief the following items for instrument approaches:

1. Name of Approach.
2. Inbound course and frequency.
3. FAF altitude.
4. Minimums/MAP.
5. Initial altitude and heading of missed approach.

Brief the following items for visual approaches:

— Landing runway.
— Inbound course and frequency.

(cont'd.)