



Presentation

of our capabilities

prepared by

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PURPOSE OF PRESENTATION

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- This Presentation has been developed as an introduction to MRO Facilities (the new name for Equipment Solutions)
- To outline our services and describe how we work.
- To present a selection of past and present projects we have been involved with.
- To review options for project design and construction.
- Why us?

MRO Facilities Background

Aviation Design Consultancy Specialising in:

- MRO Hangars
- Aircraft Painting Facilities
- Principle Ian Guinness
- Up to 6 senior personnel employed at any one time
- Operated as Equipment Solutions 2002 to 2012

Scope of what we do

➤ Turn key projects

➤ Feasibility Studies

- Client brief
- Initial Layouts
- Budget costings
- Time scale

➤ Layout design

- Develop client brief
- Concept layouts based on process flows
- Equipment selection
- Room data sheets
- Use lean concepts
- Architectural / Engineering design
- Value engineering
- Environmental

➤ General

- Site evaluation and selection
- Statutory approvals
- Planning permissions

➤ Project Management

- Feasibility studies
- Layout design
- Contractor selection
- Tendering
- Construction management
- Contract administration
- Commissioning
- As Constructed information
- Defects liability period

• Cost control

- Budget preparation
- Budget updating and reporting
- Tender document, analysis and recommendation
- Capital versus running cost evaluation.

➤ Equipment

- Selection
- Purchase
- Installation
- Commission
- Budget control

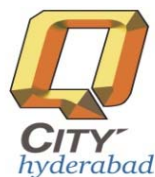
How we Work

- Prepare detail Client Briefs (Requirements and concept design – see later slide)
- Choose local team that can deliver projects under our direction
- Assist team to complete the project design.
- Assist team to construct project
- Manage and monitor on site progress
- Manage costs and cost control
- Manage project completion and commissioning

➤RESULT

Project delivered to highest Global standards by local team at local competitive cost

