



# AIRWORTHINESS APPROVALS FOR FIXED-WING & ROTORCRAFT INTERIORS...

CERTIFICATION // DESIGN // STRUCTURES // TESTING // MANUFACTURING SUPPORT





# IF YOU NEED A CERTIFICATION PARTNER, LOOK NO FURTHER...



## AIRWORTHINESS APPROVALS FOR CABIN INTERIOR PRODUCTS AND FULL CONFIGURATIONS...

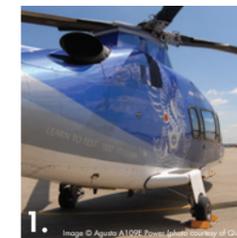
Few companies have as broad a scope of services as **SWS** to support the aircraft interiors industry today. **SWS**, an EASA Part 21J DOA and GCAA (UAE) DOA are a world-class strategic partner for Fixed-wing and Rotorcraft Operators, OEMs, Integrators, VIP and Utility companies all over the world.

**SWS** strive to provide our customers with complete solutions to their approval requirements; whether it be an EASA STC, a minor design change or repair; support for a concept design through to a fully approved modification. Our experienced, world-class team of certification experts and highly skilled engineers and designers work tirelessly to deliver the required technical documentation whilst ensuring that projects are completed on time and to budget.

**SWS** specialise in obtaining airworthiness approvals for cabin interior products in the following areas:-

### 1. ROTORCRAFT:

**SWS** have the experience and expertise to obtain airworthiness approvals for design changes and repairs to both large and small rotorcraft. We have specific experience of Agusta A109 models, Robinson R22/44, Bell, McDonnell Douglas MD902 and Airbus (formerly Eurocopter) helicopters.



### 2. SYSTEMS AND EQUIPMENT:

**SWS** also have considerable knowledge and experience in supporting electrical systems at both supplier and airframe manufacturer level.

### 3. LIGHTING:

**SWS** have experience in certifying the installation of all kinds of cabin lighting including the latest 'plug and play' LED systems.

### 4. SEATING:

**SWS** have extensive experience in designing, qualifying, testing and certifying new seats and seat systems. We can also obtain approvals for clients who are modifying and upgrading existing seats with such items as new IFE/cushions/seat actuators & lighting/control systems etc as well as clients who are configuring a complete new seating installation.



### 5. CABIN INTERIORS

**SWS** are industry leaders in designing, testing and certifying bespoke cabin interiors whether it is a R22 helicopter or a Boeing/Airbus VIP wide-bodied aircraft.



# OUR SERVICES...

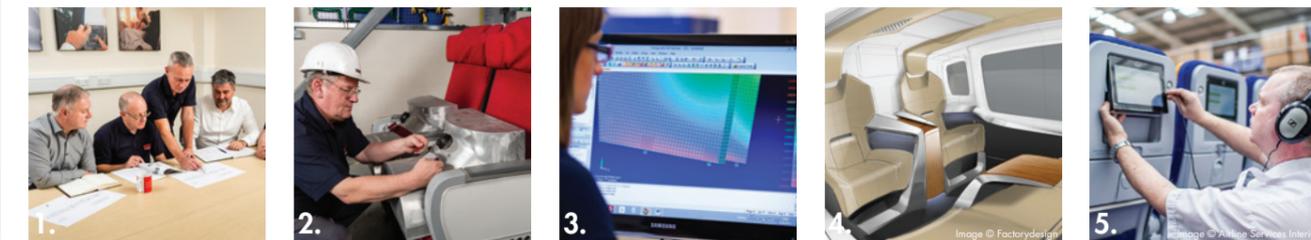
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## WHAT WE DO...

**SUPPORTING OUR CLIENTS FROM CONCEPT, DEVELOPMENT AND TEST PHASES THROUGH TO CERTIFICATION, MANUFACTURE AND INSTALLATION.**

**SWS** have technical and regulatory expertise with many different **aircraft types** and aim to provide our customers with a complete solution to their requirements. Whether you are looking for a partner for a new aircraft/product programme or whether you have a specific requirement for regulatory advice, test or analysis, we can support with the following:-



### 1. CERTIFICATION:

We work alongside our clients' design teams on concept design projects. Once the chosen design route is agreed, we undertake a first stage '**feasibility**', identifying areas which pose particular certification challenges and possible project risks. We support the **development process** ensuring all certification issues have been considered and a plan for compliance agreed. We can then take it through to achieve full airworthiness approvals, whether it be EASA, FAA or customer specific national aviation authority.

