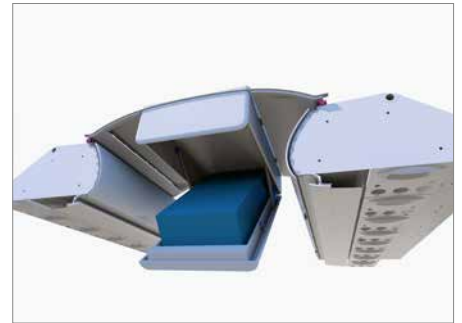




## Center Ceiling Stowage+

The trend towards a higher number of seats in A320 family aircraft has often led to costly boarding delays due to the limited space in the cabin and especially in the overhead stowage compartments. Center Ceiling Stowage+ (CCS+) is a smart solution by Lufthansa Technik and aircraft component manufacturer FACC to gain more stowage space and enhance passenger comfort. It can be installed at the forward, center and/or aft positions of the aircraft cabin. This solution for high-density cabin configurations helps operators reduce boarding time and thus maximize operating profit.



### The initial situation

The introduction of high-density solutions as well as an increasing number of passengers traveling without checked baggage (partly due to the rising number of ticket fares with fees for such items) leads to a growing amount of cabin luggage. Yet boarding is prolonged when passengers are not able to store their belongings quickly, leading to costly delays in the flight schedule. At the same time, less frequently used equipment such as life rafts, baby bassinets, wheelchairs, emergency equipment, crew luggage, galley equipment or newspapers takes up to 25 percent of the space in overhead stowage compartments – which is then not available for passenger belongings.

### A flexible solution

The CCS+ module uses the space available in the center ceiling area to store these items. It accommodates considerably more load than its predecessor (38.5 kg instead of 13 kg), and therefore is also suitable for heavier objects, such as life rafts. In addition, this solution can be installed at diverse positions in the aircraft (forward, center and aft), offering a maximum of flexibility for the customer. The short lead time to install the solution means that operators can react quickly to new circumstances. The new, enhanced structure connection, optimized for EASA Part 145 companies, facilitates installation. It is also possible to combine CCS+ with Lufthansa Technik's large antenna solution.

### Expertise and strong partnerships

To develop CCS+, Lufthansa Technik combined its strong expertise in operational and maintenance requirements with lightweight components specialist FACC to realize a design that provides maximized cabin space as well as increased flexibility, a higher payload and shorter installation times. Customers can configure CCS+ according to their individual needs. The possibilities range from consulting services to turnkey solutions as well as Engineering Bulletins (EB) and material kits, and are supplemented by excellent material and logistics services. Lufthansa Technik can also help operators avoid additional installation downtime by efficiently integrating a modification event into a scheduled maintenance layover.

### CCS+ features

- Weight (empty): about 20.5 kg
- Payload: 38.5 kg
- Provisions for less frequently used equipment
- 50,000 life cycles (about 25 years)
- New enhanced structure connection for Part 145 companies

### Options

- Airbus A318, A319, A320 and A321
- Forward, center and aft position possible
- Availability: second quarter 2018 (all positions)

### Customer benefits

- Prevention of costly boarding delays
- High flexibility with diverse positions
- Short lead time
- Structure connection compatible with large antenna solutions

### Contact

Lufthansa Technik AG  
Aircraft Modification  
Weg beim Jaeger 193  
22335 Hamburg, Germany

Oliver Rodrigues  
Phone +49-151-589-42164  
oliver.rodrigues@lht.dlh.de  
www.lufthansa-technik.com