

Technical Services



Promoting innovation, protecting business, managing risk



Global expert, local partner

Technical Services

Over 85 years experience in the aviation industry as a global expert and local partner



“Our relationship is excellent, very good relations and people.”
INDIAN OIL CO.

1926
Proudly serving the aviation industry since 1926

1927
AMACO's 1st transatlantic flight

1930's - 1960's
Air bp supplies fuel and lubricants for development of Concorde

1930's
Start of Aviation Fuel Supply in Dubai

1956
Air bp's house journal wins major British award for best design

1970
Air bp wins Queen's Award for technical achievements

1970
Air bp becomes founder member of JIG

1970
Rejuvenation and rebuilding of Tirana Airport post Kosovo conflict

1999
Rejuvenation and rebuilding of Tirana Airport post Kosovo conflict

2000
Air bp purchased Exxon Turbo Oil

2005
Air bp refuels the A380 test flight in Perth, Australia.

2010
Biofuel flight TAM

2012
Air bp Brazil first fuelling at VCP

present day

we design

we build

we operate

supplying over **700** commercial airlines

over **12,500** general aviation customers globally

represented at over **600** airports, of which 160 are joint ventures

supplying over 75 billion US gallons of aviation fuels in more than **45** countries



Technical Services

We are one of the leaders in the industry. We play an active role in setting and maintaining standards and practices through our representation across industry groups covering a wide range of technical disciplines...



MINISTRY OF DEFENCE



INTERNATIONAL

Standards Worldwide



“Very good people, very competent.”
PETROL

Our Technical Services are about promoting innovation, protecting business and managing risk.

Our offer

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Technical Services

Our bespoke TSA offer gives the ability to create solutions for customers, based on their needs, creating a mutual obligation.

So what's the difference between our standards and other standards?

Other standards are the **'What'**. They have been developed for joint operating locations as a set of minimum **'What'** standards. These are supported by a basic audit programme, where as...



“ Thank you for being there when we've needed you. ”
GOODWOOD

“ Very good, they have quality systems that help us cut down on delays. ”
ACSA

...Air bp are the **'What', 'How'** and **'Why'**

We will explain what you need to do to be compliant and meet our industry best practice standards. We'll show you how and support you to meet those standards, but equally critical, we'll explain why it's important so you don't have to learn those lessons from your own mistakes.



Understanding what the risks are to your business

Do you have assurance that the systems you think are in place are actually in place and working effectively? Do you have confidence in your product quality and the security of your supply chain? How prepared are you?"

Accidents



Delays



Product quality



Tank fire



At Air bp our risk management strategy focuses on both process (low frequency, high severity) and personal (higher frequency and lower severity) safety. To do this we develop risk events, examine what could cause these events to occur and identify barriers to prevent them occurring. We also identify the potential consequences for each risk event, putting in place barriers to reduce the consequence if one of these events did ever occur. This provides a structured risk management process, that can applied to your operations, providing the basis for internal assurance.

We have identified 21 risk events within the aircraft refuelling process, from airport supply to wing-tip delivery. These 21 risk events cover all the risks faced by operations across the globe, the only things that vary are the control barriers and the severity of the potential consequence – depending on surrounding environment and population exposure. Speak to us to find out more and have your operations mapped against this process.

“People ask ‘We have an excellent safety record, why do we need an outsider for a TSA?’ But this is a dynamic industry and things change rapidly, you need a partner, a major company and it has to be an alliance.”
BAFCO



