## **Manufacturing Engineering**

## Isn't That Special(s)?

The first things you notice as you walk into Valerie's cube are the cables covering the floor. Tracing their path reveals the source of a faint squeaking. A rotating carousel cradles 50 glass vials enabling a mounted scanner to read the bar code on the vials as they pass under a laser beam. A computer calculates and displays the information gleaned from the labels. The read rate is now 99.3%, which is "pretty good," Valerie says. The substitution error rate is improving but remains the main roadblock to finishing up this yearlong plus project for xxxxxx.

The xxxxxx project is larger and longer than most Specials' projects, which typically last less than a month. The time it takes to complete a special product varies from about a week for a simple xxx xxxxx conversion to over a year for the xxxxxx reader project.

Specials is a branch of Engineering Services that fills a gap; some customers want a product that is just like one in the product catalog except for a few "minor" details. To get a special product, the customer requests a bid by submitting a Customer Request for xxxxxxxx Special Product (CRISP). Quoting a CRISP includes calculating the engineering development costs, the amount of time to complete the project, and obtaining the customer's cost from Marketing. "Our goal is to quote the project within five days," says Brian, Specials Supervisor. An average of 12-33 CRISPS are quoted per month. About 24% of these come back as firm orders, resulting in about three new orders per month. Sometimes orders create "pull through business", that is the customer will order standard xxxxxxxx products if they can get the special products.

The members of Specials have a strong team feeling which is evidenced by their team activities, such as entering and winning last year's trike race, and creating the famed MegaCycle for quick trips between buildings. A typical example of Specials teamwork is the upcoming xxxxxxxx project for an impact printer; Orrin will design the custom printwheel, Glenn will change the software to support the new printwheel, Tag will help Manufacturing understand the project, and Barb will track the project through all its phases.



The Specials Team (Sitting left to right) Barb, Rebecca, Valerie. (Standing) Orrin, Glen, Tag, Brian.

The Specials team has eight members, and their combined years at xxxxxxxx equal an impressive 46. Their responsibilities are as widely varied as their interests. Terry, current Manager of Engineering Services and past Specials Supervisor, is proud of the Specials group. He makes sure the group gets what they need to do the detail work—from equipment to cooperation. Terry lives on Whidbey Island and likes to sail. Brian works on wedge products and quotes CRISPs in addition to supervising the group. He and his wife are expecting their first child in March. Barb performs all the administrative work—status reports. scheduling, and tracking project progress. During her 10 years at xxxxxxxx, Barb has worked her way up the corporate ladder from the assembly line. Orrin knows impact printers intimately-from how to make a printwheel to which type of label stock to use. He, too, started in manufacturing where he was a test technician 12 years ago. Tag is another old-timer—just over 10 years at xxxxxxxx. He works with Drafting and Manufacturing, getting the product built and documented. Rebecca was born in mainland China and lived in Taiwan for 27 years. She and Valerie

design hardware changes to existing products and modify the software to support these changes. Sometimes, as Valerie has done for the xxxxxx project, they design new products. Glenn uses his Computer Science degree when he's troubleshooting wedge to terminal problems. He is currently pursuing a masters in Computer Science and has a second degree in Economics.

When asked what is special about Specials, Valerie says, "Specials can be good because you get to work on a lot of different projects. You get to see a lot of different things."

"I like this department because you get to interface with a lot of other departments," Orrin says.

Glenn says, "Working in the Specials group is a good opportunity, especially for a new employee. In the Specials group you get introduced to a lot of different products... it's real educational."

"It's interesting work. You get to meet the customer, find out what they need," Brian says. "..... you feel like you're helping out."

By Karla J. Griffin