



Greyson Corporation

Greyson Corporation was formed in 1970 by three scientists from the University of California. The major purpose of the company was research and development for advanced military weaponry. Following World War II, Greyson became a leader in the field of research and development. By the mid-1980s, Greyson employed over 200 scientists and engineers.

The fact that Greyson handled only R&D contracts was advantageous. First of all, all of the scientists and engineers were dedicated to R&D activities, not having to share their loyalties with production programs. Second, a strong functional organization was established. The project management function was the responsibility of the functional manager whose department would perform the majority of the work. Working relationships between departments were excellent. By the late 1980s, Greyson was under new management. Almost all R&D programs called for establishment of qualification and production planning as well. As a result, Greyson decided to enter into the production of military weapons as well, and capture some of the windfall profits of the production market. This required a major reorganization from a functional to a matrix structure. Personnel problems occurred, but none that proved major catastrophes.

In 1994 Greyson entered into the aerospace market with the acquisition of a subcontractor for the propulsion unit of the Hercules missile. The contract was projected at \$200 million over a five-year period, with excellent possibilities for follow-on work. Between 1994 and 1998 Greyson developed a competent technical staff

employed mainly of young, untested college graduates. The majority of the original employees who were still there were in managerial positions. Greyson never had any layoffs. In addition, Greyson had excellent career development programs for almost all employees.

Between 1997 and 2001, the Department of Defense procurement for new weapons systems was on the decline. Greyson relied heavily on their two major production programs, Hercules and Condor II, both of which gave great promise for continued procurement. Greyson also had some thirty smaller R&D contracts as well as two smaller production contracts for land weapons.

Because R&D money was becoming scarce, Greyson's management decided to phase out many of the R&D activities and replace them with lucrative production contracts. Greyson believed that they could compete with anyone in regard to low-cost production. Under this philosophy, the R&D community was reduced to minimum levels necessary to support its house activities. The director of engineering froze all hiring except for job-shoppers with special talents. All nonessential engineering personnel were transferred to production units.

In 2002, Greyson entered into competition with Cameron Aerospace Corporation for development, qualification, and testing of the Navy's new Neptune missile. The competition was an eight-month shoot-off during the last ten months of 2003. Cameron Corporation won the contract owing to technical merit. Greyson Corporation, however, had gained valuable technical information in rocket motor development and testing. The loss of the Neptune Program made it clear to Greyson's management that aerospace technology was changing too fast for Greyson to maintain a passive position. Even though funding was limited, Greyson increased the technical staff and soon found great success in winning research and development contracts.

By 2005, Greyson had developed a solid aerospace business base. Profits had increased by 30 percent. Greyson Corporation expanded from a company with 200 employees in 1994 to 1,800 employees in 2005. The Hercules Program, which began in 1994, was providing yearly follow-on contracts. All indications projected a continuation of the Hercules Program through 2002.

Cameron Corporation, on the other hand, had found 2005 a difficult year. The Neptune Program was the only major contract that Cameron Corporation maintained. The current production buy for the Neptune missile was scheduled for completion in August 2005 with no follow-on work earlier than January 2006. Cameron Corporation anticipated that overhead rates would increase sharply prior to next buy. The cost per motor would increase from \$55,000 to \$75,000 for a January procurement, \$85,000 for a March procurement, and \$125,000 for an August procurement.

In February 2005, the Navy asked Greyson Corporation if they would be interested in submitting a sole-source bid for production and qualification of the Neptune missile. The Navy considered Cameron's position as uncertain, and wanted to maintain a qualified vendor should Cameron Corporation decide to get out of the aerospace business.

Greyson submitted a bid of \$30 million for qualification and testing of thirty Neptune motors over a thirty-month period beginning in January 2006. Cameron's testing of the Neptune missile indicated that the minimum motor age life would extend through January 2009. This meant that production funds over the next thirty months could be devoted toward requalification of a new vendor and start next production requirements for 2009.

In August 2005, on delivery of the last Neptune rocket to the Navy, Cameron Corporation announced that without an immediate production contract for Neptune follow-on work it would close its doors and get out of the aerospace business. Cameron Corporation invited Greyson Corporation to interview all of their key employees for possible work on the Neptune Requalification Program. Greyson hired thirty-five of Cameron's key people to begin work in October 2005. The key people would be assigned to ongoing Greyson programs to become familiar with Greyson methods. Greyson's lower level management was very unhappy about bringing in these thirty-five employees for fear that they would be placed in jobs that could have resulted in promotions for some of Greyson's people. Management then decreed that these thirty-five people would work solely on the Neptune Program, and other resources would be hired, as required, from the Hercules and Condor II programs. Greyson estimated that the cost of employing these thirty-five people was approximately \$130,000 per month, almost all of which was being absorbed through overhead. Without these thirty-five people, Greyson did not believe that they would have won the contract as sole-source procurement. Other competition could have "grabbed" these key people and forced an open-bidding situation.