Technical Services



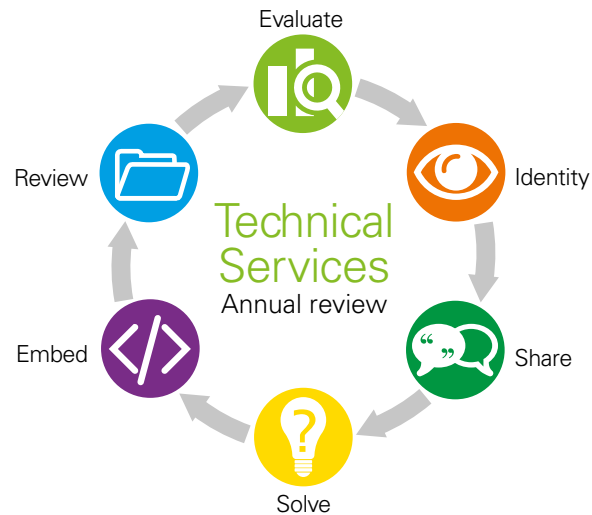
Your account holder

As part of our offer, we will appoint all customers with a **Technical Services Account Holder**, who will work with customers to agree and deliver a need's based core services package. Your account holder will act as the main point of contact linking you to our global network of expertise.



Annual review, striving for continual improvement

Reviewing the services carried out in the current year and scope services for the coming year with you, the customer.



“ We appreciate the knowledge our account holder brings, it helps to improve our business. Our account holder is always accessible and responsive to our needs, for example, he has developed off-site training for our staff, giving them exposure to other operations and developing their skills. This technical relationship gives our business great comfort at a senior level, we value having Air bp to debate operational issues with. ”

PETROL

“ The guys who support us from Air bp are professional guys, the local staff and the international staff. ”

GISSCO

“ Their individuals communicate well, they are very definitely partners. ”

ACSA



Inspections, audits and reviews



We offer a suite of inspections, audits and reviews across a wide range of disciplines. Identifying gaps, developing action plans and benchmarking against the industry and our own policies, standards and procedures.

Operations inspection

This is our main inspection, conducted against our Airport Depot and Into-plane checklist, which has been developed over the 85 years we have been operating. A detailed and confidential report including recommendations, will be issued to the customer within one month following completion of each inspection. Examples of other inspections, audits and reviews we conduct are as follows:

- Pre-airport operations and product quality inspection.
- Engineering integrity inspection.
- Incident investigation.
- HSSE management system audit.
- Management system audit.
- Documentation review – local design and operating standards and procedures.
- Stock accounting and data capture system review.



 Their auditors are well trained and have a wide technical knowledge. 
INA

Case study Eastern European Inspection



Example findings

- For various reasons, the staff are currently climbing on top of the refueller. There is no hand rail or any other fall arrest system to prevent people falling. This is a working at height issue.
- Multiple leaks were detected, from fuel pipes, valves and the hydraulic system.
- One of the Jet A-1 fuelling vehicles failed to pass the deadman test, with closing times significantly greater than required limits.





Product quality and operational support

To provide comfort and a helping hand, our experienced team offer expert day to day product quality and operational advice for handling, storage, transportation and into-plane of aviation fuels.

Product quality

Almost every system on the aircraft has a back-up, aviation fuel is the exception. From the point of manufacture all the way to wing tip, product quality (PQ) is an essential part of safe aviation operations worldwide.

At Air bp we are committed to on-spec on-time supply. To achieve this we run a comprehensive PQ assurance system along the whole supply chain and have competent PQ inspectors.

For us, each successful flight represents a job well done. The aircraft has been fuelled safely with the right grade, volume and quality of fuel.

It should be right the first time, every time.

Giving you support on:

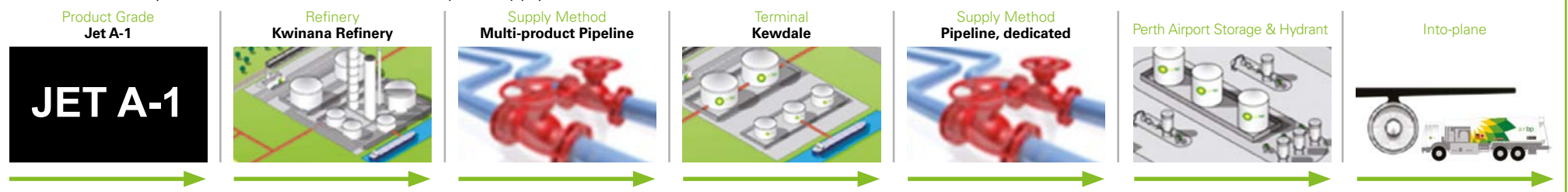
- Provision, maintenance and operation of facilities and equipment to receive, store, transport and deliver aviation fuels.
- Provision and operation of equipment to test aviation fuels for quality. Guidance on fuels quality throughout the supply chain, including sampling, testing, documentation and equipment e.g. tanks, sampling systems, pipework, filtration, mobile and fixed plant.
- Implementing an equipment approval process, ensuring equipment is compatible with aviation fuels.
- Incident and emergency support, to help manage a crisis or accident in real time.