### 2. TESTING:

We can support the qualification of new or modified aircraft and cabin interior products by managing the full testing stage and ensuring all testing conforms with EASA's strict guidelines. **SWS** have their own **static test facility** as well as a wide range of approved facilities who can perform tests such as **environmental, flammability, dynamic and electrical testing**.

### 3. STRUCTURES:

**SWS** boast professional and highly skilled structures and stress engineers who are amongst the best in the industry in their discipline. Analysis methods include **NX Nastran and FEMAP** to perform interface load, structural, fatigue and dynamic response or engine imbalance analysis and **LS-Dyna** to simulate dynamic performance.

### 4. DESIGN:

We have our own **internal design** team who provide first class design support for our electrical and mechanical programmes. However for those clients looking for a full design and approvals package we are happy to recommend our **design partners**, two of Europe's leading design consultancies, **Factorydesign and DCA Design**.

### 5. MANUFACTURING SUPPORT:

**SWS** partner with two of Europe's leading **EASA Part 21G production organisations**, Airline Services Interiors and Cobalt Aerospace. Our collaboration with these 2 organisations allows us to offer a full support package from concept design through to manufacture and installation.



# OUR SERVICES...

CERTIFICATION // TESTING // STRUCTURES // DESIGN // MANUFACTURING SUPPORT



AIR NEW ZEALAND  Image © Air New Zealand



Experts in what we do...

## CERTIFICATION...

WE HAVE BOTH EASA AND GCAA (UAE) DOA APPROVALS.

Organisations from all over the world come to **SWS** to gain design organisation approval support for their aircraft interior programmes.

### DESIGN ORGANISATION APPROVALS

Our specialist regulatory knowledge relating to Aircraft Interiors together with our experienced certification team can obtain EASA and other national regulatory approvals.

We are approved by the **European Aviation Safety Agency (EASA)** and the **GCAA (UAE)** and work hard to maintain our DOA (Design Organisation Approval) status.

The company is regularly audited to ensure we continue to offer the approval and safety standards required by EASA and expected by our customers.

### WHY SWS?

- We are fully accredited with a broad scope of regulatory approvals both technically and at aircraft type level.
- We have an excellent relationship with EASA and other regulatory bodies.
- We are experienced in dealing with Airbus/Boeing/Agusta & McDonnell Douglas, and also have the technical experience to deal with other fleet types.
- **SWS** have pioneered some of the latest certification standards in service today.
- We have CVEs in many disciplines.
- We are the preferred DOA for many airlines and OEMs around the world.

**"SWS** has delivered an excellent and efficient service to aid the certification of our product on a very aggressive schedule."

**Justin Daley:** Product Manager, Zodiac Seats UK.



Image © Air New Zealand



# OUR SERVICES...

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WE OFFER TURN KEY SOLUTIONS OR ELEMENTS AS REQUIRED...



Experts in what we do...

## TESTING...

WE OFFER A WORLD-CLASS TESTING AND DESIGN EVALUATION SERVICE.

All testing is carried out at **SWS' in-house facility** or by one of our approved test partners and complies with **EASA's strict guidelines**. Our main objective is to provide a world-class service at a competitive price to ensure we meet our customers' exact expectations.

### WHY SWS?

- **SWS** have extensive experience, capability and flexibility to provide your business with **unrivalled test services** as required by major airframe manufacturers and national regulatory authorities. We can also offer discreet data, as required.
- **SWS'** portfolio of approved test partners (including **environmental, flammability, dynamic and electrical test facilities**) is continually expanding. **SWS** also have their own static test facility in South Wales.
- **SWS** are experts in providing **electrical equipment, hardware and software qualification** in accordance with EUROCAE ED14/ RTCA DO-160, EUROCAE ED12/ RTCA DO-178 and EUROCAE ED80/RTCA DO-254 requirements.

