



Taskforce A2 - Executive Summary: Ensuring Success: The B787 & Enhancing Sustainability

•What are the Fundamentals for Boeing Commercial Airplane to succeed

The fundamentals for the division is to design, assemble and deliver airplanes that is a match between our customers' business needs and innovation. However, it is only with the very best project management capabilities and capacities only can we deliver our cutting edge innovations to our customers on time, on budget. Thus reinforcing and growing our sustainable competitive advantage of innovation and delivering products that customers demand.

•Ensuring the success of the 787 Program in its production phase

<u>Establish Global MoonShine taskforces – Support, Collaborate, Cooperate</u> MoonShine was established in 2001 with the objective to bring together the best that we have to innovate and strengthen our production process to maintain an edge and drive costs down.

We propose to extrapolate the MoonShine success on a global scale to support the critical 787 program. This will support strategic vendors and their subsequent outsourcing vendors in their production processes, above and on top the new rigorous monitoring and inspection programs.

Showcasing Boeing Success & Supporting Vendors In meeting standards

The objective is to bring all vendors (tier 1-5 and beyond) on the same page on what is required in terms of standards, showcasing how Boeing has been doing it, resolving problems, sharing the culture and taking a more

Labor Security & Employee Satisfaction

To further reduce employee dissatisfaction and weaker group performance, we are proposing the increase in proportion of the variable component in employee wages- that is tied to collective business performance. This creates a balance between rewarding employees to strive for better collective performance whilst maintaining flexibility for management to trim costs in exogenous circumstances.

In addition, we propose further training for current staff to strengthen their adaptability, thus giving them the ability to be cross-deployed beyond just on function, circumventing fears and concerns of outsourcing.

•What's next, beyond the 787:-

Lessons learnt - Project Management Critical, establishing a StarShine taskforce

The taskforce concurs that due to exogenous circumstances, outsourcing and the global supply chain will be the way forward. However this can be done better via a gradual rather than dramatic shift in proportion as learnt in the 787 program. We also propose to establish a crack taskforce of senior staff with strong experience across functions and programs, enabling us to take the lead in being the best in project management in the industry, thus being part of an ecosystem of excellence, setting the bar so high that customers will instantly relate to Boeing when it comes to reliable delivery and quality products.

Investing in Nanotechnology - The Next New Frontier

An emerging technology with the potential for broad application to many aspects of aircraft design --Good for Boeing to explore long-term potential of enhancing aircraft performance through higher performance composite materials in airplane structures.

Source for slide: US Committee on Aeronautics Research, 2010

--Research collaboration with institutions such as UW Centre for Nanotechnology





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Nanotechnology justification

Another step in value chain as nanotechnology impacts on virtually all aircraft components and systems, from airframes to propulsion systems, windows.

Source for slide: Bax and Willems Consulting, 2009

This form of R&D helps to improve properties that in turn improve functional performance, i.e. save costs. Nanostructured coatings can also provide added protection to airplanes by either reducing ice formation or preventing UV degradation in harsh environments.

Build up a collective suite of capabilities from the investment and allow us to be the leading edge of innovation and material science development

→ Enhance sustainability. Open new frontiers. Leveraging on experience to create long term CA

•Financial Implication

Our taskforce has examined the accompanying financial implications of our recommendations. We have financial simulations that depict forecasted financial performance that will be impacted by the implementation or the option of not implementing our recommendations.

Execution

The taskforce has also taken into account the complexity in executing change across multiple fronts. As such we propose a full-time taskforce to conduct further due diligence on the recommendations and with final management approval, enter the planning and development stages for the various programs like StarShine, Tune-Up etc.

The taskforce has also considered the complexity involved in specifically union wage negotiations, implementation of the new Global MoonShine and Project Management focused StarShine taskforces. The milestone gantt chart will serve provide a long term guide to what it takes to succeed, whilst considering carefully and thoroughly contemplating the complexities in executing the various programs.

Conclusion

Our task force's recommendations are focused on:-

- 1. Lasering our focus on what our division's root objective is selling more planes that market needs and wants and delivering them on time, on budget over the long term. This will be supported by the following:-
- 2. Ensuring the success of the B787, a critical Program in the company's medium term by:-
 - Bring onboard all vendors on the same page via Boeing Tune-Up program
 - Supporting them with Global MoonShine taskforces to help build and cascade down long term reliability and process excellence across extended supply chain
- 3. Enhancing the sustainability though learning from the B787 program:-
 - Setting the industry standard in project management
 - Continuing to innovate through our focused investment in nanotechnology