HOW WE WORK



Lufthansa Technik
Sofia



air maintenance estonia

RYANAIR.COM



MAAS
aviation



JORDAN AIRCRAFT MAINTENANCE LIMITED

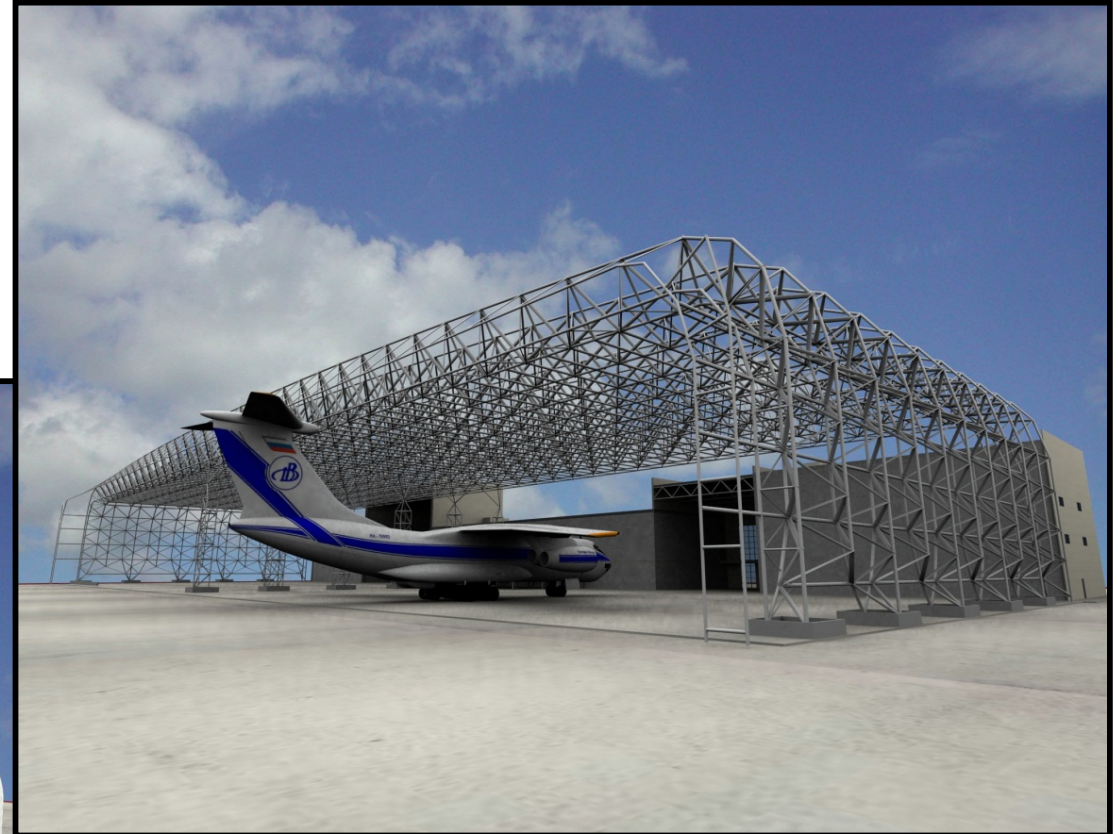


CLIENT LOGO's



- Concept Design
- Planning permission
- Design and Project management
- Status - Awaiting Board approval
- Opening 2014

- Twin bay wide body hangar
- Hangar - 14,000m²
- Ancillary buildings 6,000 m²
- Heavy maintenance



- Construction recommenced
- Completion 2013

Prospective Project 2013

- MAAS Aviation Paint Hangars for Airbus
- Indigo's Delhi hangar
- Paint hangar for AME in Tallinn
- Lufthansa Technik – New MRO facility





- 5th Paint shop for MAAS Aviation at Airbus's Finkenwerder site, Hamburg.
- 15 year design, construct and operate
- Enter into service Dec 2012
- Cost €9m





Lufthansa Technik
Sofia



- 3 Bay Extension to Existing Facility
- 2 bay extension completed March 2012
- 3rd bay 28th October 2012
- Cost €10m



