



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

December 11, 2019

Attachment 3 – Accident Flight Weight Data Record

OPERATIONAL FACTORS

DCA19CA091

HD 0957 17FEB2120 WDR
FLT0957/17BZN - LONG WDR FILED

CSR 2023 DELTA AIRLINES HISTORY DETAIL RECORDS PAGE
842

FLT DATE TIME MSG
HD 0957 17FEB2120 WDX BZN
WDR TRANSMITTED TO 0FA907 -SMRS

**** NOT FOR USE BY FLIGHT CREWS - USE COMPACT WDR ****

* FLT 0957/17FEB SHIP 3730 BZN-ATL RLS 1 *

*** FINAL - RADIO - ACARS WEIGHT DATA RECORD
HD 0957 17FEB2120 WDX BZN

*** CIRCLE ONE ***

FLT 0957/17 BZN-ATL LD PLNR [REDACTED]
FINAL WEIGHT DATA RECORD DATE/TIME 17FEB 2120Z*HAA0DOM0
FLIGHT PLAN RELEASE NUMBER 01

PSGR CONF
HD 0957 17FEB2120 WDX BZN
G 16/144 GATE 005 -SMRS

95720 OEW 738 SHIP 3730 INCLUDES 2 FLT CRW/4 FLT ATT
100 PARTS ON PLANE PROJECT

NO PASSENGER OR CARGO TOLERANCE
////////////////////////////////////
* 3012 16 C1* PAX / RADIO UPDATE
HD 0957 17FEB2120 WDX BZN
/
* 22797 123 C2* PAX /-----/-----/
/ FC / RWY/COND / /
0 B1 CARGO / / THR/FLAP / /
1590 B2 CARGO / YC / PERF LIM /
3570 B3 CARGO / ZFW / WIND ALRT
HD 0957 17FEB2120 WDX BZN
/
0 B4 CARGO / / RATOW /
/ TOW / STAB /
/ TOCG / VSPEEDS / / /
////////////////////////////////////

CSR 2023 DELTA AIRLINES HISTORY DETAIL RECORDS PAGE
843

FLT DATE TIME MSG
HD 0957 17FEB2120 WDX BZN

*126789 ZERO FUEL WEIGHT MAX 138300
126822.8 ADJUSTED ZFW 23.1 PCT MAC ZFW

28930 FUEL/1 - 8600/2 - 8660/C - 11670
-247 LESS TAXI FUEL

*155472 ACTUAL TAKEOFF WEIGHT AI 55 * 22.7 PCT MAC

HD 0957 17FEB2120 WDX BZN

155522.8 ADJUSTED TAKEOFF WEIGHT BZN TAKEOFF WEATHER /NWS
TEMP 10F ALT 30.08
WIND 277/ 6 KTS

156112 MAX TAKEOFF WT THIS FLIGHT
LIMITED BY FLIGHT PLA
HD 0957 17FEB2120 WDX BZN
NNING RESTRICTIONS

MAX T/O WT LDG ATL MAX LDG WT BURNOFF 18055 FCST 50 F
164355 FLAP 30 146300 ENRTE AND APP ICE CORR USED

174200 MAX STRUCTURAL TAKEOFF WEIGHT

BZN RWY 12 / 8994 FT 10F/-12C
HD 0957 17FEB2120 WDX BZN
5TW 3XW
NON STD TAKEOFF - TURN - SEE 10-0 PAGES
RWY COND THRUST/FLAP CLIMB LIM RATOW STAB V1 VR V2
DRY AT22/05 OVERWT OVERWT --- --- ---
DRY TO/05 168480 TW 07 159592 5.6 144 145 151
SLWET *AT22/05* *OVERWT OVERWT* --- --- ---
CSR 2023 DELTA AIRLINES HISTORY DETAIL RECORDS PAGE
844

FLT	DATE	TIME	MSG
HD	0957	17FEB2120	WDX BZN
- ---*			
SLWET * TO/05* *168480 TW 07 159592* 5.6*141 145 151*			
SLWET BOF * TO/05* *171936 TW 09 161374* 5.6*140 145 151*			
ICY BOF TO/05 OVERWT OVERWT --- --- ---			
25CTR BOF TO/05 OVERWT OVERWT --- --- ---			
50CTR BOF TO/05 OVERWT OVERWT --- --- ---			
HD	0957	17FEB2120	WDX BZN
-			

BZN RWY 30 / 8994 FT 10F/-12C 5HW 3XW
NON STD TAKEOFF - TURN - SEE 10-0 PAGES
RWY COND THRUST/FLAP CLIMB LIM RATOW STAB V1 VR V2
DRY AT25/05 164970 TW 01 158169 5.6 143 145 151

HD 0957 17FEB2120 WDX BZN

DRY TO/05 168480 TW 10 170812 5.6 143 145 151
SLWET *AT25/05* *164970 TW 01 157975* 5.6*140 145 151*
SLWET * TO/05* *168480 TW 10 170812* 5.6*143 145 151*
ICY BOF TO/05 OVERWT OVERWT --- --- ---
25CTR BOF TO/05 OVERWT OVERWT --- --- ---
50CT
HD 0957 17FEB2120 WDX BZN
R BOF TO/05 OVERWT OVERWT --- --- ---

