Docket No. **SA-509**

Exhibit No. 2Q

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

USAIR LINE ORIENTED FLIGHT TRAINING

U.S. Department of Transportation
Federal Aviation Administration

FLIGHT STANDARDS DISTRICT OFFICE 19
One Thorn Run Center, Suite 200
1187 Thorn Run Extension
Coraopolis, Pennsylvania 15108

April 1, 1993

Captain William Mathis
Director - Flight Operations & Standards
USAir, Inc.
Pittsburgh International Airport
P.O. Box 12346
Pittsburgh, Pennsylvania 15231-0346

Dear Captain Mathis:

This letter is in reference to your letter of March 29, 1993, requesting initial approval for USAir's Recurrent Loft program. Initial approval is granted to these programs with an effective date of April 5, 1993. The Recurrent Loft Flight Training Modules are approved as listed in the Flight Operations Training Manual for the following programs:

MD-80 Recurrent Loft
DC-9 Recurrent Loft
B-727 Recurrent Loft
✓B-737-200 Recurrent Loft
B-737-300/400 Recurrent Loft
B-757/767 Recurrent Loft
F-28 Recurrent Loft
F-100 Recurrent Loft

The expiration of this initial approval is April 30, 1995. This office requests USAir, Inc. provide at least seven days advance notice of any training to be conducted under this curriculum to allow for evaluation of the training in accordance with FAR 121.405(b) and (c).

Approval is also granted for each loft scenario as submitted with your request. Please ensure that the Recurrent Loft Scenario numbers are listed in the FOTM.

Approval of this recurrent program is also based on the understanding that all USAir pilots will receive training in LDA approaches by May 1, 1994.

Sincerely,

[redacted]

David L. Bowden
Principal Operations Inspector

USAIR

RECURRENT LOFT
DC9

RECURRENT LOFT
PROLOGUE

This DC9 loft consists of three flight segments. The first segment, DCA/CLT involves an aircraft not pressurizing. This event emphasizes the specific training objectives of decision making and team building. It will involve the entire flight crew, flight attendants, dispatcher, station personnel, and Air Traffic Control.

After the return to DCA, the pressurization problem is handled by maintenance, and after a short period for aircraft service and a new release time, the flight again departs for CLT. This segment of the loft contains no abnormal, however at the instructors discretion, turbulence or generator problem maybe given. If the captain elects to have the first officer fly the leg, a positive transfer of aircraft control to the captain must be accomplished in the CLT terminal area to comply with monitored approach procedures for a Cat II approach.

At the conclusion of segment two and a fifteen minute break, the cleanup items will be accomplished. This segment begins in the runup pad on runway 36L and all training items not covered in the first two segments of the loft must be completed. Please refer to the Required Items data sheet of this booklet to assure that these items are covered. You will also find a sample format which may assist you in planning the final portion of this loft.

If you find that you have time remaining at the end of segment three, you may use your discretion in choosing items to complete the four hour training period. Some possible items to include at this time are: additional wind shear training, approaches for the first officer, and additional normal and abnormal procedures.

Every attempt has been made to duplicate actual line events during all phases of this loft with an emphasis on CRM. One of the major responsibilities of you, the instructor, is to create an atmosphere of realism at all times.

USAIR DC-9 RECURRENT LOFT

Flight 513 DCA-CLT

INSTRUCTOR:
This packet contains all the paperwork necessary for the instructor. Please keep in mind that this loft should be a genuine learning experience. **MAINTAINING THE ILLUSION OF REALITY IS YOUR RESPONSIBILITY.**

FLIGHT SCHEDULE:

USAIR 513

DEPART DCA....1845
ARRIVE CLT.....2000

NOTE

After entering the simulator, set all clocks to 1820

(30 minutes prior to departure time).