“They are a very experienced company, very technical and in my experience are the right partner and the best choice.”
COPEC



Case study Supply chain risk assessment

Kwinana Refinery to Kewdale Terminal to Perth Airport supply chain:



Documentation – policies, standards and procedures

We have a wide range of policies, standards, procedures – with updates when required. We have over **600** standard documents that we operate to. Once you have become an Air bp TSA customer, your relevant documentation is made available online via your online account.



Core documentation

- Air bp regulations – fuelling and quality control.
- Air bp training manual – including 65 task breakdowns.
- Air bp emergency procedures.
- Air bp aircraft fuelling data sheets.
- Air bp operational bulletins and safety flashes.
- All held online at www.airbp.com.



Additional documentation

- HSSE audit checklist.
- Rail operation risk assessment guide.
- Critical barrier checks.
- Themed safety observation conversation.
- Road contractor HSSE audit guide.
- Engineering and construction specifications.
- Site risk register guide.
- On airport driving competence guide.
- Management of change.
- Safety and operations rules for management.
- Managing driving safety.
- Control of work.
- Introduction to aviation fuels handling.

“ This is money well spent as the standards we have to follow are the crucial point in our business relationships with the airlines who deal with us...this TSA is providing us with crucial information we are using every day. ”
INA





Training

With a suite of training courses and material on offer, we cover key topics such as; HSSE, risk assessment, product quality, and operations.

Our aviation product quality and operations specific training is targeted at both leadership and site operators to manage risk, drive personal safety and develop competency of staff.

We can deliver on site training at your location as well as off-site training at our own facilities.



Air bp operations training manual

Developed over our 85 years experience in the industry, the operations training manual provides clear standards for the delivery of employee training for staff, from new recruits to established operators.

The training manual comes with confirmation training record forms and 65 task breakdowns for operations and maintenance tasks.

Technical workshop

Our Central Technical Team host a full days' Technical Workshop, covering latest industry developments and allowing customers direct access to our subject matter experts. Tailored workshops create quality time to help customers with key topics.

These workshops enable customers to see how Air bp operates its business and manages similar risks to those faced by all members of the industry.

Examples of training offered:

- Improving human reliability programme and safety culture assessment.
- Learning from the past for a safer future.
- Ramp safety.
- Misfuel prevention.
- Airport safety leadership.
- Incident investigation training.
- Foundation HSSE training:
 - Noise, fatigue, hazardous substances, slips trips and falls, manual handling.
- Risk assessment and management.
- Inventory management.
- Secondment of staff.
- Operational site visits for customer employees to Air bp operations or JV sites.
- Function training
 - Engineering and operations.



Design and build – depots and vehicles

Over the 85 years we have serviced the aviation industry, our design, construction and innovation has been at the front line of global aviation growth. We have a team of civil, chemical, electrical and mechanical engineers all supported by our CAD engineers and design office.

Our global team has significant experience working on large projects such as LHR T5 hydrant down to single tank general aviation operations.

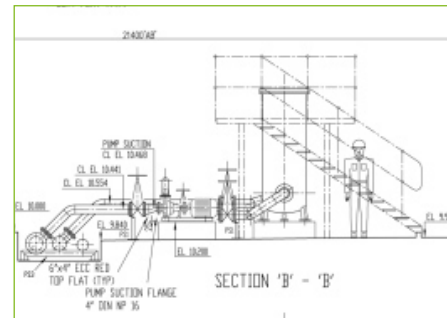
Our expertise covers terminals, pipelines, depots, hydrants, vehicles and into-plane equipment.