PERFORMANCE NOTES:
TAILWIND: -1382 LBS/KNOT FROM RATOW
TEMP INC: -161 LBS/DEG F -UP TO 15F- FROM CLMB LIM AND RATOW
HEADWIND ADD 200 LBS/KNOT TO RATOW

HD 0957 17FEB2120 WDX BZN

BLEED AIR CORRECTIONS - ENGINE ANTI-ICE
SUBTRACT 500 LBS FROM RATOW
SUBTRACT 600 LBS FROM CLIMB LIMIT

CUTBACK CORRECTION - ASSUMED TEMP
CSR 2023 DELTA AIRLINES HISTORY DETAIL RECORDS
845

PAGE

FLT DATE TIME MSG
HD 0957 17FEB2120 WDX BZN
NOT AUTHORIZED
SUBTRACT 20 LB/FT FROM RATOW

NO LANDING NOTES

MEL/CDL:
S53-00-01
PERFORMANCE CORRECTION FOR 2KU WIFI RADOME
FLT OPS PROC:PERFORMANCE CORREC
HD 0957 17FEB2120 WDX BZN
TIONS HAVE BEEN APPLIED
S99-99-01
NON HZMAT AC PART IN CRGO-ACCTED FOR IN AWABS-NO PILOT ACT REQ
FLT OPS PROC:PERFORMANCE CORRECTIONS HAVE BEEN APPLIED
M73-00-04
FUEL FILTER DIFFERENTIAL PRESSURE WARNING SYSTEMS
HD 0957 17FEB2120 WDX BZN

FLT OPS PROC: REFER TO MEL

REMARKS:
CHILD WEIGHTS IN USE C1K/01 C2K/011
NO LIVE

FLT 0957/17
END

FLT DATE TIME MSG

HD 0957 17FEB2120 CMX

CMD

AN N3730B/GL BZN1

- QUATLDDDL.1ACARS WDR UPDATE

FLT 957/17FEB SHIP 3730 BZN-ATL RLS 1

WDR DATE/TIME 17FEB 2120Z

SOB/146

CARGO 0/1.59/3.57/0

FUEL TOTAL 28.9 TAXI 0.2

TANK 8.6/11.7/8.7

RMWT 155.7 ZFWT 126.8

TOWT 155.5 TOCG 22.7

FLAP/STAB 05/05.6

WX 27706KT -12C A30.08

12 8994FT 05TW 03XW

HD 0957 17FEB2120 CMX

T/F CLIMB RATOW WIND V1 VR V2

WTO/05 168.5 159.6 TW07 41 45 51

WTO/05 171.9 161.4 TW09 40 45 51 BOF

DTO/05 168.5 159.6 TW07 44 45 51

30 8994FT 05HW 03XW

T/F CLIMB RATOW WIND V1 VR V2

W25/05 165.0 158.0 TW01 40 45 51

WTO/05 168.5 170.8 TW10 43 45 51

D25/05 165.0 158.2 TW01 4

FLT DATE TIME MSG

HD 0957 17FEB2120 CMX

3 45 51

DTO/05 168.5 170.8 TW10 43 45 51

RMKS-NOTES-MEL

S53-00-01

S99-99-01

M73-00-04

NO LIVE

FLT 957/17FEB SHIP 3730 BZN-ATL RLS 1

TOWT 155.5 TOCG 22.7
FLAP/STAB 05/05.6
END ACARS WDR

HD 0957 17FEB2120 WDX
CMD
AN N3730B/GL BZN1
- QUATLDDDL.1ACARS WDR UPDATE
FLT 957/17FEB SHIP 3730 BZN-ATL RLS 1
WDR DATE/TIME 17FEB 2120Z
SOB/146
CARGO 0/1.59/3.57/0

FUEL TOTAL 28.9 TAXI 0.2
TANK 8.6/11.7/8.7
RMWT 155.7 ZFWT 126.8
TOWT 155.5 TOCG 22.7
FLAP/STAB 05/05.6

WX 27706KT -12C A30.08

12 8994FT 05TW 03XW
CSR 2023 DELTA AIRLINES HISTORY DETAIL RECORDS PAGE
848

	FLT	DATE	TIME	MSG
HD	0957	17FEB	2120	WDX
T/F CLIMB RATOW WIND V1 VR V2				
WTO/05 168.5 159.6 TW07 41 45 51				
WTO/05 171.9 161.4 TW09 40 45 51 BOF				
DTO/05 168.5 159.6 TW07 44 45 51				

30 8994FT 05HW 03XW
T/F CLIMB RATOW WIND V1 VR V2
W25/05 165.0 158.0 TW01 40 45 51
WTO/05 168.5 170.8 TW10 43 45 51
D25/05 165.0 158.2 TW01 4
HD 0957 17FEB2120 WDX
3 45 51
DTO/05 168.5 170.8 TW10 43 45 51

RMKS-NOTES-MEL
S53-00-01
S99-99-01
M73-00-04
NO LIVE

FLT 957/17FEB SHIP 3730 BZN-ATL RLS 1
TOWT 155.5 TOCG 22.7
FLAP/STAB 05/05.6
END ACARS WDR

HD 0957 17FEB2120 WDR
FLT0957/17BZN - ACARS WDR UPLINKED