HUSH KIT EQUIPPED AIRCRAFT

RECURRENT LOFT

LOFT #902

DATE: FEB. 1, 1994

Leg 1: DCA-DCA

Departure Data	Problem Highlights	Arrival Data
Stn_DCA_____Flight___513_____Gate__H5_____ Fuel_18,000____# GW_90,500__# B/O_____# Rwy__36___Temp_30F___° ETE_1+15___Altn_____ Route_GVE 056 036 GVE LYH MAJIC 7 CLT_____FL_280_____	NON PRESSURIZING AIRCRAFT	ILS 36 CIRCLE TO RW 33

Segment	Instructor Inputs	Problem Indications	Communications	Weather	Probable Actions
Preflight	#06 MAIN CABIN DOOR #07 RAPID DECOMPRESSION	ATIS ALPHA	CLR: "CAF, NORTH WEST NOISE ABATEMENT, VECTORS GORDONSVILLE, LHY, MAJIC 7, CLT; CLIMB & MAINTAIN 5,000, EXPECT FL 280 TEN AFTER. DEPARTURE 118.95, SQUAWK 3275." F/A: "ALL PAS. SEATED, ALL BAGS STOWED." GRND: "CLEARED TO PUSH, EXPECT RWY 36."	3000 OVER, 10 MILES, TEMP. 30, DP 28, WIND 270/22, GUST 26, ALTIMETER 29.95, RWY 36 FOR DEPARTURE.	
Start	PUSH		GRND: NORMAL PUSH BACK INSTRUCTIONS		PUSH BACK NORMAL START
Taxi	TAXI RWY 36, HOLD SHORT RWY 3 ON "C" **NOTE: PRESENT CREW WITH ACARS**		GRND: "TAXI RWY 36, HOLD SHORT RWY 3 ON "C" " CK PILOT: PRESENT ACARS W&B DATA GRND: "CONTACT TOWER 119.1."		TAXIOUT BEFORE TAKEOFF CHECK
Takeoff			TWR: "CLEARED FOR TAKEOFF." TWR: "CONTACT DEPARTURE CONTROL 118.95."		SELECT ENGINE & AIRFOIL ANTI-ICE

Climb			DEPT: "RADAR CONTACT, MAINTAIN 5,000 EXPECT TURN SOUTHWEST BOUND IN 5 MILES." DEPT: "TURN LEFT 240, CLIMB TO 12,000 DIRECT GORDONSVILLE, CONTACT WASHINGTON CENTER 124.05."	TOPS OF OVERCAST FL 190, LIGHT TO MODERATE RIME ICE REPORTED AT ALL ALTITUDES.	AIRCRAFT WILL NOT PRESSUR-IZE RETURN TO DCA.
Cruise					
Descent	DCA WX	ATIS BRAVO	**AFTER PRESS. PROBLEM** CTR: "RADAR CONTACT, CONTACT WASHINGTON APP. ON 124.7."	2500 OVER, 10 MILES, TEMP. 30, DP 28, WIND 270/22 GUST 26, ALTIMETER 29.95, ILS RWY 36 APPROACH IN USE.	
Approach	**NOTE: CHECK PILOT MUST POSITION AIRCRAFT ON RUNWAY 36 USING HAZARDS ROUTE #1**		DCA: "RADAR CONTACT, DESCEND AND MAINTAIN 3,000, VECTORS ILS RWY 36." DCA: "CROSS 10 DME AT 2500 OR ABOVE, CLEARED FOR ILS 36 APPROACH." DCA: "CONTACT TOWER 119.1."		A/C ON RW 36 CAUSES CIRCLE TO RUNWAY 33
Ldg or MA	**NOTE: PUT A/C IN POSITION ON RWY 36 WITH PROBLEM** **NOTE: AFTER LANDING VIS. SHOULD BE INCREASED TO MAX TO SEE PARKING BAR AT GATE**		TWR: "CLEARED TO LAND RWY 33, WIND 270/23 GUST 27." TWR: "CONTACT GROUND 121.7." GRND: "TAXI TO GATE."		

