Civil Aviation Case Study 34

Strategic Consulting
Business Improvement - Safety Leadership

Review of Continuing Airworthiness, Safety and Quality Management

Silk Air and SIA Engineering, a major Operator and MRO working in Singapore, Australia, Hong Kong, Indonesia and the Philippines, commissioned Baines Simmons to conduct an audit of its Continuing Airworthiness, Safety and Quality Management activities to gain an international, independent performance assessment. The objective was to provide recommendations on better process integration between the two organisations and to identify improved operational effectiveness and efficiency opportunities.

Client Profile
Silk Air is the regional wing of Singapore Airlines and currently operates to 33 destinations across 11 countries in Asia and is a premium, short-to-medium haul regional carrier. SIA Engineering Company (SIAEC) was formed from the engineering division of Singapore Airlines. SIAEC provides a full line and base maintenance support service to Silk Air for its narrow body Airbus fleet. With certifications from more than 20 airworthiness authorities, SIAEC’s six hangars and 22 in-house workshops provide complete MRO services in airframe, component, engine, aircraft conversions and modifications to major airlines in four continents.

The Challenge
The two organisations needed to work together more effectively, and sought recommendations for:

- Improved integration and efficiency, with advice on how the proposals could be optimised to meet the airline’s higher aircraft utilisation and safety standards objectives.
- Preventing maintenance error reoccurrences with a better error management system.
- Improving training, communications and technology application between the organisations.
- Closing gaps in the system and initiating best practice improvements.
- Analysing findings regarding regulatory and safety standards compliance.

The Solution
The Baines Simmons audit team adopted advanced audit methodologies augmented with industry best practice client engagement techniques. Constant communication was fed back to the client throughout the programme. A comprehensive report was generated with an executive summary providing expert professional overview opinions and recommendations across key areas:

<table>
<thead>
<tr>
<th>Human Factors</th>
<th>Error Management</th>
<th>Safety Management System</th>
<th>Training and Retraining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>System Optimisation</td>
<td>Airworthiness Directive Management</td>
<td>Maintenance Resources</td>
</tr>
</tbody>
</table>

“We were very impressed with the professional expertise at Baines Simmons. They provided very good value for money, gave us new insights and confidence in our current approach. They provided us with excellent recommendations for advancing integration, efficiencies, competence development and safety management systems implementation. We can now more confidently reappraise our priorities.”

- Silk Air QAM
The Outcome

The results provided the client with an unbiased situational overview.

- It provided an overall assurance of the Engineering support arrangements.
- It provided an international benchmark against other Operators’ safety systems.
- It provided co-ordination improvement and simplification areas for management focus.
- The detailed report listed results by finding, by example, by category and by recommendation.
- The recommendations provided a range of fresh and independent insights that were pragmatic and aligned to the client’s aircraft utilisation and safety strategy objectives.
- The review provided an invaluable catalyst and direction for improving performance.

Summary of Baines Simmons services utilised

**SMARRT®**

Error Management Diagnostic (EMD); Staff Error Management Workshop Facilitation

**Consulting support:**

MRO/ Operator Board level Strategic MEMS & SMS leadership support