DOCKET NO. SA-516

EXHIBIT NO. 110

### NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

## **CABIN ELECTRICAL WRITE-UPS**

(PAGES O-1 THRU O-13)

CABIN ELECTRICAL WRITE-UPS

APRIL

<u>DATE</u>	PAGE	WRITE-UP AND SIGN-OFF
4/2	33038-2	Call light wont light at 43-1. Relamped checks ok.
4/2	33039-1	reading lights out at seats 21-1, 25-4, 31-3, 31-6, 35-8, 36-1, 36-2, 43-1, 44-1. relamped checks ok.
4/4	33043-2	Lav "J" no lights. Relamped ops check ok.
4/4	33044-1	Lav "L" lights are out. Relamped ops check ok.
4/6	33049-3	Overhead light out in lav U1. Relamped bulb check ok.
4/7	22102-1	Audio out "C" zone seats 4,5,6 whole cabin. Reset PSS test accomplished normal.
4/7	22104-3	Lav U1 no light as you enter. Relamped checked ok.
4/8	22106-1	Pax stereo plug seat 8-8 stereo plug loose, intermittent sound. Secured plug seat 8-8. Ops check normal.
4/8	Non-routine	"B" galley and "D" galley overhead fluorescent lights inoperative. Relamped check ok.
4/11	22108-2	Entire cabin F/C and coach no music. Tried to replace main mux and PA 1 ampl. No help. Deferred until LAX 4/12 - troubleshot system found both audio switches bad. Replaced switch at L-4 door. Needs switch at L-1 door P/N 91-0264. Cabin audio restored but must use switch at L-4 door. 4/15 JFK - replaced audio switch at L1 door - no help. Resoldered wires at L1 door, audio switch ops check normal.

- DATE PAGE WRITE-UP AND SIGN-OFF
- 4/11 22109-1 Lav "J" no fluorescent light. Relamped. Checked ok.
- 4/12 22115-2 Ceiling light out above cockpit door. Cleaned contact and relamped. Ops normal.
- 4/13 22118-1 Reading lights out 36-1,2.
  Tried to replace SEB control seat panel and
  PSU no help. Deferred until JFK 4/15 repaired broken power wire at pax reading
  light assembly. Reading light ops check
  normal.
- 4/14 22119-2 Audio does not work. Lights go on and off in last half of "C" zone in center. Secured connector at seat. Ops check ok.
- 4/14 22121-2 "D" and "E" overhead lights out. Relamped checked ok.
- 4/14 Non-routine L-2 aft overhead ceiling lights inop. Relamped checked ok.
- 4/14 Non-routine Center lav both overhead ceiling lights inop. Relamped checked ok.
- 4/14 Non-routine Right aft overhead ceiling light inop. Relamped checked ok.
- 4/14 Non-routine R1-L1 aft overhead ceiling lights inop. Relamped checked ok.
- 4/16 Non-routine Upper call light inop no 3R door. Relamped ok for service.
- 4/20 22131-2 Cove light at 4R inop. Relamped no help. Replaced ballast at 4R cove lights ops checked normal.
- 4/20 22133-2 Seats 6 and 7 in rows 41-54 and seats 4 and 5 in rows 22-28 have static on audio channels. Reseated seat cable at 43-7 and 22-4. Audio ops checked normal.

- DATE PAGE WRITE-UP AND SIGN-OFF
- 4/20 22133-3 Overhead lights in D/E galley right rear and left forward won't come on bright. Relamped lights ops check good.
- 4/22 22139-2 Lav "J" fluorescent light inop. Relamped ops check normal.
- 4/22 22140-3 Ceiling lights inop row 34 left side and row 10 left side and row 19 right side. Relamped. Ops checked normal.
- 4/23 22143-3 Lav "K" entry light inop. Relamped.
- 4/23 22144-1 Reading lights inop 38-2 and 33-8. Relamped
- 4/23 22144-2 Cabin overhead lights inop row 34 left side. Relamped.
- 4/24 22146-2 Reading light at seat 41-0 is burned out. Relamped ops check normal secured PSU.
- 4/25 Non-routine Check all pax reading lights in all zones for proper operation. Checked and relamped as needed.
- 4/25 Non-routine Check all pax call lights in all zones for proper operation. Check and relamped as needed.
- 4/26 19151-2 R2 cabin door area chime button light is inop and no chime when pax call button is activated. Corrected wire tension ops normal.
- 4/26 19151-3 Call button reset switch will not cancel pax call light at 29-8, 9, and 0 seats. Operated call button at all connections several times. Reset works normally. Could not duplicate.
- 4/29 Non-routine Check all interior lights. Accomplished ok.

