

Transition to EASA Certification

EASA Aerodromes Conference

November 2014



Bristol Airport

- Origins date back to 1930: at current location since 1957
- 9th largest UK airport (6.3m pax 2014)
- Catchment area of circa 10m pax
- Diversified range of leading airlines
- Fly direct to over 109 destinations across 29 countries with 86 scheduled destinations and services to 15 capital cities
- Approx. 3,000 employees working for 45 businesses
- Significant growth potential with comprehensive planning approval to grow to 10 million pax

AERODROME CHART - ICAO

ARP 512258N 0024309W

AD ELEV 622FT

BRISTOL
EGGD

AERO INFO DATE 28 JUL 14

COM		
ATIS	126.025	BRISTOL INFO
TWR	123.850	BRISTOL TOWER
	121.925	BRISTOL GROUND
	121.600	BRISTOL FIRE
LIGHTING		
APCH 09	450m HI coded CL with 3 bars.	
APCH 27	570m HI coded CL with 3 bars. Supplementary inner 300m.	
THR 09/27	HI green uni-d with W bars.	
RWY 09/27	Elev HI bi-d with LI oval-d component. HI colour coded CL. End lights red.	
TWY	Taxiways G/Z green CL. Blue edge on Taxiways A, B, D, F, H and J.	

VAR 2.0°W - 2014
Annual Rate
of Change 0.15°E

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the
Reference Ellipsoid (WGS 84) at the stated position.
BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL 609



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS		
APRON / RWY / TWY	SURFACE	BEARING STRENGTH
RWY 09/27	Grooved Marshall Asphalt	51/FICAWT
Main Apron	Concrete/Asphalt	51/FICAWT
West Apron	Concrete	51/FICAWT
Southern Apron	Asphalt	30/FICAWT
Light Aircraft Park	Asphalt	20/FICAWT
TWY A/G/Z	Asphalt	51/FICAWT
TWY B	Asphalt	53/FICAWT
TWY D	Asphalt	43/FICAWT
TWY F	Asphalt	25/FICAWT
TWY H	Asphalt/Green	20/FICAWT
TWY J	Asphalt	30/FICAWT

CHANGE (11/14): RUNWAY TOUCH DOWN ZONE AIMING POINT MARKINGS AMENDED.

Amazing journeys start here



Amazing journeys start here



Involvement of BRS in EASA transition trial

- Bristol Airport in conjunction with its Aerodrome Inspector lobbied hard to be involved in the UK trial run by the CAA
- Bristol was selected along with Norwich and Aberdeen.
- Bristol became the first trial aerodrome with lessons learned being passed onto other trial aerodromes
- Why?
- An opportunity to confirm the completeness and effectiveness of our SMS
- Being involved at the early stage provided an early opportunity to influence how that change is implemented
- More time to rectify any issues that were identified during transition process before the regulatory deadline

Bristol Airport transition team

Oversight of the process was provided by the Operations Director

Transition Team consisted of :-

- Head of Safety and Compliance
- Aerodrome Infrastructure and Development Manager
- Airside Operations and Safety Manager
- Airside Operations Co-ordinator
- Chief Fire Officer
- Head of Engineering

A summary of the trial transition

- First met with the CAA Transition team in June 2013
- Worked with the CAA to gain a clear understanding the transition process and the Regulations
- Worked with the draft documentation to prepare the three main transition elements Certification Basis(CB) , Operations Basis (OB) and Aerodrome Manual(AM) and identified to the CAA opportunities for improvement.
- The agreed document changes allowed us to record evidence that supported our assertions of compliance
- Following a number of iterations, the amended trial documentation was used for our formal submission to the CAA.

