

CASE STUDY

FBO Facility
Seletar Airport, Singapore

Client: Jet Aviation (Asia Pacific) Pte Ltd
Facility: Hangar 2, Business Jet and BBJ capable MRO and FBO
Size: Hangar floor area of 5,000m²; Annex Building (offices, workshops) 4,000m²
External Works (aprons, carparking, landscaping) 18,500m²
Status: Completed May 2014

About Jet Aviation

Jet Aviation (Asia Pacific) Pte Ltd ("JA"), a wholly owned subsidiary of General Dynamics, was founded in 1967. The company has grown into a world leader in maintenance, repair and overhaul (MRO) services, completions and refurbishment, engineering, and fixed base operations (FBO), which it provides to a wide range of business aviation customers.

A major focus for Jet Aviation is the increasing number of private jet owners, a customer group that is growing rapidly in South East Asia. To serve these customers better, the company decided to expand its facility at Singapore's Seletar Airport by adding a new and state-of-the-art hangar facility.

The Project

In November 2012, Aircraft Support Industries ("ASI") received a Letter of Award from JA appointing ASI as the Main Contractor to design and construct - on a full turnkey basis - JA's new MRO/FBO hangar and associated ancillary buildings and external areas, at their base operations at Seletar Airport, Singapore.

The award came after the culmination of extensive cost and design planning between JA and ASI, with several different design configuration options being developed and tabled by ASI that ultimately resulted in a facility that met both the future business plans for JA and the challenging site and existing infrastructure conditions.

The new facility features an additional (2nd) hangar spanning 100m clear and 50m deep, being capable of accommodating up to 5 Gulfstream G650 aircraft or multiple numbers of various different business jet types. Additionally, the hangar will have capacity for a Boeing Business Jet (BBJ), providing JA with the exclusive capability to service the private BBJ market at Seletar airport.



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The hangar structural design utilised ASI's proprietary and unique stressed arch technology which is unrivalled in providing the most cost-effective steel structure for large clear-spans.



The facility features vertical lift doors, allowing flexible, fast and well-sealed protection from the weather whilst providing the ability to fully open the entire hangar span. Inside, the hangar has overhead crane capability, along with unique large industrial ceiling fans to provide a more comfortable working environment for JA employees.

At the rear of the new hangar was built a 2-storey annex block comprising a total of approximately 4,000m² of specialty maintenance workshops, stores, office administration, canteen and dedicated customer areas fitted out with high-end lounges, restrooms and sleeping quarters.



The facility is NFPA409-compliant, meeting this internationally recognised standard for fire protection of hangars, which is in line with both ASI and JA's philosophy of maintaining high standards in all respects.

Unique to the new facility is its clever integration with JA's existing hangar – a simple pitched-frame steel building some 50 years old and used by JA for their core maintenance operations. Clever architectural detailing was employed to blend the new arched hangar with the existing pitched hangar to give the impression of one continuous facility that had been planned that way from the beginning – an important aspect for JA and their overall branding.

By combining the two hangars, and providing the seamless workflow integration with the new workshops and offices, JA is able to generate a significant increase to their overall operational capacity, which allows them to meet current demand and also put them in good stead for future expansion for many years to come.