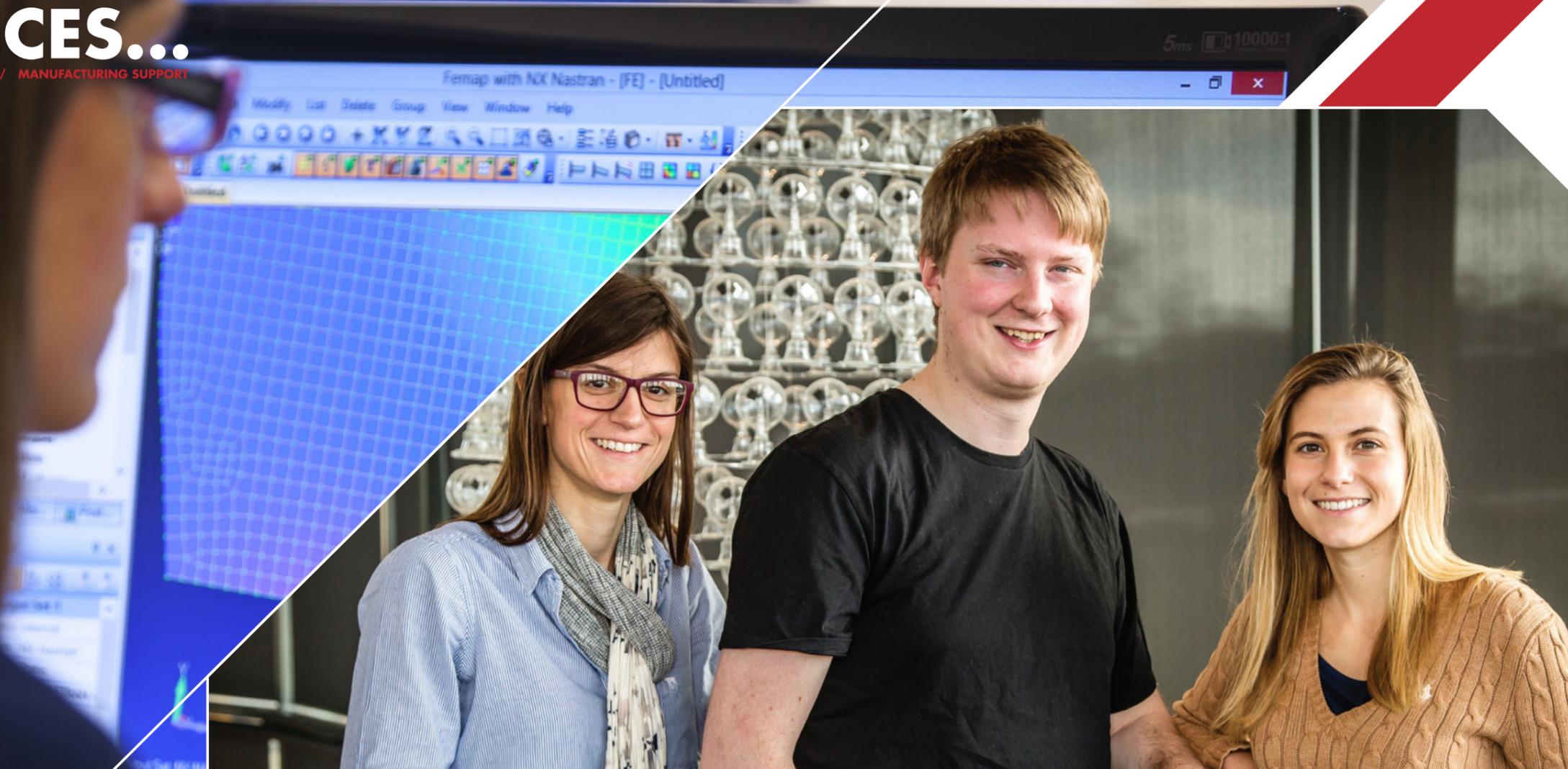
"Acro used **SWS'** Static Test Facility to support the certification for the installation of one of our seats onto the B767. We were impressed by the expert advice and support we were given."