RECURRENT LOFT

LOFT #:902

DATE: FEB. 1, 1994

Leg 2: DCA - CLT

Departure Data	Problem Highlights	Arrival Data
Stn_DCA_____Flight_513_____Gate__H5_____ Fuel_18,000_____# GW____90,000_# B/O_____# Rwy__36___Temp__30_F__ ETE___1+15_____Altn___GSO____ Route___GVE 056 056 036 GVE LYH MAJIC 7 CLT_____FL__260_____	GENERATOR FAILURE CAT II ILS WINTER OPERATIONS	STN CLT FLIGHT 513 GATE B-7 ARRIVAL: MAJIC & RADAR VECTORS WEATHER: -X 1/16 MILE -SBS TEMP 32 DP 28 WIND 330/10 ALTIMETER 29.89 LT. RIME ICE SURFACE TO 17000 FEET APPROACH: ILS 36L (CAT II) & LOC (BACK CRS) RW 23

Segment	Instructor Inputs	Problem Indications	Communications	Weather	Probable Actions
Preflight	**NOTE: DO NOT LOAD APPLICABLE PRESET UNTIL FLIGHT CREW REQUESTS THE CORRECT FUEL LOAD.**	ATIS ECHO	ATIS INFORMATION ECHO 900 OVC, 10 MILES, TEMP 29 ,DP 20 WIND 280/15 GUST 22, ALTIMETER 29.95. DEPARTING RWY 36, B/A RWY 36 GOOD BY B737. CLNCE: "USAIR 513 CLEARED TO CLT AS FILED, VIA NW NOISE ABATEMENT, CLIMB MAINTAIN 5000, EXPECT FL 260 TEN MINUTES AFTER DEPARTURE, DEPARTURE CONTROL ON FREQ. 118.95, SQUAWK 3701."	900 OVC 10 29/20/280/15G22	
Start	PUSHBACK		F/A: "SEATED AND STOWED." MTC: STD. PUSH BACK PROCEDURE & START CLEARANCE UPPER WING-ICE INSPECTION COMPLETE WITH NO ICE FOUND.		PUSHBACK NORMAL START

Taxi	**NOTE: PRESENT CREW WITH ACARS**		MTC: STD. DISCONNECT LANGUAGE GND: "USAIR 513, TAXI TO RWY 36 VIA JULIET AND CHARLIE, HOLD SHORT OF RWY 3 AT CHARLIE." CK PILOT: PRESENT ACARS W&B DATA. GND: "USAIR 513 CLEARED TO CROSS RWY 3, CONTACT TWR ON FREQ. 119.1."		TAXIOUT/ BEFORE TAKEOFF CHECK
Takeoff			TWR: "USAIR 513 WIND 280/15, CLEARED FOR TAKEOFF RWY 36." TWR: "CONTACT DEPARTURE CONTROL 118.95."		
Climb			DEPT: "RADAR CONTACT ,MAINTAIN FL 190." DEPT: "CONTACT WASHINGTON CTR. 133.25."		
Cruise	GENERATOR FAILURE		CTR: "MAINTAIN FL. 280."		
Descent	INPUT ARRIVAL WEATHER	ATIS DELTA	(90 MILES NORTH OF CLT) CTR: "USAIR 513, CONTACT ATLANTA CENTER ON 128.8." CTR: "USAIR 513, DESCEND TO CROSS MAJIC INTERSECTION AT 12000 FEET AND 250 KNOTS." CTR: "USAIR 513, CONTACT CLT APP. ON 126.15."	300VC,1/16MI, SBS,TEMP30,DP28, WIND 35010G15, ALTM 29.99. ALL SURFACES WET EXPECT ILS 36L.	SELECT ENGINE AND AIRFOIL ANTI-ICE
Approach			CLT: "RADAR CONTACT, DESCEND TO 5000, DEPART CHARLOTTE VOR HEADING ____ FOR ILS 36L RVR 1200,1400,1200." CLT: "CONTACT TWR 126.4."		AIRFOIL ANTI-ICE OFF AT FINAL APPCH FIX.

