



**Case Study:
Total Consignment Support Solution for HAESL**

The origins of the Farsound Aviation / HAESL relationship

The Challenge:

HAESL faced increasing pressures on its supply chain in the early 2000s:

- HAESL's offerings grew to include Trent 500, 700 and 800 series engines (in addition to RB211s) which led to significant business expansion
- This growth brought increased supply chain risk associated with potential part shortages that could cause costly delays to engine repairs
- The need to oversee numerous suppliers was creating an administrative burden for HAESL and was overloading management



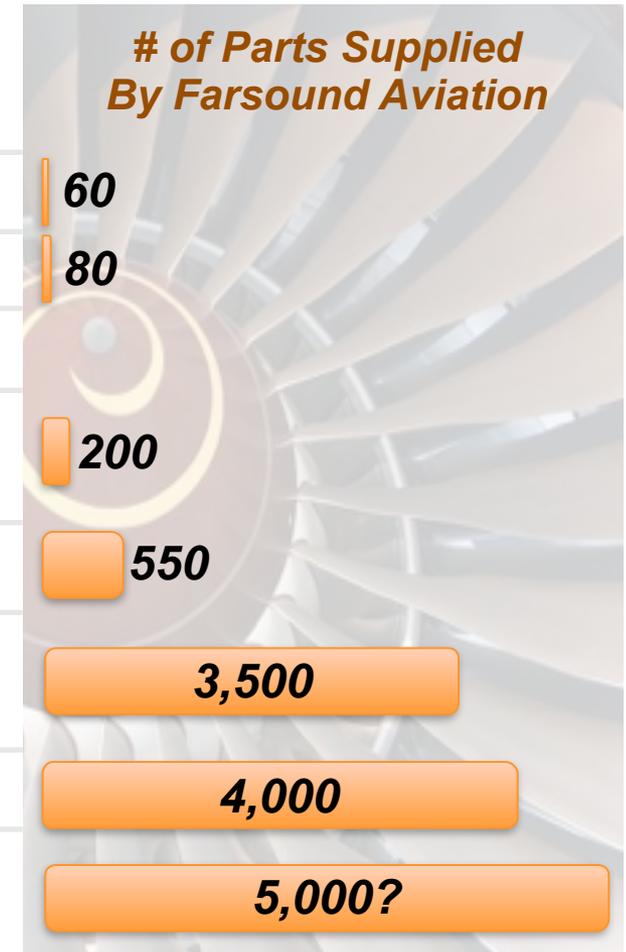
The Opportunity for HAESL and Farsound Aviation:

At the time, Farsound Aviation was one of several suppliers to HAESL providing high-volume, low-value parts. In 2004, HAESL sought to expand the relationship with Farsound Aviation given its reputation and responsiveness to HAESL's requirements.



Farsound Aviation has enjoyed a long historical cooperation with HAESL

- 1996** Started to supply parts in HAECO's time
- 1997** HAESL opened in Tseung-Kwan-O
- 1998** HAESL expanded to serve Trent 500/700/800
- 1998** Initial consignment stock contract signed covering RB211-524, Trent 500/700/800
- 2004** HAESL signed a new contract with Farsound
- 2005** Contract expanded to cover a wider product portfolio
- 2013** HAESL renewed the contract with Farsound
- 2014** Work starts to identify additional products & services to support XWB engines



Farsound Aviation works with HAESL through a direct, closely-integrated commercial & operational partnership



Operational Relationship

- Monitors and maintains consignment inventory at agreed levels
- Participates in regular review of inventory levels and forecasting
- Around-the-clock team availability for urgent or non-routine matters
- New product development



- Provides personnel to operate the consumables store
- Responsible for receiving and inspection
- Communicates a Critical List of items to Farsound when needed
- Obsolescence management

Commercial Relationship

- Holds all inventory until consumed by HAESL
- Pays a single annual fee covering staffing and rent for management of the consigned inventory & space occupied
- Invested in the electronic shuttle system to optimise HAESL space
- Forward thinking



- Provides consumption data to generate replenishment inventory & invoice
- Forward visibility
- Market strategy insight



Farsound Aviation brings HAESL numerous operational and financial benefits

Excellent service performance

Consistent >99% Off Shelf Performance

Reduced inventory holdings from US\$2 million to zero

Simplified supplier management

From six suppliers to one

Lower management and administrative burden

Benefits in Procurement, Material Control, Stores

Saves the equivalent of 3.5 full time employees

Provides a rental income stream

Provided the shuttle system infrastructure

Investment of US\$250,000

Rapid Responsiveness

>90% Critical List delivery performance

Complete availability for non-routine issues

Case No. 1: Technical issue with a fastener supplier

The Challenge for HAESL:

HAESL experienced an urgent need to replace an existing fastener supplier with a new supplier. Without the new fasteners, HAESL's engine repair activities were at risk of grinding to a halt. HAESL's own internal resources and the OEM were not able to develop a solution in sufficient time.



Farsound Aviation's Solution:

Farsound Aviation quickly deployed its own team to develop an alternative sourcing plan. Their solution was far quicker than what HAESL and the OEM could have ever accomplished on their own. Farsound Aviation's actions ensured the quick, efficient and uninterrupted flow of engines through HAESL.

“Farsound was able to quickly go to the problem, prepare a solution, and execute on that solution” – HAESL executive



Case No. 2: Handling an unexpected surge in component demand

The Challenge for HAESL:

Demand for a cable used in Trent 800 engine repairs unexpectedly jumped 7 fold in a short period of time, from 4 units per month to 7 units per week.



Farsound Aviation's Solution:

Farsound Aviation executed an immediate sourcing effort to identify additional supply of the needed cable. As a result of these efforts, HAESL's projects were kept on track.

"Farsound were very aggressive to come up with a solution" – HAESL executive



Case No. 3: Responsiveness to new customer requirements

The Challenge for HAESL:

As a result of local regulatory audit, HAESL's QA department sought to establish full traceability for Industrial Standard Parts. Prior to that, a certificate of conformance had been satisfactory. This had the potential to create an enormous paperwork burden, as a typical Farsound Aviation shipment had 1,000 part numbers.

Farsound Aviation's Solution:

Farsound Aviation's team reacted quickly, meeting with HAESL's QA Department to understand the relevant issues. They rapidly implemented a web-based system enabling full traceability of all shipments, satisfying the QA Department's requirements and also saving HAESL money by avoiding the need to ship and administer bulky paperwork.

***“Farsound never said ‘no’ or asked ‘why do you need this?’
They simply did their very best to support our requirements.” – HAESL executive***



Case No. 4: Providing a sustainable solution to a difficult supply situation

The Challenge:

A leading OEM had gained a reputation within the MRO community for poor delivery performance through an inability to react & flex to support fluctuating demand patterns. They approached Farsound to help them by managing supply to their various aftermarket customers and eradicate the stigma.

Farsound Aviation's Solution:

Farsound Aviation put in place initial stock provision to create a buffer sufficient to support normal production & initiated an electronic data interface with the manufacturer providing a flattened demand profile taking account of individual product lead-times & batch quantity constraints removing unexpected urgent spares demands. Thereafter they maintained optimum inventory to assure 100% product availability to HAESL requirements at all times.

***“Farsound was able to develop effective new approaches for our business. They possess the professional quality of knowing what has to be done.”
– HAESL executive***

