



**Case name: Getting the Big Contract**

*Contributor: Hal Williamson  
Hope Unlimited*

**Company:** Sundstrand Company

**The Challenge:** How to meet Boeing's technical specifications.

**Purpose:**

To win the power source contract for the new Boeing 777 aircraft.

**Existing conditions:**

By 1990, Sundstrand had developed highly sophisticated hydro-mechanical power generator systems, but had resisted a switch over to digital, solid state power electronics to provide such electrical power. That same year, Boeing Corporation announced they would only accept bids for digital, solid state electrical power generators, or, as they were called, variable speed constant frequency systems (VSCF) for their newer technically sophisticated commercial aircraft, specifically the Boeing 777.

**Desired outcome:**

Short term: Create a new VSCF design and win the Boeing 777 contract.

Long term: Establish a new line of variable speed constant frequency products and compete for future Boeing orders as well as business from other aircraft manufacturers.

**Whole Brain intervention methods, processes, and strategies:**

Sundstrand met the challenge by pulling together a task force of volunteers that represented the brightest and best of the company's inventors, engineers, marketing, and manufacturing individuals. The group had never worked together before. Adding to the challenge was the fact that most of the inventors and engineers had become highly specialized and had worked independently for years not as team members.

Hal Williamson, who served as Senior Patent Counsel for Sundstrand Corporation advised the team leader of his knowledge of the HBDI and the principles of the brain dominance. He recommended the concept and the instrument as powerful tools for synergistic team building. Before they began the Boeing project, the team was brought together, off site, for a day long presentation on effective whole brain team building. The effect of the whole brain learning experience was profound

and had a major effect on how the team functioned. Taking advantage of the expertise within the team but bringing it together on the basis of group synergy rather than independent action, the task force was able to invent/design and propose the entire VSCF system in less than twelve weeks.

**Summary of Outcomes:**

Sundstrand won the Boeing 777 contract hands down. The project had forced them into a new design concept, which helped launch a new product line.

**Optimizing the results:**

Short term: Building and delivering the new VSCF systems to Boeing. Continuing to employ the HBDI whenever Sundstrand has a team of people called upon to cooperate in a synergistic fashion.





Long term: A better understanding of how to best utilize the intellectual assets in the organization to produce better than expected results.

**Success measurement criteria applied:**

The VSCF project involved all four quadrants at various levels. The main task was to invent a new variable speed system. This involved primarily the A and D quadrants. The next measurement aspect was the short-term completion and delivery of the finished design. This was primarily a B quadrant effort. The final measurement area was the formation and interaction of the team, which was primarily a C quadrant activity.

The success measurement process allows up to 100 points to be allocated to each of the four quadrants of this Whole Brain Process. The success measurement points for this case are allocated as follows:

- A quadrant: Solve different technical issues on time
- B quadrant: Short term completion and delivery of furnished design
- C quadrant: Building an outstanding team
- D quadrant: Invent new power system on time

<u>Metaphors</u>		<u>Success measurement points</u>	
A 	D 	A <b>100</b>	D <b>100</b>
B 	C 	B <b>100</b>	C <b>100</b>