Extension to Existing Facility – Sofia 1 of 2

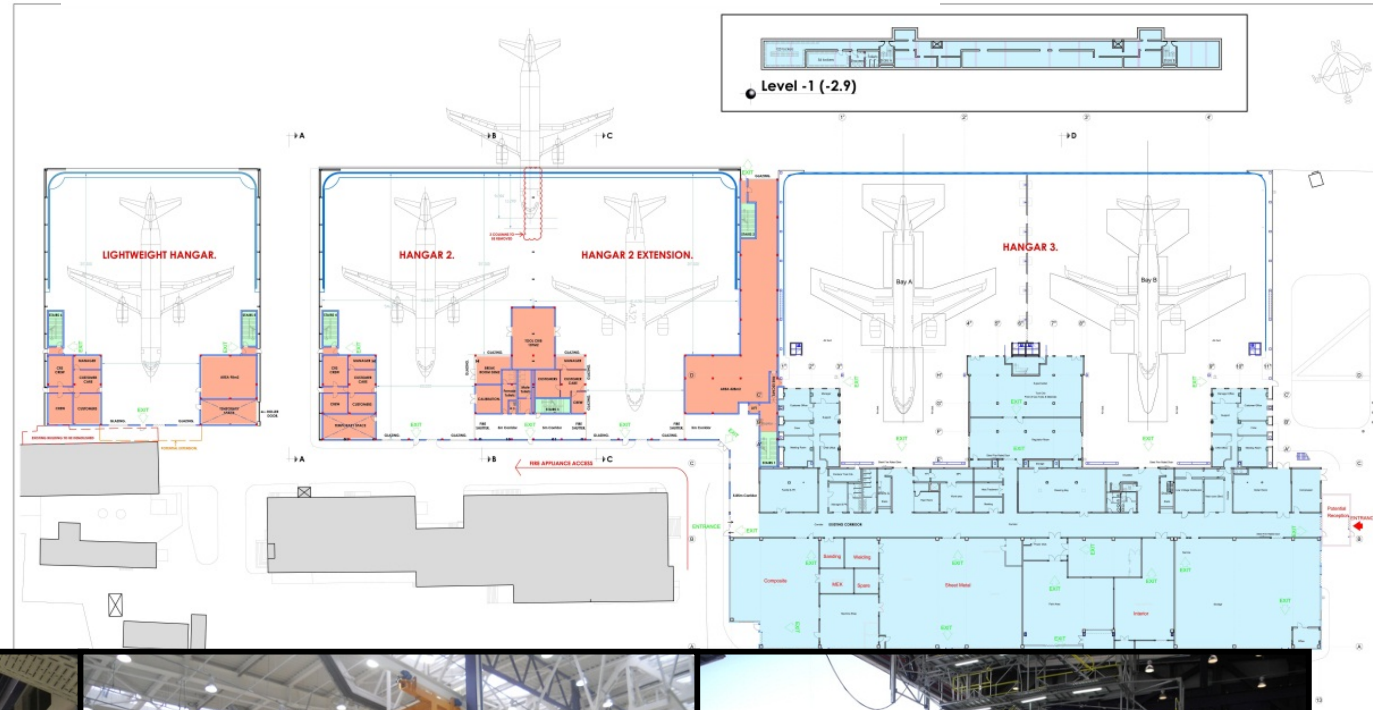
PROJECTS



Lufthansa Technik
Sofia



- Right- Concept Plan
- Below – Birthday cake
- Views Bay 3,5 and 4



Extension to Existing Facility – Sofia 2 of 2

PROJECTS

- Concept design and Employers requirements
- Completion 5th Sept 2012



AME 3 bay 'D' Check Facility



- Maintenance Facility for Business Jets
- Can be convert to 1 Bay Narrow Body Facility
- FBO Facility
- Completed Jan 2012
- Cost €3.2m

