## The Years of Change

In early January of 1993 all the B-2 structural tests were successfully completed. The static load tests were taken to failure to 161% of maximum stress, and the durability test completed more than 2 lifetimes, which represented 20,000 design flight hours.

January 1993 confidence was high for the \$4-billion PAMPA Program as the company prepared to complete its first flight evaluation aircraft. However, the realities of the "post-cold war" era forced management to gear up for a tough year as the battle of the defense budget continued in Washington.

The ailing commercial aviation industry presented additional challenges for the company. Boeing cut production on all their programs, and 1993 looked very gloomy. The company announced plans for down-sizing up to 1,500 people by the end of the year.

Vought president Gordon Williams streamlined the management team to help the company ride out the business downturn, and still continue to meet its customer requirements. He stated that "business will be smaller but stronger."

In March 1993 Vought shipped its last engine nacelle for the Canadair business jet while continuing production on the regional jet nacelles. The 500<sup>th</sup> horizontal stabilizer for the Boeing 767 was shipped during March, and 141 employees elected to retire. In the meantime, Loral Corporation formed a new missiles group by combining Loral Vought Systems and Loral Aeronutronic during the month.

At the end of April, 104 employees elected to retire.

McDonnell Douglas certified Vought's business processes in early May, which was another milestone on the way to becoming a preferred supplier for McDonnell Douglas.

The End Item Management concept was instituted in May 1993. This concept was designed to place complete responsibility for schedule, cost and quality on the end item manager for his deliverable item. In that same month, 60 employees elected to retire.

Early June marked the beginning of an extensive flight test program for the PAMPA 2000 jet trainer. The PAMPA had successfully completed its maiden flight on May 25, 1993. June 17, 1993, brought good news. The company announced a revenue sharing arrangement with Gulfstream Aircraft Company to build wings for the Gulfstream V business jets.

While the company celebrated preparations for the delivery of its 1,000<sup>th</sup> 747 tail section in July, the C-17 faced an uncertain future as Congress continued its defense budget cutting. By the end of July, 37 employees planned for retirement.

The Gulfstream team built up momentum in September as the Navy A-F/X lost the battle of the budget and is canceled. During the month, Boeing rolled out its 1,000<sup>th</sup> 747, a Singapore Airline jet to be delivered in October.

The C-17 tail section completed two lifetimes of cycle testing, equivalent to 60,000 flight hours, in November and the PAMPA flight test program wound down. In December, Congress approved the building of 20 B-2 Stealth Bombers as the B-2 "Spirit of Missouri" arrived at Whiteman Air Force Base, Missouri. Boeing cut production of the 747, as airlines struggle with red ink. By the end of 1993 things at Vought still looked tough; however, the company was still in business.

Vought employees in December of 1993 collected 967,140 cans for the North Texas Food Bank, and a total of 367 employees retired.

The aerospace bad news continued as sales are predicted to fall \$8-billion more in 1994, and employment to drop another 5% throughout the industry. Vought management response to survival were: (1) Joint Primary Aircraft Training system (JPATS) was a "must win."; (2) needed company capabilities would be retained; (3) the capacity and number of employees would continue to be reduced, and (4) Vought would pursue all market opportunities.

In March, Northrop announced that the acquisition decision on Vought would not be made until 1995. The Pentagon delayed the JPATS trainer schedule, and requests for proposal were expected in May. On March 17, 1994, Vought shipped the last B-2 intermediate section to Palmdale, California.

On March 21<sup>st,</sup> Northrop and Martin Marietta were locked in a high stakes battle to buy Grumman Aircraft Company. Northrop won the bid for Grumman in April and the new company was named Northrop Grumman.

On April 18, 1994, Vought teamed with Chrysler Technologies of Waco to modernize the P-3 Orion; however, their proposal was rejected because of cost.

Layoffs continued in 1994 and into 1995. The company offered training to help employees cope with unemployment and prepare themselves for new opportunities. Manufacturing operations introduced a lean and agile manufacturing concept to reduce cost.

On July 12, 1994, Northrop Grumman signed a memorandum of understanding to acquire the Carlisle Group's 51% interest in Vought for \$130 million. Vought Aircraft Company would be retained as a subsidiary of Northrop Grumman. At the time, Vought had 5,200 employees and sales in excess of \$800 million. Things appeared to be looking up. On the 16<sup>th</sup> of July Vought submitted the JPATS proposal and the flight evaluation team arrived at Wright-Patterson Air Force Base later in the month.

August 1994 brought good news to the new division when Vought won a \$2-billion contract extension from Boeing. This agreement would provide Vought production of Boeing components into the next century.

In September of 1994 Northrop Grumman completed the acquisition of Vought Aircraft. Gordon Williams was selected to head the Dallas-based commercial division. Mr. Williams would become a corporate vice president and general manager of the Commercial Division as well as president and chief executive officer of the Vought Aircraft subsidiary of Northrop Grumman.

December brought bad news, as the PAMPA 2000 jet trainer (Vought's entry into the JPATS competition) was removed from competition. The employees canned food drive netted 946,258 cans for the North Texas Food Bank. Two-hundred-twenty-one employees elected retirement in 1994 and the year ended with more positive hopes for the future.

A world of opportunity awaited the new Commercial Aircraft Division in early January 1995. The division was to be headquartered in Dallas, Texas, with sites in California, Michigan, Pennsylvania, Georgia and Florida. On March 3, 1995, the C-17 Program won the coveted Collier Trophy award and Vought shared in the glory.

McDonnell Douglas presented its highest award, the Silver Eagle, to the Vought Vertical Stabilization Team for overall performance improvement on the C-17 program.

Vought also delivered its first Gulfstream V wing in mid-July.

Business was looking good in August of 1995. Northrop Grumman reported record operating margins, increases in sales and an increase in net income for the quarter. Boeing also reported better-than-expected earnings for the second quarter of 1995. Wall Street analysts said that these results indicated that the industry was headed for better times.

The first Gulfstream V aircraft was rolled out in early October and its first flight was scheduled for late November.

The year 1995 ended with a positive and upbeat outlook toward 1996 as the employees collected 780,884 cans for the North Texas Food Bank.

The year 1996 began with Vought Center winning the Boeing President's Award for excellence. Northrop Grumman reported record sales for 1995 of \$6.8-billion, with a net income of \$252-million.

In March of 1996, Gordon Williams announced his intention to retire and Mr. Ralph Crosby was named general manager of the Commercial Aircraft Division.

Mr. Ralph Crosby took over in September as corporate vice president and Commercial Aircraft Division general manager.

Model Number: Gulfstream V

**Model Name:** 

Model Type: Business Jet

The Gulfstream V Program was launched in 1992 and fills the market requirements for extended-range business jets. Powered by BMW Rolls-Royce BR710-48 turbofan engines, the Gulfstream V contains state-of-the-art avionics and electrical systems from Honeywell and Sundstrand, respectively.

Vought Aircraft Company, then a subsidiary of Northrop Grumman, was selected in June 1993, by Gulfstream Aerospace Corporation, as a revenue-sharing partner for its super long-range business jet, the Gulfstream V. Northrop Grumman designed and builds the wings for the new aircraft, which

has a range of 6,500 nautical miles.