Ldg or MA	**NOTE: REDUCE VIS. WHEN CAPT. ACQUIRES RWY INDUCING MISSED APPROACH**		TWR: "CLEARED TO LAND RWY 36L." ****MISSED APPROACH**** TWR: "CONTACT DEPT. 120.05." DEPT: "RADAR CONTACT, TURN RIGHT 050, RADAR VECTOR LOC(BACK CRS) RWY 23, SW HAVE PASSED, WX 600 OVC 2 MILES, TEMP 30 DP28, WIND 250/10, ALTM 29.99. ALL SURFACES WET. BRAKING ACTION GOOD BY MD-80." CLT: "CONTACT TWR 118.1." TWR:"CLEARED TO LAND RWY 23. BA GOOD BY COMPANY MD-80." GRND: "TAXI TO THE GATE."		

CLT/CLT RECURRENT LOFT 513 SEGMENT 3

This segment is flown real time and will begin with engine start in the runup pad on runway 36L. The following items are required on this segment in order to complete the loft. These items may be covered in a format of your choice or the sample format on the following pages.

REQUIRED ITEMS

600 RVR T/O, Takeoff Alternate RDU
Cat II 36L approach (LAND)
V_1 Cut
S.E. ILS Approach (LAND)
Rejected Takeoff
Windshear
LDA 18, DCA (MISSED APPROACH)

CLT/CLT RECURRENT LOFT USAIR 513 SEGMENT 3

TYPICAL SEGMENT 3 FORMAT

1. 600 RVR takeoff, Runway 36L. Takeoff alternate RDU.
2. Vectors for CAT II approach, Runway 36L. Land, Right turn
3. Taxi to Runway 36L.
4. V_1 Cut on takeoff 36L.
5. S.E. approach to CAT I minimum on Runway 36L.(LAND)
6. Right turn off 36L, taxi Runway 5.
7. Restore all systems, max gross weight takeoff Runway 5.
8. Rejected takeoff Runway 5.
9. Windshear profile.(CLT)
10. LDA 18 DCA. (MISSED APPROACH.
11. Any time remaining in the four hour period may be used at your disecretion for additional windshear training, approaches for the first officer additional training or any other items you think appropriate.

JULY 13, 1991

ALL DC-9 CHECK PILOTS

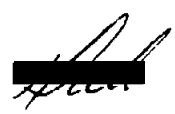
FLIGHT MANAGER DC-9

NEW LOFT SCENARIOS BOOKLET

ATTACHED, PLEASE FIND A TOTAL REVISION TO THE EXISTING LOFT BOOK YOU NOW HAVE. PLEASE DESTROY ALL LOFTS YOU NOW USE AND REPLACE THEM WITH THIS REVISED COPY. IT WILL PROBABLY BE NECESSARY FOR YOU TO MAKE COPIES OF THE WEATHER/FLIGHT PLAN PACKAGE TO GIVE TO THE CREWS FOR THEIR USE DURING THE LOFT SESSION, THEN COLLECT THEM AT COMPLETION.

IF YOU HAVE ANY QUESTIONS OR IF YOU SEE ANY AREAS THAT NEED REVISING PLEASE CALL.

THANK YOU.



CAPT. DALE KOTTRABA

DC-9-30 LOFT

REVISION PAGE

REVISION NUMBER	REVISION DATE	INITIALS
# 1	7-13-91	DK

INTRODUCTION

THE ATTACHED LOFT SCENARIOS TOTAL FOUR IN NUMBER. EACH LOFT INCLUDES THE FOLLOWING GUIDELINES AND INFORMATION.

1. A LOFT SCENARIO SUMMARY AND A COMPLETE SCENARIO FOR THE INSTRUCTOR.

2. A WEATHER DOCUMENT PACKAGE FOR THAT SCENARIO.
   INCLUDING WEATHER AT DEP/DEST/ALTERNATE AND NECESSARY ENROUTE SEQUENCE REPORTS.
   FORECASTS, WINDS ALOFT, AND NOTAMS.

3. COMPUTER FLIGHT PLANS FOR AIRCRAFT # 939 VJ
   FLIGHT RELEASES FOR AIRCRAFT # 939
   TARE SLIP & WEIGHT ANALYSIS FOR AIRCRAFT # 939
   & FUEL SLIPS.