The Operations Basis

- The OB requires the Aerodrome to provide a description of the management, operations and safety processes /procedures in place.
- Our approach was to perform a gap analysis comparing our existing procedures etc. against the EASA regulations
- This enabled us to identify non-compliances and/or areas of uncertainty that needed to be addressed by the airport authority in consultation with the CAA
- An SMS evaluation by the UK CAA helped to validate the findings of the gap analysis
- Once we were satisfied the OB was complete it was then submitted to the CAA with references to accompanying evidence of our compliance
- Bristol airport used National standards, Civil Aviation Publications (CAP's) as acceptable means of compliance



Shortcut to Operations Basis Checklist V1.050813.Ink

The Certification Basis

- The 'Certification Basis' (CB) requires aerodromes to compare their actual infrastructure and facilities with that identified within the Certification Specifications (CS) .
- The CB recognises that flexibility is needed to take account of the non-uniform infrastructure of European airports.
- The CB therefore permits local solutions to deviations from the CS as result of a risk based approach supported by risk assessments and SADS
- This CB is proposed by the aerodrome operator and is decided upon by the UK CAA



Shortcut to EASA Transition - Notes and non compliances v1 090813.Ink



Shortcut to EASA Transition - Known issues 060613.Ink

Preparing the Certification Basis

The approach taken by UK CAA is to provide Aerodrome Operators with a template listing all the Certification Specifications contained within CS-ADR-DSN

The Aerodrome Operator then completes the template identifying and confirming that specifications are or are not met

Where specifications cannot be met, but can be agreed to be acceptable with current or further mitigation applied they will be classed as:

- A special condition
- An Equivalent Level of Safety (ELOS) or
- Entry into the Aerodrome 'Deviations Acceptance and Action Document' (DAAD)

The Aerodrome Manual

- The format of the Manual has been prescribed by EASA.
- The change from the existing format and addition of other required information has resulted in the Manual now becoming a comprehensive 'location' for all necessary aerodrome information
- Is supported by specific airside procedures, which can be read as standalone documents, cross referenced within the manual
- Production of the Aerodrome manual was very time consuming and the cross referencing with other information was complicated especially with regard to being allowed to reference historic national standards as acceptable means of compliance
- The Manual is a 'living' document, and subject to approval from the Competent Authority, is updated on a regular basis to reflect the modifications to the airport and procedures

The Transition

- BRS provided a completed OB, CB and AM along with supporting DAAD and Safety Assurance documentation as required to the UK CAA
- A period of collaborative review followed to reach an agreed method of dealing with acceptable non compliances (DAAD, / SC / ELOS)
- Once this is achieved, a formal EASA Certificate can be provided to the Aerodrome Authority
- The review and documentation process for Bristol Airport took six months. This could vary depending on the complexity of the Aerodrome and the maturity of its SMS
- Several review meetings, correspondence and conference calls with the CAA
- Attendance at EASA transition conferences

General Observations

- The new format of the regulations is confusing and non-intuitive at first, but does become easier with familiarity
- The OB was less complex than the CB for BRS, (BRS did take the opportunity for a complete airfield compliance check which exceeds minimum requirement for transition)
- Guidance from the CAA on changes to National standards simplified the process
- Although fundamental requirements of certain CS do not differ from SARPs, particular wording does allow alternate interpretation.
- This means there may not always be a simple 'Yes' or 'No' answer to compliance with CS – some narrative and justification may be required

General Observations

- There exists the possibility that the Aerodrome and Regulatory authority will interpret compliance with the regulation in a different way
- The trial identified differences between the existing and new requirements which mean that some previous variations were no longer needed but new non compliances were identified
- Aerodrome manual cross referencing was reasonably difficult due to uncertainty around acceptable means of compliance
- CAA and Bristol Airport worked well together
- The CAA listened to us, reacted to our concerns, they were pragmatic and helpful

The Transition Process

Thanks to our early involvement in the process, on 28th July 2014 Bristol Airport became the first Aerodrome Authority in Europe to transition to EASA Regulation and receive an EASA Aerodrome Certificate

Bristol now has:-

- One national Special Condition, (applicable to all UK aerodromes aerodrome reference code)
- Four aerodrome specific Special Conditions (supported by SAD)
- No ELOS

There are also five items in our DAAD

Shortcut to BRS-SAD-03 Sight distance 080414.Ink

Shortcut to Deviation and Action Doc (DAAD) BRISTOL AIRPORT v1.1 010714.Ink

The Benefits of Transition for Bristol

- Fully audited SMS
- Early adoption allowed a greater reaction time and influence
- No outstanding operational items
- All legacy aerodrome design non-compliances formally accepted
- Enhanced our reputation with the CAA, EASA and hopefully the wider industry
- Clearly demonstrates Bristol's commitment to an industry leading safety and compliance culture

Amazing journeys start here