**Chris Brady:** Chief Executive, Acro Aircraft Seating.



# OUR SERVICES...

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Experts in what we do...

## STRUCTURES...

WORKING TO GIVE OUR CLIENTS THE BEST ANALYSIS AND SUPPORTING DATA AVAILABLE.

At **SWS** we believe our people are our greatest asset. Over recent years, our professional and highly skilled stress and structures engineers have been involved in the substantiation of a number of major programmes for leading companies in the Airline Interiors market.

### OUR TEAM

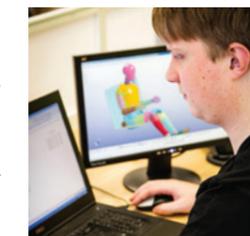
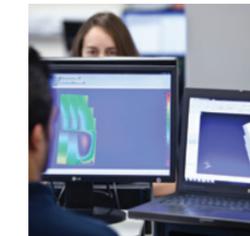
Our team has extensive experience in this exacting industry and their disciplines include **specific analysis for interface loads, structural strength, fatigue, windmilling, dynamic response and engine imbalance** to support development, design and testing. These disciplines **support the substantiation of product designs** and installations as part of the **EASA compliance package**.

### SWS SOFTWARE TOOLS

**SWS'** expert and experienced stress and structures engineers employ a series of analysis methods in accordance with industry requirements. We work with **NX Nastran/FEMAP FE Software** in line with leading airframe manufacturer requirements to give our clients the very best analysis data they require relating to their interior structure. We have also acquired NX10, which is a finite element software with CAD/CAM/CAE capabilities and LS-DYNA for **SWS'** dynamic analysis.

"We aim to give our clients the very best analysis and supporting data available."

**Claire Demarquet:** Head of Engineering, **SWS**.



# OUR SERVICES...

CERTIFICATION // TESTING // STRUCTURES // DESIGN // MANUFACTURING SUPPORT

## INNOVATIVE AIRCRAFT INTERIOR DESIGN WITH CERTIFICATION IN PARALLEL...

factorydesign

Image © Factorydesign

DCA

Image © DCA Design

Experts in what we do...

## DESIGN...

WE CAN OFFER A FULL 'DESIGN FOR CERTIFICATION' SERVICE WORKING WITH OUR APPROVED DESIGN PARTNERS.

As an **EASA Part 21J DOA**, **SWS** are best known for our regulatory and certification expertise; obtaining approvals for Aircraft Interior products to allow them to be installed successfully and safely onto the aircraft. However as an additional arm to our business, **SWS** are able to support our clients on the conceptual design side as well.

### IN-HOUSE DESIGN & DRAFTING SERVICES

**SWS** have an internal team who specialise in **mechanical and electrical design**. We get involved in the design element of an overall STC or Minor Change/Repair project. For example, on a programme where an airline wishes to fit a new electrical lighting system, there may be an underlying issue where the existing and new equipment do not interface correctly resulting in the need for a completely new design for the installation.

**SWS'** design team use a combination of **2D and 3D software**. **SWS'** expertise includes: the generation of **wiring diagrams, loom drawings, GAs and LOPAs**. The team also gets involved in the design of any parts required for manufacture, assembly or installation. As part of the design, a full parts list for the final design is also provided. Quite often this will involve liaising directly with the **customer, the airframe manufacturer, EASA Part 21G production organisation and EASA Part 145 maintenance organisation**.

### THE WORLD'S BEST CONCEPTUAL DESIGN HOUSES

**SWS** are pleased to work with some of the **world's best design houses**, from the airline's or OEM's own in-house department to design consultancies nominated by our clients. At **SWS** we firmly believe that the Aircraft Interior design process has to take account of certification/airworthiness requirements, in order to reduce the certification risks and successfully meet our clients' product expectations. We also believe that certification should not stifle design creativity but become an integral part of the design process. Therefore for those clients requiring the full concept design with approvals package we would strongly recommend that they work with us alongside one of our **preferred design partners**.

