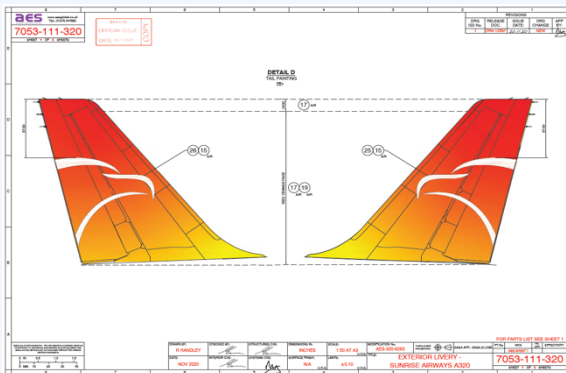
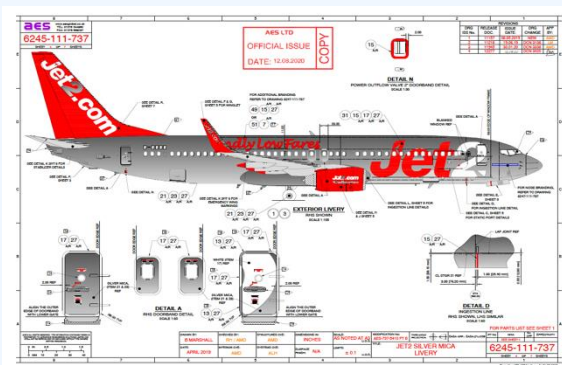




CELEBRATING
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AIRCRAFT LIVERY MANDATORY MARKINGS

Whether you are an aircraft operator or lessor, Aerospace Engineering Solutions can provide you with EASA Part21J solutions to support any changes to an aircraft's exterior livery or mandatory markings.



Support for Airlines

- ▶ New or existing liveries for aircraft entering service
- ▶ Airline rebranding
- ▶ Retro liveries
- ▶ Promotional liveries

Lessors with transitioning aircraft

- ▶ White tail liveries & de-branding
- ▶ Registration markings changes (Temporary or Permanent)
- ▶ External mandatory markings changes (single or dual language)

Our Solutions

- ▶ Applicable to all aircraft types
- ▶ EASA Approved Minor Modification with accomplishment instructions & installation drawings
- ▶ Livery paint stencil kits provided
- ▶ Supply stencil kits or decals for mandatory marking & registrations changes.



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AIRCRAFT SEAT REFURBISHMENT

Aerospace Engineering Solutions offers a comprehensive range of aircraft seat refurbishment packages tailored to meet your requirements. Whether you want to improve your seat for ultimate passenger comfort or install/remove In-Flight Entertainment systems, our design and engineering teams can assist you. We specialise in STC applications for seat cabin configuration and monument changes for narrow and wide-body aircraft, ensuring seamless integration and compliance with industry standards.



Scope includes

- IFE system installations & integration
- IFE de-activation & removal (including blanks)
- In seat power supply systems
- 9 abreast seats configurations
- Replacement of foams & dress covers
- Trim & finish changes
- Airline branding / décor changes



Solution

- Support Airbus, Boeing & Regional aircraft
- EASA & GCAA approved
- Necessary parts & installation kits provided
- Flammability testing compliant (where applicable)
- FAA validation also offered



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AIRCRAFT TRANSITIONS

Aerospace Engineering Solutions facilitates global aircraft transition projects for airline operators and leasing companies. With our DOA approvals, capabilities, extensive experience, and strategic collaborations, we provide a comprehensive turnkey solution. Our technical teams manage projects seamlessly, offering on-site personnel, engineering expertise, and streamlined parts procurement.