Because of the increased overhead rate, Greyson maintained a minimum staff to prepare for contract negotiations and document preparation. To minimize costs, the directors of engineering and program management gave the Neptune program officer the authority to make decisions for departments and divisions that were without representation in the program office. Top management had complete confidence in the program office personnel because of their past performances on other programs and years of experience.

In December 2005, the Department of Defense announced that spending was being curtailed sharply and that funding limitations made it impossible to begin the qualification program before July 2006. To make matters worse, consideration was being made for a consolidation of the requalification programs to twenty-five months in a twenty-month period. However, long-lead funding for raw materials would be available.

After lengthy consideration, Greyson decided to maintain its present position and retain the thirty-five Cameron employees by assigning them to in-house programs. The Neptune program office was still maintained for preparations to support contract negotiations, rescheduling of activities for a shorter program, and long-lead procurement.

"In May 2006, contract negotiations began between the Navy and Greyson. At the beginning of contract negotiations, the Navy stated the three key elements for negotiation:

1. Maximum funding was limited to the 2004 quote for a thirty-month/forty-month program.
2. The amount of money available for the last six months of 2006 was limited to \$3.7 million.
3. The contract would be cost plus incentive fee (CPIF).

After three weeks of negotiations there appeared a stalemate. The Navy contended that the production man-hours in the proposal were at the wrong level on the learning curve. It was further argued that Greyson should be a lot "smarter" now because of the thirty-five Cameron employees and because of experience learned during the 2001 shoot-off with Cameron Corporation during the initial stages of the Neptune Program.

Since the negotiation teams could not agree, top-level management of the Navy and Greyson Corporation met to iron out the differences. An agreement was finally reached on a figure of \$28.5 million. This was \$1.5 million below Greyson's original estimate to do the work. Management, however, felt that, by "lightening our belts," the work could be accomplished within budget.

The program began on July 1, 2006, with the distribution of the department budgets by the program office. Almost all of the department managers were furious. Not only were the budgets below their original estimates, but the thirty-five Cameron employees were earning salaries above the department mean salary, thus reducing total man-hours even further. Almost all department managers asserted that cost overruns would be the responsibility of the program office and not the individual departments.

By November 2006, Greyson was in trouble. The Neptune Program was on target for cost but 35 percent behind for work completion. Department managers refused to take responsibility for certain tasks that were usually considered to be joint department responsibilities. Poor communication between program office and department managers provided additional discouragement. Department managers refused to have their employees work on Sunday.

Even with all this, program management felt that catch-up was still possible. The thirty-five former Cameron employees were performing commendable work equal to their counterparts on other programs. Management considered that the potential cost overrun situation was not in the critical stage, and that more time should be permitted before considering corporate funding.

In December 2006, the Department of Defense announced that there would be no further buys of the Hercules missile. This announcement was a severe blow to Greyson's management. Not only were they in danger of having to lay off 500

employees, but overhead rates would rise considerably. There was an indication last year that there would be no further buys, but management did not consider the indications positive enough to require corporate strategy changes.

Although Greyson was not authorized, there was a possibility of a massive strike if Greyson career employees were not given seniority over the thirty-five former Cameron employees in the case of layoffs.

By February 2007, the cost situation was clear:

1. The higher overhead rates threatened to increase total program costs by \$1 million on the Neptune Program.
2. Because the activities were behind schedule, the catch-up phases would have to be made in a higher salary and overhead rate quarter, thus increasing total costs further.
3. Inventory costs were increasing. Items purchased during long-lead funding were approaching shelf-life limits. Cost impact might be as high as \$1 million.

The vice president and general manager considered the Neptune Program critical to the success and survival of Greyson Corporation. The directors and division heads were ordered to take charge of the program. The following options were considered:

1. Perform overtime work to get back on schedule.
2. Delay program activities in hopes that the Navy can come up with additional funding.
3. Review current material specifications in order to increase material shelf life, thus lowering inventory and procurement costs.
4. Begin laying off noncritical employees.
5. Purchase additional tooling and equipment (at corporate expense) so that schedule requirements can be met on target.

On March 1, 2007, Greyson gave merit salary increases to the key employees on all in-house programs. At the same time, Greyson laid off 300 employees, some of whom were seasoned veterans. By March 15, Greyson employees formed a union and went out on strike.