Our collaboration with **factorydesign** and **DCA** we believe offers something quite unique to the aircraft interiors industry. It aims to provide a combined conceptual design and certification service for cabin interior programmes for both large and small fixed-wing aircraft and rotorcraft.

- **Factorydesign**, an award winning aviation design consultancy based in London.

- **DCA Design**, one of Europe's leading product & transport design consultancies, based in Warwick.

Together **SWS** and our design partners are able to provide a complete service which we believe is currently lacking in the Aircraft Interiors industry. This is already bringing **considerable benefits** to some of our clients' projects; where designs which are presented at concept stage were significantly de-risked therefore helping to meet the customer's design expectations within **agreed budgets and timescales**.



EASA.21J.124



United Arab Emirates



دولة الامارات العربية المتحدة  
الهيئة العامة للطيران المدني  
UAE General Civil Aviation Authority

# OUR SERVICES...

CERTIFICATION // TESTING // STRUCTURES // DESIGN // MANUFACTURING SUPPORT



Experts in what we do...

## MANUFACTURING SUPPORT...

**WE ARE ABLE TO DELIVER CERTIFIABLE DESIGNS FROM CONCEPT THROUGH TO MANUFACTURE.**

**SWS** have unrivalled expertise in Certification & Testing and combined with our high quality collaborations with leading manufacturing organisations, we are able to deliver certifiable designs from Concept, Approval through to Manufacture.

### TAKING DESIGN THROUGH TO MANUFACTURE

We are delighted that many production organisations, from the world of aircraft interior parts and appliance as well as organisations who provide aircraft interior refurbishments, all benefit from **SWS'** expert knowledge and advice.

In order to provide manufactured products with Airworthiness Release Certification, **SWS Certification Services** partner with Cobalt Aerospace who are an EASA Part 21 Subpart G production organisation, reference UK.21G.2669.

### COBALT AEROSPACE

Cobalt Aerospace provides POA manufacturing support to many high profile interior programmes for airlines, VIP completion centres and integrators around the world.

### AIRLINE SERVICES INTERIORS

Another organisation **SWS** partner, with Part 21 Subpart G POA status, is Airline Services Interiors:-

Airline Services Interiors offer a range of Aircraft Interior Repair, Overhaul and Engineering services and we are proud to be supporting several of their interior programmes.



Image © Airline Services Interiors



Image © Custom Control Concepts



# OUR CLIENTS...

**SWS SUPPORT MAJOR AIRCRAFT INTERIORS COMPANIES AROUND THE WORLD.**

SWS' clients include major international airlines, OEMs as well as reputed helicopter operators and prestigious VIP interior companies as far afield as New Zealand. We believe the relationship we have built with many organisations, including high profile aircraft operators, over the years is a testament to how we conduct our business.



## NORTH & SOUTH AMERICA:



### Our North & South American clients include...

- Adams Rite Aerospace
- Azul
- Greenpoint Technologies
- Panasonic Avionics Corporation



## UNITED KINGDOM & NORTHERN IRELAND:



### Our United Kingdom & Northern Ireland clients include...

- AIM Altitude
- AirTanker Ltd
- AirTanker Services Ltd
- Acro Aircraft Seating
- Airline Services Interiors
- Castle Air
- Cobalt Aerospace
- Mirus Aircraft Seating
- Rebel.aero
- Sloane Helicopters
- Thompson Aero Seating
- Virgin Atlantic
- Zodiac Seats UK



## EUROPE:



### Our European clients include...

- Airbus Defence and Space
- Air Austral
- Greiner aerospace
- Lufthansa
- Peak
- Stelia Aerospace
- TAP Portugal
- Turkish Airlines



## AUSTRALASIA & ASIA:



### Our Australasian clients include...

- Air New Zealand
- China Airlines



**WE SUPPORT MAJOR AIRCRAFT INTERIOR COMPANIES AROUND THE WORLD...**



*Examples of our work...*

# AIRLINES...

## SKYCOUCH™ STC APPROVALS FOR AIR NEW ZEALAND AND CHINA AIRLINES.

**SWS** are a world-class certification partner for operators all over the world. Over the years we have had a particularly close relationship supporting Air New Zealand programmes.