Scope includes but not limited to:

Cabin Changes

- Narrow and wide-body aircraft types
- Seating reconfigurations (single or multi class)
- Zero passenger LOPA
- Emergency equipment layouts
- Interior placard modifications
- Airline branding/décor changes

Exterior Changes

- White tail or new operator liveries
- Technical markings

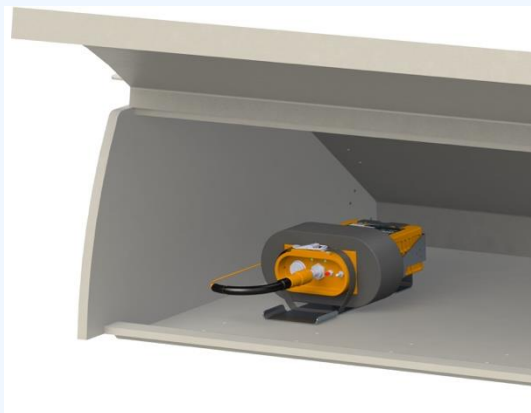
Aircraft Registration Modifications

- Mode S recoding / SELCAL change / FDIMU / EGWPS callout / Satcom / DFDAU

Emergency Locator Transmitter Reprogramming

Aircraft & Engine Lease Plates

EASA approved with accomplishment instructions, parts supply and installation kits

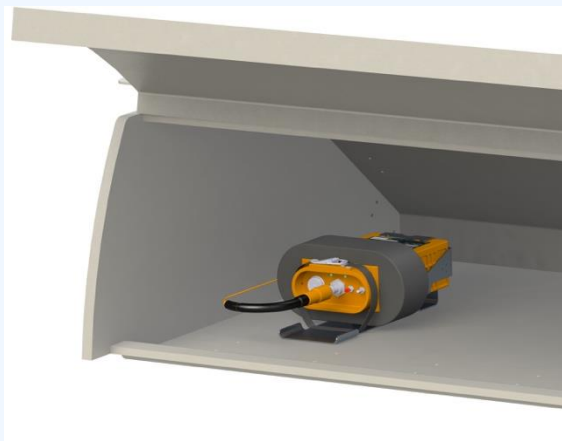




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AUTOMATIC PORTABLE ELT

WITH NON-RECHARGEABLE LITHIUM BATTERIES



Requirement

EASA CAT.IDE.A.280(a) mandates automatic ELTs for aircraft with a MOPSC of over 19, or two if CofA issued before July 1, 2008. Many portable ELTs with lithium batteries need an STC for ETSO C142b non-compliant installation.

Solution

Aerospace Engineering Solutions (AES) offers evaluation for minor modification and modification package for all aircraft types. We provide full engineering, ETSO C142b compliant Portable ELT (Oriola), and installation kit (bracketry and placards) to meet NRLB installation requirements.

Benefits

Allow operators and aircraft leasing companies to achieve compliance quickly without an STC application. Minor changes for customization, cost-effectiveness, and fleet-wide adaptation.

FAA validation also offered.





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BOEING 737NG

FORWARD UNDERBIN CLOSET

EASA STC 10079922



Aerospace Engineering Solutions hold EASA STC 10079922 for the design and installation of a left-hand and right-hand closet (12inch, underbin).

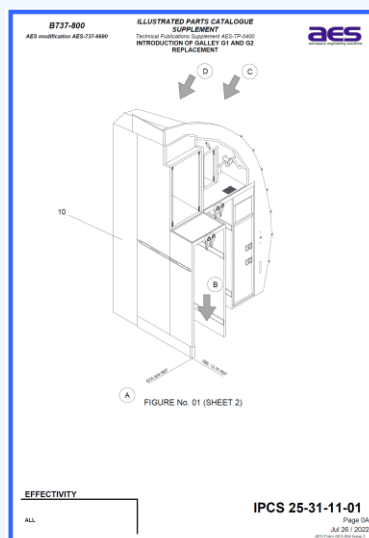
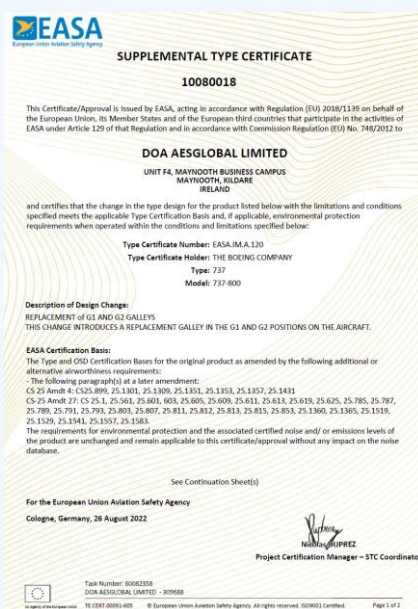
Each stowage features two coat rails behind an inboard opening door.