Air bp's design office

Our design office provides aviation fuel storage and distribution facility Conceptual and Front End Engineering Designs (FEED) for projects.

The team have sophisticated vehicle path modelling software to maximise facility design efficiency and minimise vehicle traffic risks. The team produce the suite of operating drawings, including layout drawings, hazardous area drawings, emergency plans, fuel hydrant operator drawings.

The department designed Heathrow Airport's complete Terminal 5 fuel hydrant system (conceptually and detailed design) and has been responsible for upgrading and modifying the other LHR fuel hydrants for over 40 years. Design activities have also been carried out on many other hydrants around the world.



“ They have real skills in planning facilities and when you are designing you need real experts! ”
QUEENSTOWN

Case study

Gold Coast Airport, Australia (2012)

Design and construction of a new depot, hydrant control system and hydrant extension, on behalf of Joint Venture.

Big Maggie

We have developed a unique product in response to industry issues with pipeline cleanliness and fuel supply.

An in-line magnetic filter that strips out ferrous material within pipelines.

The benefits:

- Reduction in filter element consumption downstream (e.g. microfilters and coalescers).
- Reduced environmental footprint (lower used element disposal costs).
- Reduced equipment wear from particulates (e.g. control valves, pumps).
- Reduced tank dirt-sub-micron paramagnetic particles can pass through filter elements, but are removed by Magna-Strain.



Fuelling footprint reduction

Here at Air bp we're taking giant steps to help reduce airport emissions. Within many businesses and in many countries, there is a push towards implementing and providing environmentally friendly technology. Whether it be that you're considering a complete new build airport or simply updating older equipment with environmentally friendly

equipment. Your needs may be for tax credits, incentives or simply a need to reduce emissions and a want to do your bit for the planet. Here at Air bp we have the ability to deliver carbon neutral projects, builds and operations through our best in class, carbon management programmes, designed to meet your energy and footprint reduction needs.

Benefit examples

<p>Stop-start technology Switches engine off when vehicle is idle – 10% € and CO2 reduction.</p>	<p>Variable speed drives Creating efficiency on energy intensive hydrant pumps.</p>	<p>Electric powered vehicles 75% € reduction on running costs and 65% less CO2.</p>



Organisations use bp target neutral to reduce their CO2 footprint through a 'Reduce-Replace-Neutralise' strategy.

Case study

Offset programme example – Brazilian Biomass

“ Once the reduce and replace elements of the strategy have been implemented the residual CO2 is offset using our carbon partnership programmes. These low carbon projects make a real difference to local communities and can great brand enhancement. All of our projects are measurable and permanent, offering benefits in a range of different ways. ”



bp targetneutral



Management Services

Air bp offers a range of management services

- Management and operation of a facility by Air bp.
- Management and operation of a JV by Air bp.
- Special representation on boards and sub-committees.
- JV general manager performance management process.



Airline Technical Support

We provide training for airline customers on product quality, airport storage and into-plane operations.

Fuel depot and product quality familiarisation

We offer airline customers an on airfield course to familiarise them with the importance of product quality and the steps taken by our teams to ensure fuel remains on spec. The course also covers the basic principles of fuel supply, on airport storage and into-plane operations.

Risk management and management systems training

We provide airline customers training on risk assessment and management systems based on our own extensive material.

Product quality familiarisation



Into-plane services



Technical Services



Insurance

A huge opportunity for you to save money by signing a TSA with Air bp.

If your site meets the minimum standard of "Satisfactory" on the Air bp operations inspection, you can take out aviation liability insurance under a third party pooled insurance program offered by Marsh. Depending on certain criteria the premium is often considerably lower than the market rate.

Fees will be negotiated with Marsh insurance brokers directly, please contact kerrigan.read@marsh.com for an indicative quote.

Estimated benefits verses your current position can be conducted on request.



Happy to recommend Air bp based on experience, we've used them extensively over 10 years for technical work and expertise is the thing that stands out. They know what they're talking about.



GLOUCESTER AIRPORT

Want to talk to us about Technical Services?

To request a call back, please email:
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Technical Services



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