### AIR NEW ZEALAND SKYCOUCH™

When Air New Zealand came up with the idea of Skycouch™, they wanted to market it as a purpose-designed, triple seat, multi-occupancy three-seat berth and recreational area, specifically aimed at singles and couples in search of a bed or some extra room, and parents travelling with children.

It was the first time an airline had come up with this concept, certainly in economy, and that was the challenge - how **SWS** with Air New Zealand would approach and evaluate Skycouch™ to prove it was airworthy and offered the occupants a safe flight environment.

### CERTIFICATION CHALLENGES

The main issue was occupant safety and the potential for injury during inflight turbulence. If individuals – adults or children – are lying down side by side, the challenge was to establish the interrelationship between Skycouch™ and the surrounding environment, including the seat in front, the effectiveness of new occupant restraints and a risk of head, chest and general occupant injuries for adults, children and infants of various sizes.

Despite the certification challenges, **SWS** supported Air New Zealand and successfully obtained an STC on the B777. Since then **SWS** has been working with the airline to introduce it onto further aircraft. STC approvals have now also been obtained for its installation on Air New Zealand's Dreamliner B787-9.

### EASA STC FOR FAMILY COUCH ON CHINA AIRLINES B777-300ER

Also in late 2013, Air New Zealand had signed a licensing agreement with China Airlines allowing them to use the Skycouch™ concept which it will brand as the "Family Couch". Again **SWS** provided the necessary certification support to obtain an STC for Skycouch™ on China Airlines B777-300 ER. China Airlines will now roll out the new seating on all 10 of its new Boeing 777-300ER aircraft.

**"SWS'** unrivalled certification expertise and support continues to impress **Air New Zealand** and has directly resulted in further STC approvals for the installation of **Skycouch™**, on Air New Zealand's new B787-9's and the existing B777-200ER aircraft."

**Kerry Reeves:** Programme Director, **Air New Zealand.**



**"SWS** provide China Airlines great support and service with experience to obtain the EASA STC for "Family Couch" installation. They are the reliable partner of certification expertise."

**J.S.Tseng:** Manager, **China Airlines.**

AIR NEW ZEALAND Image © Air New Zealand





Examples of our work...

# VIP CLIENTS...

## AEROLOFT STC APPROVALS FOR GREENPOINT TECHNOLOGIES.

SWS are uniquely experienced in obtaining approvals for some of the latest innovations in cabin interior installations, allowing Greenpoint Technologies to offer their VIP clients something different and customised. We pride ourselves on being able to work on some of the most innovative, ground-breaking products in Aircraft Interiors today and for this reason believe we really are the right partner to support OEMs, Operators and Airframe Manufacturers with their new/upgraded VIP cabin interior developments.

### AEROLOFT®

In 2011, SWS supported the launch of Greenpoint Technologies' Aeroloft® and specifically the regulatory challenges that were encountered in obtaining an EASA approval for Greenpoint, a Zodiac Aerospace company manufacturing the Aeroloft® for use on a non-EU VIP aircraft. All of this at a time when the US/EASA bilateral agreement was coming into force.

Being a completely new concept, Aeroloft® presented many certification challenges necessitating a multi-organisation collaboration between Greenpoint, Boeing, SWS, the integrator and EASA. There are other crew rest sleeping accommodations in the overhead area of the aircraft but not for aircraft passengers.

This presented several certification firsts for the Aeroloft® project.

- First EASA STC on the first Boeing delivered B747-8i
- First EASA STC approved involving the recently issued EASA and USA bi-lateral agreement
- First Aeroloft® integrated into a VIP configured B747-8i
- Application submitted for first Aeroloft® FAA STC

Since the initial STC, SWS have now approved another 3 Aeroloft® installations.