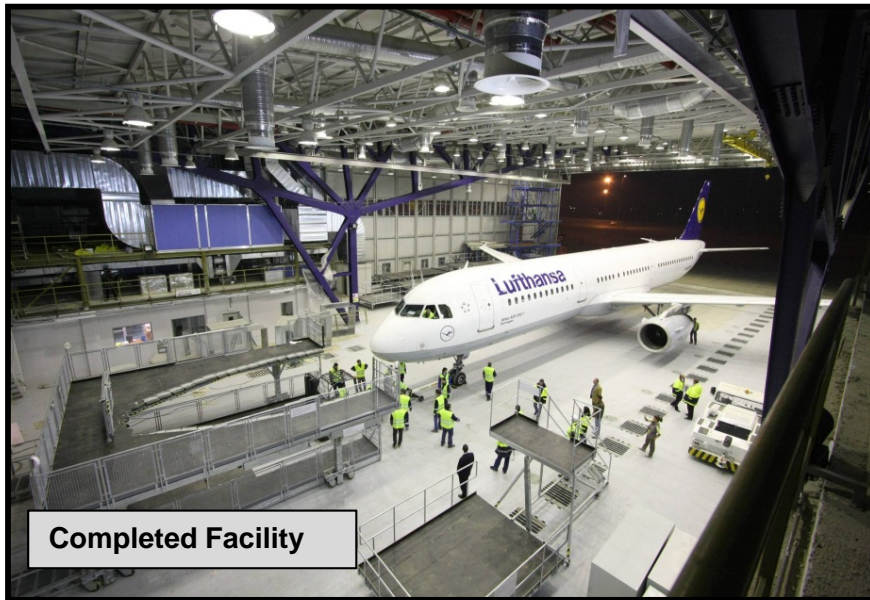


Lufthansa Technik

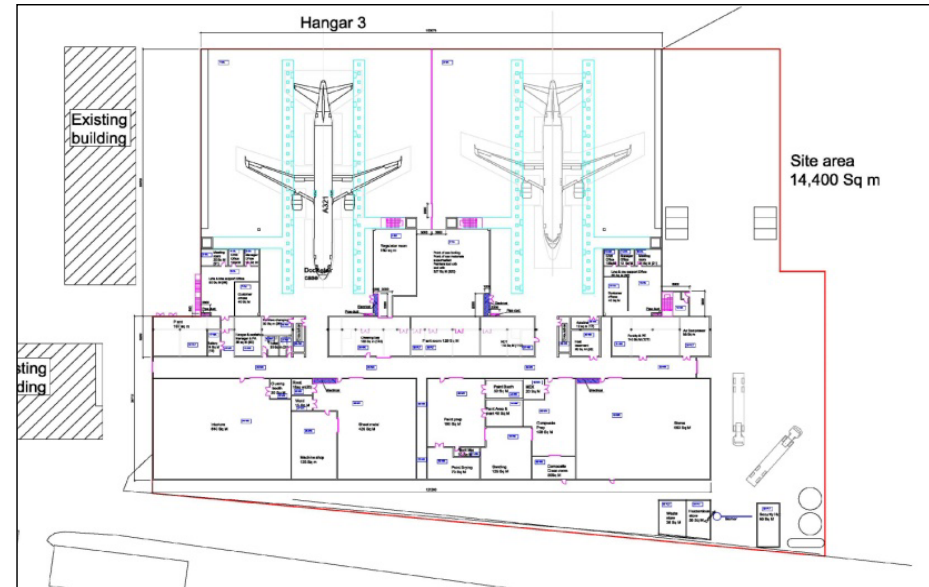
Sofia



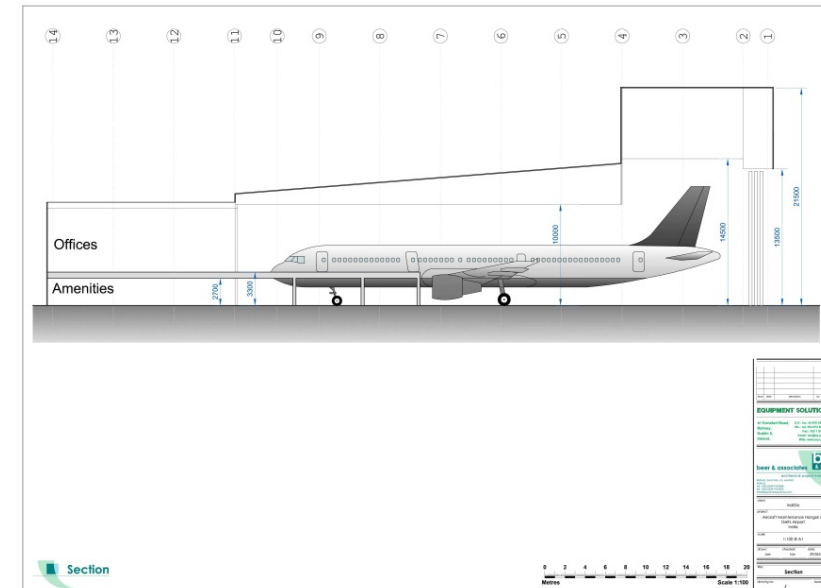
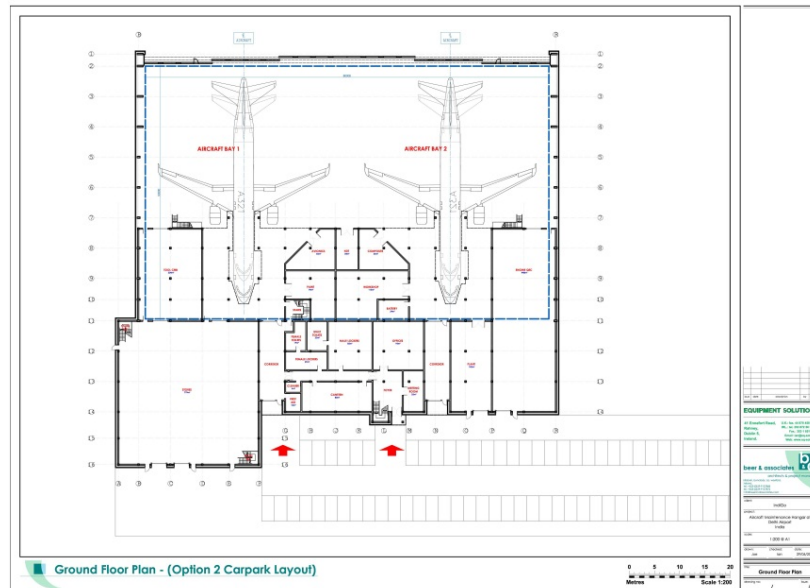
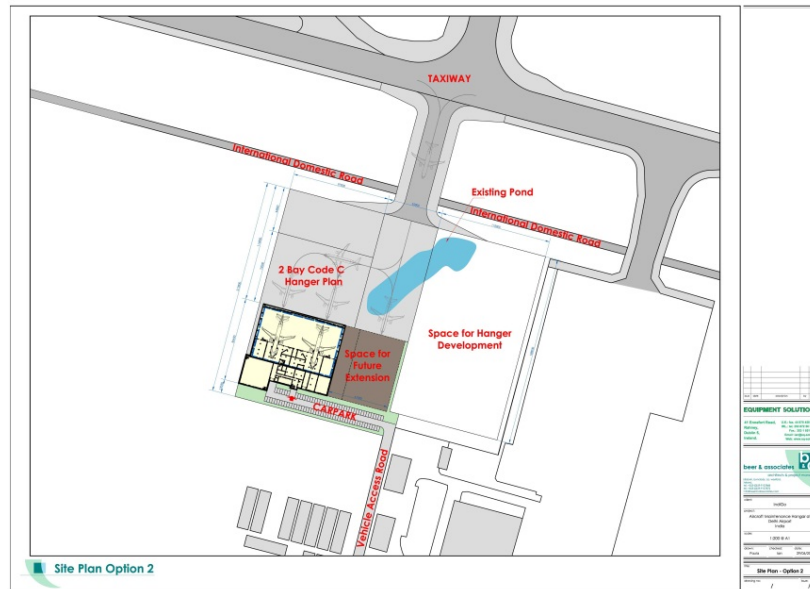
Existing Facility



Completed Facility



- Refurbish and extend existing facility
- Client brief for A320 - B737 – D check facility
- Opened Oct 2008
- Hangar 5,500 m²
- Workshops 4,000 m²
- Offices 1,200 m²



- New 2 Bay Facility
- For Line and Casualty
- Completion 2014



Project – Lufthansa Technik Hyderabad

- Client brief for A320 / B737 D check facility
- 17,000 Sq m
- 2 painting hangars
- Workshops for D check
- Detail design and specification
- Project tender
- Site preparation
- Project shelved

Prestwick 1



- Opened December 2003
- 7,000 m²
- 76m by 45m clear span hangar
- B737-800w – 3 number
- Workshops to support heavy C check
- Warehouse – 700 Sq m
- Engineers Training suit and Support Offices
- Taxi way link

Prestwick 2



- Opened September 2010
- 8,000 m²
- 120m by 47.5m.
- Heavy C checks.
- Landing gear workshop.
- Airstairs workshop.
- Future Painting capability in one bay
- Opened September 2010

Stanstead



- Opened October 2008
- 12,000 m²
- 124m by 56m clear span hangar
- B737-800w – 5 number
- Workshops to support line & casualty
- Warehouse – 2000 Sq m
- 4 B737 CAE Simulators, Training Suite
- Support Offices – 500 Sq m
- Taxi way link