The closet assemblies are perfect for operators wishing to provide stowage accommodation but do not have much “spare” space in the cabin.

Décor is a standard Isovolta 70F1 type so can be customised to suit. The closet units are delivered with UK CAA Form 1 approval.

As an industry leader in certified aerospace design and engineering, AES has developed more than 3000 interior cabin modifications over the past 20+ years.

B737NG GALLEY 1, 2, 4B & 7 INSTALLATION



Aerospace Engineering Solutions has developed several EASA STC solutions for installation of Galley 1, 2, 4B and 7 for the Boeing 737NG Family.

Galley installations (or replacement galleys) can be introduced for a variety of reasons. Damaged beyond economic repair; an alternative insert arrangement may be required; the new operator may have a specific unit required for operation, etc. Our STCs are the perfect solution if you need to replace these units.

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BLUEBOX WOW AIRCRAFT POWERED W-IFE

Aerospace Engineering Solutions provides Part 21J design support for Bluebox Wow, offering two approved pathways for aircraft-powered wireless in-flight entertainment (W-IFE): a fully integrated STC solution and a power provision-only minor modification.

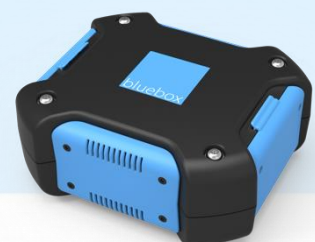
Bluebox Wow is an award-winning wireless streaming hardware platform delivering in-flight entertainment, onboard retail, and other digital services. Utilising aircraft power eliminates the need for battery logistical management while still offering a considerably lighter and lower-cost system than fully fitted W-IFE.

STC option – The Wow box is delivered with UK CAA Form 1 approval, full installation support, and Instructions for Continued Airworthiness (ICA), providing a fully approved integrated aircraft solution.

Minor modification option – Only the power and mechanical provision are installed under minor modification approval. The operator remains responsible for activating the Wow box and approving it for use as a Portable Electronic Device (PED).



- Applicable to A320 Family, A330, EMB190, F100, B737NG/BSI (WIP)
- Installation kits provided with Form 1
- Cost-effective solution for on board W-IFE solution
- Lunchbox-sized unit stowed securely in overhead bins
- Additional aircraft types can be added





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B737NG/BSI CABIN CONFIGURATION



Aerospace Engineering Solutions offers a series EASA STC solutions for the Boeing 737NG including 186, 189 cabin configurations.

Following release of EASA Certification memo EASA CM-21.A-CS-001 ISSUE 02 the installation/reconfiguration of all aircraft cabin that involve 16G / 25.562 certification statements, the change classification shall be considered as a Major (STC) change.

EASA requires a different STC for each seat type and each different passenger count. We have successfully secured the following STCs:-

186 – with Recaro 3510B seats

186 – with Recaro 3520H seats

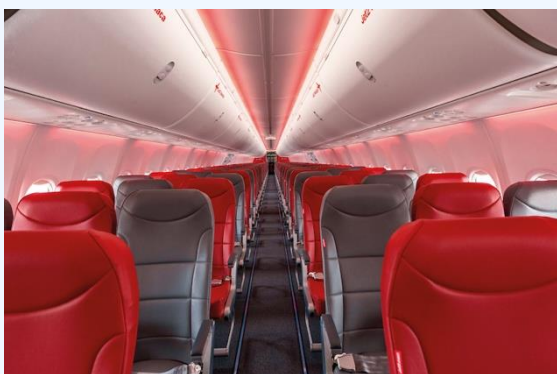
189 – with Acro Series 3 seats

189 – with Safran Z100 seats

189 – with BE Spectrum seats (WIP)

189 – with Recaro 3510A seats (WIP)

The addition of new seat types is dealt with the Agency (EASA) and we can typically complete the STC application in 3-4 months.





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CABIN ATTENDANT SEAT REFURBISHMENT

Aerospace Engineering Solutions (AES) has developed a modification for the Airbus A320 family that replaces the existing leather dress covers with alternative-coloured covers. The change allows the operator to refresh the Cabin Attendance Seats (CAS) to match the cabin's desired aesthetic look and feel.