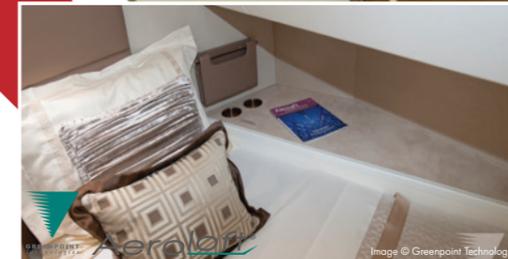
**"SWS continues to support the EASA certification process for Greenpoint's Aeroloft® product. Their extensive experience with EASA regulations was instrumental in obtaining the first STC on the 747-8 aircraft. They understand custom and innovative projects, and offer a wide variety of certification expertise."**

**Greg Cummings:** Chief Engineering Technology, DER, Greenpoint Technologies.



## EXAMPLES OF OUR WORK...

AIRLINES // VIP CLIENTS // MANUFACTURING CLIENTS // ROTORCRAFT



**"AIM Altitude contract SWS for their specific expertise in certification issues, and have continued to be impressed and have confidence in their ability to deliver. SWS provided an EASA minor approval on a B737 VIP package; as with our previous experiences, SWS provided a very efficient service to a tight schedule."**

**Richard Leaper:** Chief Engineer, AIM Altitude.



Examples of our work...

# MANUFACTURING CLIENTS...

## APPROVALS FOR ACRO'S SAAB SEAT AND COBALT AEROSPACE'S SPECTRUM.

SWS have excelled ourselves in guiding our manufacturing customers through all phases of the approvals and testing process to ensure their products obtain the necessary approvals on time and to budget. Our ultimate aim being to equip them with the required technical documentation to show compliance with the regulatory authorities.

### THIS IS OUR 6-POINT PLAN FOR MANUFACTURERS

1. To work alongside OEM clients to provide design support and advice on certification issues.
2. Once the chosen product design is agreed, to formulate a certification programme detailing the qualification and certification route to approval.
3. To support the development process ensuring all certification issues have been considered and a plan for compliance agreed; attend ITCM, PDR, CDR and FAI meetings.
4. To support the qualification of new product design by providing the required analysis and test data.
5. To support OEM clients with the development of certification and compliance documentation.
6. To liaise with the regulatory authorities, to obtain the required airworthiness approvals.

### ACRO SAAB SEAT

Acro's Saab Seat; a lightweight passenger seat, developed in cooperation with Saab and Acro Aircraft Seating Ltd and tested by SWS.

### COBALT AEROSPACE'S 'SPECTRUM'

Cobalt Aerospace's 'Spectrum' is available as a retro-fit lighting system and offers passengers all the advantages of a full mood lighting system without the aircraft needing to undergo expensive and unnecessary rewiring.

Spectrum which is the world's first 'Drop-In' full colour RGBW (with Red, Green, Blue, and White) LED cabin lighting solution has now been certified by SWS and is available for installation on the Airbus A320, A330 and A340 aircraft.

"We have been particularly impressed by the high standards of testing we receive as well as the expert advice and certification support that SWS provide. As a result, we regularly use SWS to support the testing & certification of our seats including most latterly Acro's Saab seat."

**Chris Brady:** Chief Executive, Acro Aircraft Seating.

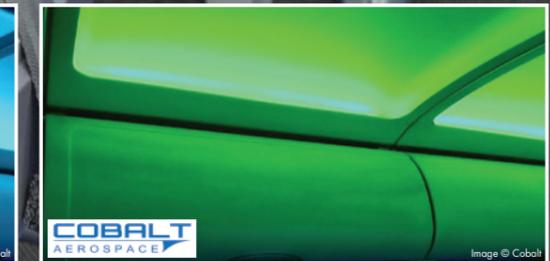


## EXAMPLES OF OUR WORK...

AIRLINES // VIP CLIENTS // MANUFACTURING CLIENTS // ROTORCRAFT

"SWS are our DOA partner of choice because their knowledge of regulatory domains, as well as their practical insight, are second to none."

**Dan Rust:** Director, Cobalt Aerospace Ltd.



Examples of our work...

# ROTORCRAFT...

**WE OFFER COMPLETE SOLUTIONS FOR THE ROTORCRAFT INTERIORS INDUSTRY.**

**SWS** have the experience and expertise to obtain airworthiness approvals for design changes and repairs to both large and small rotorcraft. We have gained specific experience, working on Agusta A109 models, Robinson R22/44, Bell, McDonnell Douglas MD902 and Airbus (formerly Eurocopter) helicopters.