3 Bay Facility - Stanstead

Kaunas



- A check facilities at Kaunas
- Has been built on the apron
- Insulated steel building not a tent
- Fabric door
- Completed November 2010
- Cost €0.9m

1 Bay Facility - Kaunas

PROJECTS

Skavsta

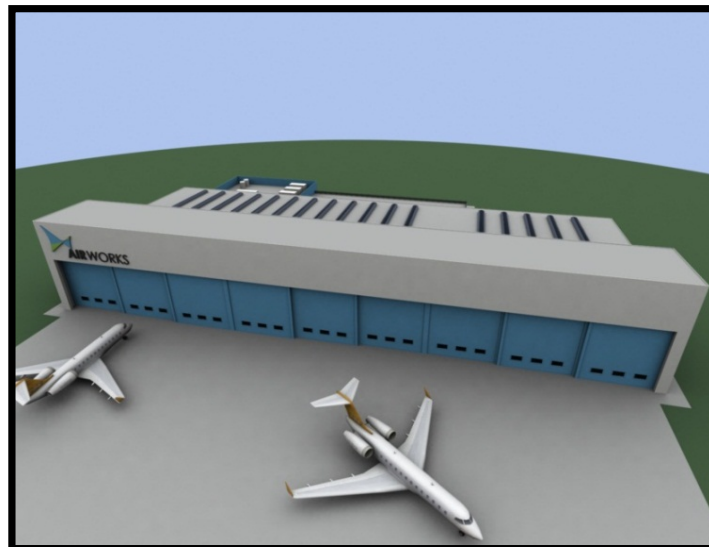


- Opened 2003
- 2,200 Sq m
- 40m by 42m clear span hangar
- B737-800w – 1 number
- Line and causality

Rygge



- A check facilities at Rygge
- Built on the apron
- Insulated tent
- Fabric door
- Completed Nov 2010
- Cost - €0.8m



Airworks - option

PROJECTS

Detail of what we do

- Employers Requirements (ER's)
- Design
- Project management, cost control and completions

WHAT WE DO

Employers Requirements

- Expert knowledge is required to develop a bespoke Client Brief
- Production efficient and requirement specific hangar design
- ER's are a document with specifications and concept drawings.
- Can be used to purchase the project competitively in any market.

Design Development

- Development of ER's into tender and Construction details
- Using Local Design engineers / Contractors
- Tender and Contractor appointment
- Assist the Employer with the design development during the life of the project.

Project management, cost control and completions

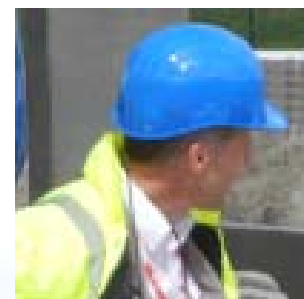
- Overall project control and management
- Ensuring western principles are used to deliver the project on time, on budget and to the required standard.
- Commissioning
- Completions
- As-constructed information
- 12 months signoff



Ian
Guinness
Principle &
Designer



Robin
Beer
Architect



Finbar
Murphy
Services



Roy Dovey
Cost
Control



Joe
Brennan
Office
manager



Clodhna
Nolan
Admin



Maeve
Hynds
Admin



JJ O'Brien
Draftsman



Richie Sinnott
Draftsman



Stuart Annan
PM Stansted
and
Birmingham



Bill
Morrison
PM
Prestwick



Stanislav Petrov
Eye and ears -
Sofia

Why chose us

- Experience – Track record as demonstrated in this presentation
- Clients wishes developed at an early stage
- Small and responsive
- Repeat business – Continuous repeat business – Ryanair – Lufthansa
MAAS Aviation – Nick White (Britannia – Joramco – Airworks)
- Fit for purpose design
- Cost effective solutions
- Flexible turn key service

WHY CHOSE US

Thank you



Ian Guinness

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THANK YOU