| **PROJECT TYPE** | | **APPLICABILITY:** |
|---|---|---|
| **STC** ☒ | **Minor Change** ❑ | • **B767 family** |

The Northern Avionics 5VDC USB Power Distribution System is an In-seat Low Power System providing each passenger with an USB charging port available at the proper seat, as shown by the below figure.

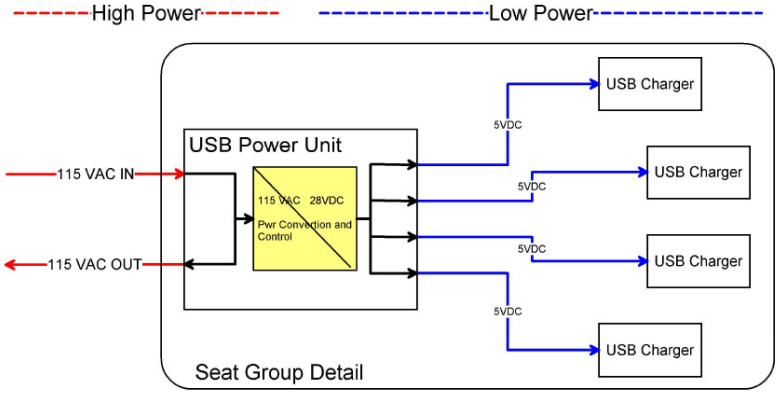


Fig. 1 In-seat USB Power Distribution Scheme

The 115 VAC power of the LH and RH Utility Busses is distributed to each Power Unit installed into each group of seats (i.e. Double or Triple Seats) and converted into a 5 VDC low power, ready to be used by each passenger through a dedicated USB Charger.

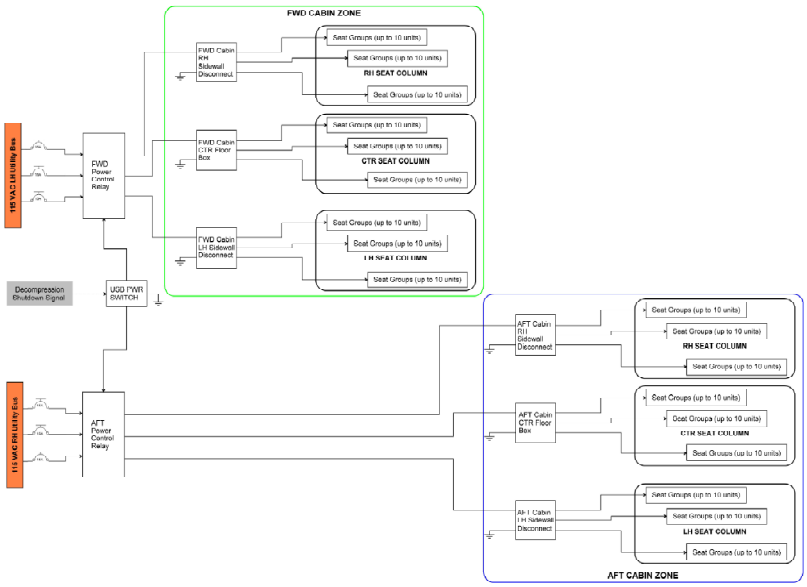


Fig. 2 USB Power system – Block Diagram

The design of this modification is developed to install a number of power units necessary to supply up to three hundreds (300) USB chargers positioned in each passenger seat (as seat group of two or three seats).

The USB Power system architecture appears as two separate cabin areas, forward and aft zones, with separate power lines for each seat column, left-center-right, as per the below general block diagram shown by figure 2.

Details of typical USB power distribution within the seat columns, with regards to the different type of seat groups and with a possible front and rear installation of the USB Charger outlets on each seat, are shown by figure 3.

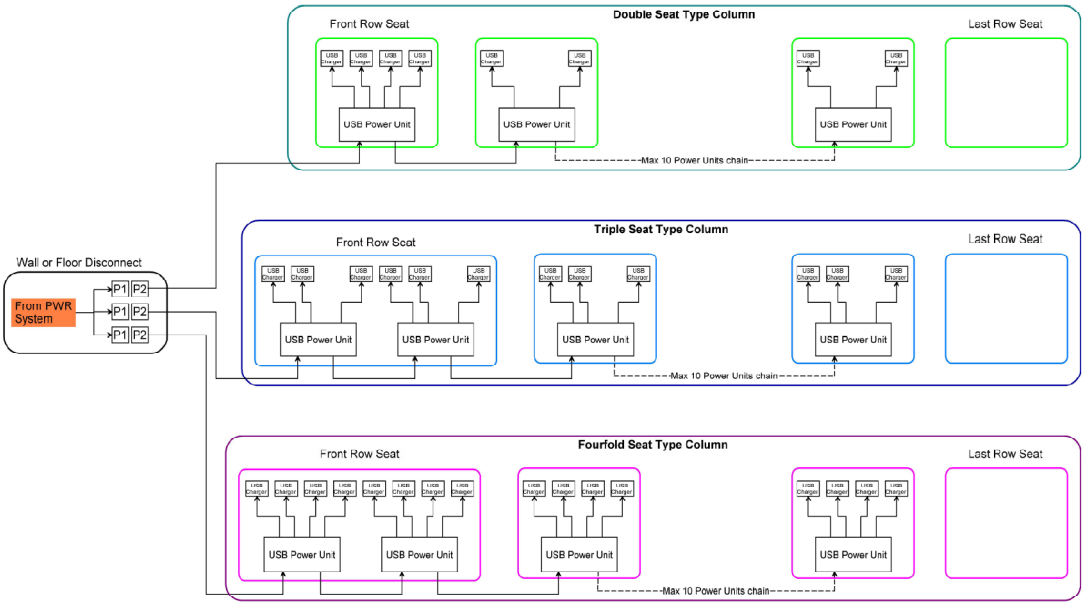


Fig. 3 Seat Column distribution details

This Major Change, related to USB Power Units p/n 1000-800-100 and USB Chargers p/n 1000-411-000 can be easily customized with additional features on the USB Chargers (i.e. night light or highr power output). Applicability to different aircraft models can be evaluated.

For more information you can contact:

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# SUPPLEMENTAL TYPE CERTIFICATE

# 10064716

This Supplemental Type Certificate is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EU) No. 748/2012 to

## NORTHERN AVIONICS S.R.L.

**VIALE DELL' AVIAZIONE 65**
**20138 MILANO**
**ITALY**

and certifies that the change in the type design for the product listed below with the limitations and conditions specified meets the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified below:

**Original Type Certificate Number:** EASA.IM.A.035
**Type Certificate Holder:** THE BOEING COMPANY
**Type:** 767
**Model:** 767-200
767-300
767-400ER

**Description of Design Change:**
USB Power on B767

**EASA Certification Basis:**
The Certification Basis for the original product as amended by the following additional or alternative airworthiness requirements: the following paragraph(s) at a later amendment:
Rif. CCL-NAV0573 Rev.2
The requirements for environmental protection and the associated certified noise and/ or emissions levels of the original product are unchanged and remain applicable to this certificate/ approval.

See Continuation Sheet(s)

**For the European Aviation Safety Agency**

**Cologne, Germany, 20 February 2018**

**Carla IORIO**
**Supplemental Type Certificates & Special Projects**
**Section Manager**