## DESIGN CHANGES & REPAIR APPROVALS

We have a number of design changes and repair approvals obtained for various equipment and structures including:- seating, avionic installations & upgrades, NVIS, GPS- Moving Maps, communication equipment, IFE, Mode S, external cameras as well as police role and HEMS installations.

## SUPPORT FOR EMERGENCY MEDICAL SERVICES

**SWS** have particular experience supporting the UK Air Ambulance Authorities providing them with design and certification support for HEMS equipment installations.

Typical design change and repair approvals obtained include: stretchers, defibrillators, monitors, infusion pumps, tetra radio and oxygen systems.

“Sloane Helicopters have worked closely with **SWS** over several years and have always found them to be professional and thorough with knowledgeable and personable staff.”

**Andy Wood:** Maintenance Manager, **Sloane Helicopters Ltd.**



Image © Agusta A109E Power (photo courtesy of QinetiQ)

# WHAT OUR CLIENTS SAY ABOUT US...

# TESTIMONIALS...

## HOW WE MEASURE OUR SUCCESS.

### AIRLINE CLIENTS:

#### AIR NEW ZEALAND...

"SWS have excelled in developing an innovative approach to achieving approval of the 'Skycouch' a new Economy seat proposition for Air New Zealand."

**Kerry Reeves:** Programme Director, Air New Zealand.

#### CHINA AIRLINES...

"SWS provide China Airlines great support and service with experience to obtain the EASA STC for "Family Couch" installation. They are the reliable partner of certification expertise."

**J.S. Tseng:** Manager, Cabin Interior Section, China Airlines.

#### TAP Portugal...

"SWS proficient knowledge and responsiveness were instrumental success factors which enabled TAP to achieve a quite complex seat modification and IFE integration in a very aggressive lead-time, thus earning the right of being considered much more than a supplier, a partner."

**Jose de Almeida:** A330 Fleet Manager & IFE Systems Manager, TAP Portugal M&E.

### MANUFACTURING CLIENTS:

#### THOMPSON AERO SEATING...

"The expertise and knowledge of SWS has assisted Thompson Aero Seating to gain ETSO and TSO approval for our Vantage seats, as well as providing follow up data to enable seat installations via STC. They are fully worthy of their reputation for competence and quality of service."

**Seamas Mulholland:** VP Engineering/Certification, Thompson Aero Seating.

#### ADAMS RITE AEROSPACE...

"SWS has become our first choice when we begin looking for Safety and Certification support. Their responsiveness and breadth of experience make it hard for other firms to compete with them in this area. We have benefitted from their expertise on multiple programs across our product lines."

**Scott Shuster:** Director Sales & Customer Service, Adams Rite Aerospace.

#### ZODIAC SEATS UK...

"SWS has delivered an excellent and efficient service to aid the certification of our product on a very aggressive schedule."

**Justin Daley:** Project Manager, Zodiac Seats UK.

### VIP/ROTORCRAFT CLIENTS:

#### AIM ALTITUDE...

"AIM Altitude contract SWS for their specific expertise in certification issues, and have continued to be impressed and have confidence in their ability to deliver. SWS provided an EASA minor approval on a B737 VIP package; as with our previous experiences, SWS provided a very efficient service to a tight schedule."

**Richard Leaper:** Chief Engineer, AIM Altitude.

#### GREENPOINT TECHNOLOGIES...

"SWS continues to support the EASA certification process for Greenpoint's Aeroloff® product. Their extensive experience with EASA regulations was instrumental in obtaining the first STC on the 747-8 aircraft. They understand custom and innovative projects, and offer a wide variety of certification expertise."

**Greg Cummings:** Chief Engineering Technology, DER, Greenpoint Technologies.

#### SLOANE HELICOPTERS...

"Sloane Helicopters have worked closely with SWS over several years and have always found them to be professional and thorough with knowledgeable and personable staff."

**Andy Wood:** Maintenance Manager, Sloane Helicopters Ltd.



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