#### MAY

- 5/1 19167-3 Seat 9-7, no reading light. Relamped - ops check normal.
- 5/3 19175-2 "D" galley overhead lights right side very dim. Relamped galley "D" lights - ops check ok.
- 5/8 19190-1 Seat 25-3, reading light inop. Relamped checked ok.
- 5/8 19190-3 Seat 4-5, no movie sound on channel #1 also some channels inop. Reseated SEB connectors at seat 4-5, checked ok.
- 5/9 19194-2 Seat 4-5 sound switches movie sound to audio and back with no inputs from selector. Replaced seat control op checks normal.
- 5/11 22902-1 Cab attendant light burned out R-4 door. Relamped. Ops check normal.
- 5/11 22902-2 "D" galley left side work surface light burned out. Readjusted and resecured lamps at left hand side "D" galley. Ops check ok.
- 5/11 22903-1 No smoking sign facing R-4, jump seat burned out. Moved and readjusted no smoking sign lamp aft of R-4 door. Ops check ok.
- 5/11 22903-3 Lav "M no light. Reseated lamp connector, ops checked normal.
- 5/15 22913-2 Seat 15-4 heavy static on movie channel. Reseated SEB checked ok.
- 5/17 22290-1 Call lights inop at seats 12-7, 14-2, 15-2, 18-7, 32-8, 44-4, 46-4, 47-7, 25-8. Relamped checked operation ok.

- DATE PAGE WRITE-UP AND SIGN-OFF
- 5/17 22920-2 Reading light inop at 33-8. Relamped checked ok.
- 5/17 22925-1 Light on second from top stair socket broken, light seems to be ok. Relamped checked all stair lights. Operation normal.
- 5/20 22929-1 "M" lav interior light doesn't come on when door is locked. Exercised door switch. Operation ok.
- 5/20 22929-3 92-2 reading light inop. Relamped checked operation ok.
- 5/21 22937-1 Lav "M" light does not come on when door is locked. Recheck lav "M" ops normal lights normal.
- 5/23 22942-1 Row 42-7 reading light inop. Relamped ops good.
- 5/23 22944-1 44-6 and 7 reading lights out. Relamped, ops check good.
- 5/23 22946-1 Seat 92-1 reading light inop. Relamped checks ok.
- 5/23 22946-2 Seat 42-0 reading light inop. Relamped checks ok.
- 5/23 22947-2 Seats 1-1,2-1, 2-2, 3-1, 3-2, 4-1, 4-2, 5-4, 5-5 reading lights inop. Unable to duplicate malfunction. Checked lights operation normal.
- 5/24 Non-routine Several stairwell step lights are burned out. Relamped checks ok.
- 5/25 22949-3 Row 29-1 and 2 reading lights out. Repaired wire. Checked ok secured PSU.
- 5/25 37751-1 "M" lav interior light out. Relamped ops normal.

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5/25 37751-2 Lav light S call light does not work. Relamped call light, ops normal.

- DATE PAGE WRITE-UP AND SIGN-OFF
- 5/25 37753-1 First class 92-1 reading light inop. Relamped, no help deferred until BCN 5/26 spliced loose wire to lamp holder operation checked ok.
- 5/27 Non-routine Lavatory "M" light inop. Relamped checked ok.
- 5/29 37766-3 Static sound only seats 18-4 and 5, 19-4 and 5, 20-4 and 5. Reseated connection at SEB ops check.
- 5/30 37768-1 Reading lights burned out at 20-4, 25-6, 26-6, 21-8, 31-2, 32-5, 30-8, 29-8, 45-5, 45-6. Relamped as required checks ok.
- 5/30 37769-1 Upper deck blue pax call light continually blinks on and off. Found switch in test position. Selected normal light operation normal.
- 5/31 37777-1 Seat 5-6 audio goes on and off only one ear (side) working. Deferred until LGW 5/31 - reseated cp on SEB. checks ok.
- 5/31 37777-2 Lav K light out only dim when door is locked. Relamped ops checked ok.
- 5/31 Non-routine Multiple reading lights inop. Relamped as necessary. Ops checked ok.

### JUNE

- 6/2 37787-3 Loose wires on floor under 34-4 and 38-5. Repositioned wire. All ok.
  6/1 37788-2 "B" galley counter light is dim only. Repositioned bulb. All ok.
- 6/2 Non-routine 805042 check all interior lights. Accomplished ok