Customisable Leather Dress Covers

AES offers a modification to replace existing leather dress covers with alternative colour options, enabling operators to refresh and personalise the cabin's aesthetic.

Collaborative Expertise

Developed with Sabeti Wain Aerospace, our solutions ensure top-quality, and precision tailored to your needs.

Safety and Compliance

Rest assured, our new replacement covers come with UKCAA Form 1 certification, and our engineering services are EASA-approved. These ensure the highest standards of safety and compliance, giving you peace of mind.

Comprehensive Solutions

In addition to new covers, AES can replace seat belts, ensuring a cohesive and comfortable cabin environment for your crew.





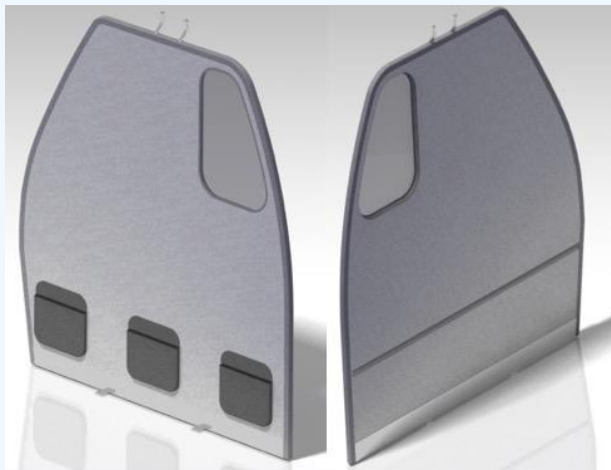
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CABIN BULKHEADS

AIRBUS A320 FAMILY

Aerospace Engineering Solutions offers a cost-effective solution for forward left-hand and right-hand partitions designed for the Airbus A320 family.

Manufactured from lightweight composite materials and featuring standard Isovolta 70F1 decorative laminate, these partitions are track-mounted at the floor and spigot-mounted at the top. Additionally, aluminium edging can be anodised or powder-coated to match airline branding colours, with all partitions equipped with a stainless-steel kick strip.



Customised to suit your requirements

- ▶ Leather literature pockets
- ▶ Direct view window
- ▶ Bassinet provisions
- ▶ IFE provisions
- ▶ Rub strips on forward face
- ▶ Released with EASA 21J minor modification

As an industry leader in certified aerospace design and engineering, AES has developed more than 3000 interior cabin modifications over the past 20+ years.



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CABIN USB POWER

BOEING 737, AIRBUS A320 & A330



Aerospace Engineering Solutions offers a USB power solution for the passenger airplane through minor modification.

Each outlet assembly can be provided under seat (2 or 3 outlets per triple seat). Output is 5-6V, 2.1A per outlet.



The outlets can be installed behind the seat or integrated in the seat back. The power supply unit shares the standard SEB footprint, streamlining retrofit solutions.



Full aircraft and seat installation engineering is provided, hands on labour to fit the seat mounted hardware is also available.

Installation kits are available and supplied with EASA Form 1.



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FLIGHT DECK USB POWER

BOEING 737, BOEING 747, AIRBUS A320/A321 FAMILY



Aerospace Engineering Solutions offers a solution for 5-20V, 3A, 60W output, with Power Delivery (PD) USB power for flight deck personnel through minor modification.

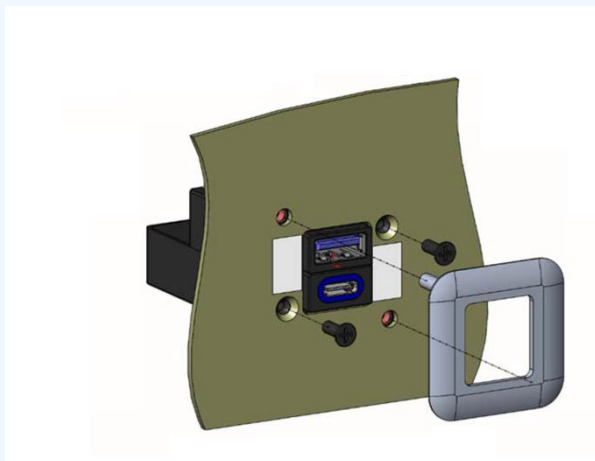
Installation is conveniently located adjacent to each flight crew, optional 3rd outlet for Boeing 737 and A320/A321 family is also available. This can be from an existing USB installed system or from a clean aircraft.