FOR YOUR INFORMATION, THE USAIR DC-9 SIMULATOR # 2 IN PIT HAS -9 ENGINES.

LOFT SCENARIO #101 SUMMARY

FLT. 471/7471: PIT - ORD - IND - PIT

Total Flight Time: 2:20
Total Scenario Time: 3:20

Approaches:

ORD ILS 14R
IND VOR 14
IND ILS 23R

A. SUMMARY

1. PIT-ORD

Left engine oil quantity low on pre-flight. WX requires takeoff alternate. Routine flt. to ORD.

(BREAK)

2. ORD-IND

On climbout, left CSD oil pressure low lt. on. Upon gear extension, anti-skid lt. illuminates.

3. IND-PIT

Left CSD on MEL. Left engine fire warning after takeoff caused by bleed air leak. Fire goes out when throttle is retarded. Engine should not be shut down. Return for 23R ILS.

B. INSTRUCTOR'S NOTES

1. Ensure that scenario, CFP, W/B, T/O weights, WX, and all other data are compatible with simulator.

2. Don't forget fuel slips, located in this section.

3. Remember logbook write-ups and MEL's.

LOFT SCENARIO #102 SUMMARY

FLT. 858/1344: PIT - JFK - BOS - PIT

Total Flight Time: 2:15
Total Scenario Time: 3:15

Approaches:

JFK CAT II ILS 4R
BOS VOR/DME 33L
BOS ILS 4R

A. SUMMARY

1. PIT-JFK

Right eng. hydraulic quant. low on pre-flight.

(BREAK)

2. JFK-BOS

WX requires T.O. alternate. Right main gear frozen down after gear retraction. Observe 300 knot speed restriction. Ground spoilers will not arm. Manual spoilers with weight penalty.

3. BOS-PIT

Hung start left engine. After takeoff, eng. fire on left engine. Return for ILS 4R.

B. INSTRUCTOR'S NOTES

1. Ensure that scenario, CFP, W/B, T/O weights, WX, and all data are compatible with simulator.

2. Don't forget fuel slips, located in this section.

3. Remember logbook write-ups and MEL's.

LOFT SCENARIO #103 SUMMARY

FLT. 1689/68: PIT - SDF - IND

Total Flight Time: 2:20
Total Scenario Time: 3:20

Approaches:

SDF NDB 29
IND ILS 5L

A. SUMMARY

1. PIT-SDF

APU air inop. with MEL. WX requires T.O. alternate. Delay second eng. start. Right Reverser Accumulator Low light illuminates at cruise.

(BREAK)

2. SDF-IND

APU air inop. with MEL. Left or right main landing gear frozen up when gear extends. Emergency Gear Extension fails. Burn off fuel and do not arm spoilers. Refer to Emergency Procedure for landing with available gear. Emergency Evacuation!

INSTRUCTOR'S NOTES

1. Ensure that scenario, CFP, W/B, T/O weights, WX and all data are compatible with simulator.

2. Don't forget fuel slips, located in this section.

3. Remember logbook write-ups and MEL's.

LOFT SCENARIO #104 SUMMARY

FLT. 365/372: PIT - TOL - PIT - JFK

Total Flight Time: 2:10
Total Scenario Time: 3:10

Approaches:

TOL ILS 7
PIT ILS 10L
JFK ILS 31L

A. SUMMARY

1. PIT-TOL (RETURN TO PIT)

Powerback from gate. Uplatch check unsatisfactory after takeoff. Auto Pressurization fails enroute. TOL runway lights are out during approach, return to PIT. Rapid decompression enroute PIT.

(BREAK)

2. PIT-JFK

New aircraft. Left AC Bus Fault enroute JFK. Turn off one AC supply switch prior to landing.

B. INSTRUCTOR'S NOTES

1. Ensure that scenario, CFP, W/B, T/O weights, WX, and all other data are compatible with simulator.

2. Don't forget fuel slips, located in this section.

3. Remember logbook write-ups and MEL's.