## D-6

- DATE PAGE WRITE-UP AND SIGN-OFF
- 6/2 37792-3 Lav K overhead round light burnt out. Relamped ops checked ok
- 6/3 37793-2 Pax call light will not turn off. Checked found all ok.
- 6/3 37793-3 Pax call lights burnt out 31-8, 51-7, 54-9, 54-4, 54-7. Relamped ops ok.
- 6/3 Non-routine 805046 cove lights 1-9, 4-9, 5-9, out. 1-9 relamped check ok. Relamped 4-9, 5-9. No help deferred until 6/6, amps input accomplished. JFK 6/17 - replaced both lamp holders. Ops check normal
- 6/5 27257-1 "B" zone cannot hear announcements properly. Adjusted "B" zone amplifier ops normal.
- 6/6 27262-1 Numerous passenger reading lights blink in first class. Performed PSS test an ops check normal.
- 6/6 27263-1 Seats 8-8, 8-0, audio static. Replaced seat control unit. Ops check normal.
- 6/6 27263-3 Seat 8-9, no audio. Reseated connector at seat control, ops check normal.
- 6/11 27282-3 Reading lights inop 45-7, 37-5, 36-3, 23-8, 25-8. Relamped ops check normal.
- 6/11 27283-2 Overhead ceiling light inop, row 21-27 left side, row 41-43 right side. Relamped ceiling lights row 21-22, rows 41-43.
- 6/11 27284-2 Pax call light inop row 32, seat 1-2-3; row 11, seat 6 and 7. Relamped pax call button ops checked normal.
- 6/11 27285-3 Two lights on stairway to upper deck inop. Relamped ops check normal.

- 6/12 27288-2 Stereo/audio has static sound in row 15 center section. Re-set connector on seat control boxes. Ops check normal.
- 6/12 27288-3 Cabin overhead lights inoperative at row 22, left side and row 33, left side. Excited fluorescent tubes, repositioned in sockets ops normal.
- 6/12 27291-2 Several lights (push button) above cove lights in upper deck are out. Replaced several bulbs in push button side wall lights. No help deferred until JFK 6/12 relamped ops check normal, remove placard.
- 6/11 Non-routine "B" galley ceiling lights inop in bright position. Relamped ops check normal
- 6/14 27303-1 Rows 2 through 5 left side F/C disco lights
  and flashing call lights.
  Deferred until STL 6/14 re-seated SEU cables
  at seat 2 and 5 ground ops check normal.
- 6/15 27305-2 Bulb burnt out in F/A call light outside of Lav E. Relamped ops check normal.
- 6/15 27308-1 All "E" zone right side seats 8, 9 and 0, no audio-static (rows 40-54). Reseated cp's on several SEB's. All check ok
- 6/19 27317-3 11-7, no light. Relamped ops check ok.
- 6/20 27321-2 Reading lights burnt out 10-1, 10-2, 14-8, 27-1, 37-5, 38-1, 37-5, 45-7, 52-6. Relamped reading light. Ops check normal.
- 6/20 27322-1 92-1, something wrong with reading lights all lights in that area inop. Repaired broken wire at attendant rotarty light selector switch. ops check ok.
- 6/20 27322-2 Call lights burnt out 21-1, 49-0. Deferred until 6/24 CDG - relamped and installed cover checked ok.

- 6/20 27323-1 Ceiling light in aisle outside of lav R burnt
  out.
  Relamped ops check ok.
- 6/20 27323-3 Middle lavs left cross aisle ceiling light burnt out. Relamped ops check ok.
- 6/20 27324-3 One of the round ceiling lights at both R5 and L5 burnt out. Relamped ops check ok.
- 6/20 27327-2 "A" galley right round ceiling light burnt out. Relamped ops check ok.
- 6/20 27327-3 Staircase to upper deck, 2nd step light from top burnt out. Relamped ops check ok.
- 6/22 27336-1 28-4,5,6,7, lights flash will not stay on. Secured connector at SEB ops checked ok.
- 6/22 27336-2 28-6,7, audio all channels go in and out. Reseated audio control cannon plug. Ops check normal.
- 6/22 27341-3 Upper deck pax reading lights on fuselage inop 2 center ones on left and first 3 on right. Deferred until FCO 6/27 - relamped wall lights operating normally per aircraft configuration.
- 6/22 27342-1 Cove light at 36-right inop. Deferred until CDG 6/27 - relamped checked ok removed placard.
- 6/23 27346-2 "B" and "C" galley counter lights out. Relamped counter lights - ok, B and C galley.
- 6/25 21105-2 Seat 91-2 no reading light. Relamped ops checked ok.

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- 6/25 21105-3 Seat 91-2, no stereo. Replaced controller checked ops ok.
- 6/25 21108-2 No audio rows 41-8,9,0 to 44-8,9,0. Found seat electronic unit cannon plug out at seat 48-8,9,0. Repositioned same checked ok.