The engineering package is EASA approved and covers installation and instructions for Continued Airworthiness.

Installation kits available and supplied with EASA Form 1.

FAA approval can be provided if required.

Additional aircraft types in progress.





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PART 21J SOLUTIONS FOR INTERIOR REPAIRS

Maintaining aircraft interiors is crucial, but standard CMMs and AMMs often lack tailored repair solutions for timely maintenance. When repairs exceed OEM documentation, operators face costly delays and extended downtime. Efficient solutions are essential to keep aircraft in service.

Aerospace Engineering Solutions provides a Part 21J-approved engineering package for complex interior repairs. We deliver fast, cost-effective, and fully compliant solutions to minimise downtime and keep aircraft flying. **Our repair services include:**

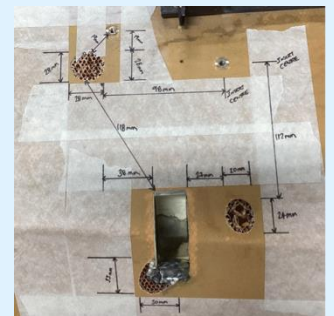
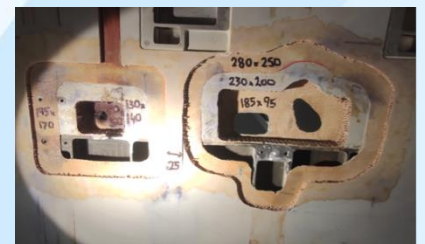
Galley & Lavatory Workdecks, latch fittings, bonded blocks, composite panels, delamination, punctures, water egress, cracking, corrosion damage.

Interior Component Ceiling panels, overhead stowage compartments, sidewall panels.

Passenger Seat Cracks in metallic parts, loose components, trim & finish replacement.

Product Improvement & Damage Prevention
Protective panels, enhanced trim & finish solutions.

Design & Manufacture Custom repair parts for unavailable components.

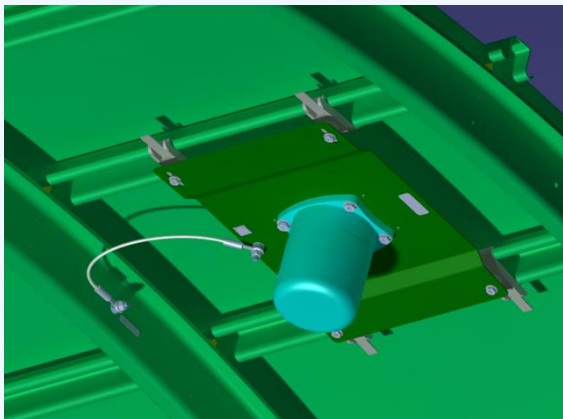




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LF-ULD SOLUTION

ALL BOEING AND AIRBUS AIRCRAFT TYPES



Requirement

EASA CAT.IDE.A.285(f) states that, all aircraft with a maximum take-off mass of over 45,000 kg operating over oceanic areas are to be fitted with the Low Frequency Underwater Locator Device (LF-ULD) by 1st January 2019.

Solution

Aerospace Engineering Solutions has developed a retrofit solution for Airbus and Boeing family. AES can provide the full engineering, LRU (NovegaSID88) and installation kit to meet this new requirement.

Benefits

The design solution is engineered to allow operators and leasing companies to achieve full compliance with the applicable ruling in a convenient and timely fashion.

Lead time - within 4 weeks.

FAA validation also offered.



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ZERO PASSENGER LAYOUT

EASA STC 10070986

BOEING 737NG & BOEING 757



Aerospace Engineering Solutions holds STC 10070986 for the “incomplete passenger cabin” commonly known as the “zero passenger place” configuration, specifically designed for single aisle Boeing aircraft.

This modification, categorised as Major per EASA Certification Memo CM-CS-010-001 Issue 01, is often necessary for ferrying aircraft or to accommodate end of lease and entry into service requirements.

Additional aircraft types can be added to our capabilities.