

In April 2007, James Wallace, general manager of the Advanced Products Division at Shipper, was considering a change in manufacturing strategy. Recently, Wallace and his staff had revised the business strategy of the division. As a result, it became apparent that the marketing, engineering, and manufacturing strategies should also be revised.

The Shipper Company started in the aerospace business in the 1960s. In the early years, the company developed and produced the Echo weather satellites, which were launched into space. More recently, the Shipper Company had diversified into three divisions located in Faribault, Minnesota: the Electrical Products Division (EPD), the Materials Division (MD), and the Advanced Products Division (APD). The EPD produced a variety of circuit boards and other electrical products for mass markets. The MD produced laminated plastic materials that were sold to EPD, APD, and outside customers. The APD manufactured specialty products to customer order. The sales growth and profitability of the company have been good for the past five years, as shown in Exhibit 1. Sales and profits of the APD, however, have been somewhat erratic.

The main product of the APD is the aerostat, which is a large lighter-than-air blimp resembling the famous Goodyear blimp. These aerostats are sold to communications companies, the U.S. government, and foreign countries for communications uses. At the present time, the APD produces about 12 aerostats per year, and the aerostat accounts for about 50 percent of the APD's sales.

The APD also produces a variety of other specialty products made to customer order. These products include mine stoppers used to seal mining passages for ventilation control (see Exhibit 2) and blade liners used as inserts in helicopter blades to detect cracks. One unifying feature of these specialty products is

that they are made from the laminated plastic materials supplied by the Materials Division of Shipper.

In formulating his business strategy, Wallace envisioned a gradual shift toward products that are sold to multiple customers and manufactured on a volume basis. The business strategy developed by Wallace and his staff is summarized as follows:

APD will continue to do what it has historically done best—respond to *individual customer* design requirements and tailor new products to unique customer applications. This business is characterized by low volume but sole-source products, by customer funding for product development, and by large year-to-year variations in sales and profits.

Concurrently and increasingly, the APD will become more *market-focused* in its business and will apply resources toward market and product-development programs. Its objective shall be to reduce but not eliminate APD dependence on short-run customer-specified products or projects and to bring on stream new products with higher-volume continuous production. The APD will restrict its market development resources to certain market segments of niches of growth and to mature industries where there is a realistic opportunity and expectation of occupying a dominant or strong competitive position.

This heavy emphasis on marketing strategies will require enlargement of market research, market development, and sales distribution systems. Technologically, materials and systems engineering capabilities will have to be strengthened, as will the production engineering and production control disciplines. The company will need to concentrate heavily on planning, and it must have the patience to focus on and stick to its strategies to see them through to fruition.

EXHIBIT 1 Financial data.

	\$ Thousands				
	2002	2003	2004	2005	2006
Shipper Corp.					
Sales	34,884	41,029	46,824	41,914	47,857
Profits (after tax)	1,256	1,324	1,363	1,035	1,579
APD					
Sales	5,977	6,508	4,080	7,600	5,179
Profits (after tax)	703	597	223	1,139	150

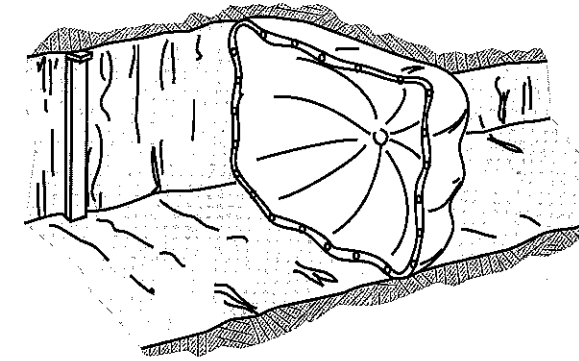
This case was prepared as a basis for class discussion, not to illustrate either effective or ineffective handling of an administrative situation.

EXHIBIT 2 Product description.



Advanced Products Division
Faribault, Minnesota 55021

Reusable Ventilation
Control Stopping for
Underground Mines
Part No. 10687



DESCRIPTION

- A DIFFERENT BRATTICE FOR EMERGENCY AND PRODUCTION VENTILATION CONTROL
- INSTALL IN MINUTES
- SELF SEALING
- REUSABLE
- RESISTANT TO BLAST FORCES
- FLAME RESISTANT (To NFPA 701-75 Spec. and ASTM E162 with Flame Spread Index of less than 25.)
- AN ACCESSORY HARNESS IS AVAILABLE TO CONVERT THIS UNIT INTO A "PARACHUTE" SINGLE POINT ATTACHMENT STOPPING

SIZING

For Airways smaller than 7' x 8' order the 10687-012 Stopping.
For Airways between 7' x 8' and 11' x 12' order the 10687-016 Stopping.

The business unit is growth-oriented with substantial resources directed to new-product/new-market strategies, making it a medium- to high-risk operation. Although investment in product development and capital equipment will be required, the business should retain its low-capital, high-labor-intensive character. Over the five-year planning period, sales, profits, and asset levels should produce a return on net assets (RONA) in the 30 to 40 percent range. Additionally, the business will be a net cash user.

According to Wallace, the shift in business strategy will require a corresponding change in manufac-

turing strategy. Manufacturing will need to develop facilities, people, and production control systems to support the gradual change from low-volume, one-of-a-kind production to higher-volume, standardized product lines. Among the results of this change in strategy could be changes in organization. The present organizational structure of the APD is shown in Exhibit 3.

Wallace also felt that the shift in business strategy might affect the production and inventory control area. At the present time, production and inventory control is handled by two individuals who were