DATE PAGE WRITE-UP AND SIGN-OFF 6/26 21112-1 91-2 reading light out. Deferred until FCO 6/27 - relamped checked ok. 6/26 21112-2 28-4,5,6,7 lights continuously flash, audio goes in and out. Secured connector at seat SEB ops checked ok. 6/26 21112-3 Seat 16-8,9,10 no electrical power (no lights, no audio). Re-installed connector at SEB ops checked ok. 6/27 21117-2 Overhead light outside of lav R does not illuminate. Relamped checks ok. 6/27 21118-1 91-2 reading light does not illuminate. Relamped checked ok. 6/27 21118-3 Overhead light between lavs L and J does not illuminate. Relamped checks ok. 6/27 21119-3 C galley left work light does not illuminate. Repositioned lamps checks ok. 6/28 21126-3 E galley left side overhead light is out. Relamped ops good. 6/28 21127-2 Seats 40-8,9,0 headset sound does not work. Reseated plugs at SEB row 40 right hand side ops normal. 6/28 21127 - 3B galley left and right sides work surface lights are out. Relamped ops good. 6/28 21129-1 B galley left side overhead light is out. Relamped ops good. 6/29 21132 - 2Audio in C zone out on left side of aircraft. Reseated loose audio plug C zone audio ops check ok. 6/30 Non-routine Upper deck left ceiling light overhead out. Replaced left assembly checked ok. 6/30 Non-routine Check all interior lights. Accomplished.

D-10

6/30 Non-routine Lots of reading lights out 1st cabin. Replaced bulbs checks ok.

6/30 Non-routine Window light out 21. Replaced lamps row, ok

#### JULY

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- 7/2 21146-3 Seat 16-4 passenger entertainment and reading light controls do not work. Could not duplicate. No 16-4 on aircraft. 16-3, 15-4 ops checked normal.
- 7/2 Non-routine Check all pax reading lights in all zones for proper ops. Checked reading lights in all zones. Relamped as required.
- 7/2 Non-routine Check all pax call lights for proper ops. Check call light system ops normal.
- 7/3 21148-1 C zone left side coach from row 20-1, 20-2, 20-3, to back of zone, no audio just static. Cleaned SCU connector 20-2 ops checked normal.
- 7/2 21149-1 Seats 16-1, 16-2, 16-3 PSU controls no light control. Wiring connected to seats 15-1, 15-2, 15-3. Replaced seat control unit ops checked normal.
- 7/3 19602-1 Rows 33-36, seats 5-6-7 no audio. Reseated SEB operation normal.
- 7/4 19606-1 91-1, no reading light. Deferred until FCO 7/5 - relamped checked ok.
- 7/4 19609-3 Light bulb works but switch in arm rest does
  not 91-1.
  Cleaned reading light switch and relamped
  properly checked ok.
- 7/6 19616-2 Upper deck galley light reading light over side servicing area upperdeck galley out. Deferred until 7/7 TLV relamped checked.

DATE	PAGE	WRITE-UP AND SIGN-OFF
7/6	Non-routine	"H" lav mirror light is inop. Replaced both fluorescent tubes checked ok.
7/7	Non-routine	Lots of bulbs out on all F-A doors. Relamped.
7/7	Non-routine	Several ceiling lights out in cabin. Relamped ok.
7/7	Non-routine	Few cabin ceiling lights out. Relamped checks ok.
7/8	Non-routine	43-4 light switch inop - reading light. seat control page 80508.
7/8	Non-routine	Seat 14-0 reading light out. Relamped ops checked ok.
7/9	19624-2	92-8 reading light does not turn on at seat. Relamped checked ok.
7/9	19625-1	Reading lights are out at 17-3, 25-2, 21-0, 22-6, 27-6, 28-7, 26-4&5. Replaced column recorder timer fuses checked ok.
7/9	19625-3	Rows 21-28, seats 1,2,3 have no audio. Unable to duplicate on ground operation checked ok.
7/9	19629-1	C zone right side no audio. Reseated SEB connection at 27 8,9,0 audio ops normal.
7/9	19629-2	Row 28-6,7 reading go off and on by themselves. Reseated PSUD connection reading lights ops normal.
7/9	19631-2	Rows 8-16, seats 8,9,0 - no lights, call lights or audio. Replaced burnt fuse operation checked ok.
7/11	Non-routine	Reading light inop seat 5-6. Replaced bulb, operation checked ok.
7/11	Non-routine	Galley B worklight inop. Reseated neon tubes operation checked ok.

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# D-12

- 7/15 Non-routine "B" zone right side egress lights inop. Replaced track power feed strip. Ops check normal.
- 7/15 Non-routine "E" zone aft right side and aux. bar area egress light inop. Reconnected wall power feed strip. Ops check normal.
- 7/15 Non-routine Ceiling lights inop at seats 9-1,10-1,11-1, 12-1, 14-1 and 15-1. Relamped 9-1. Reworked socket at 11-1. Ops checked normal at 9-1, 10-1, 11-1, 12-1, 14-1, 15-1.

# 0-13