

Yokogawa, U.S.A., CENTUM CS 3000 R3, 1,900 devices



Tokyo, Japan – April 23, 2003

**Yokogawa Awarded FED for First Phase of Shell Norco Chemical
Reinstrumentation Program
Shell Chemical LP Sees Fieldbus As A Strategic Technology**

Yokogawa Electric Corporation announced today that Yokogawa Corporation of America, its North American subsidiary located in Newnan, Georgia, has been awarded the Front End Development (FED) of the first phase of the Shell Norco Chemical Reinstrumentation Program. The entire reinstrumentation program at Shell Chemical LP's operation in Norco, Louisiana, has an estimated value of US \$50 million.

The program scope includes the CENTUM CS3000 R3 integrated process control system, Plant Resource Manager (PRM) asset management solution, Exaquantum plant information management systems, panels, field instruments, and ten years of maintenance services and training.

Shell Chemical LP's selection of Yokogawa was made after an extensive evaluation of competing technologies and life cycle costs. Shell Chemical LP selected Yokogawa based on their low project and life cycle costs as well as their high product reliability. The main objective of this project is to increase unit reliability and reduce maintenance cost by using the advanced diagnostics built into intelligent field instruments and control hardware.

“ This instrumentation re-vamp project at Norco is very important for Shell Chemical LP since it identifies our future direction of automation technology. Our decision to use the all-digital FOUNDATION™ fieldbus technology means a 'leapfrog' of an entire technology - skipping analog electronic control,” said Wayne Pearce, the Shell Chemical LP Plant Manager. “Shell Chemical LP expects to benefit from fieldbus by lowering our maintenance cost and better managing our assets to allow instantaneous decisions linked to market demand and operation availability. A significant point is that we will switch to fieldbus technology with the plant in full operation.”

"This award is a big step for Yokogawa because it solidifies our fieldbus and engineering abilities. Our more than 10-year commitment and contribution to the development, implementation, and promotion of FOUNDATION™ fieldbus technology enables us to deliver cost-effective solutions to our growing base of fieldbus customers," said

Teruyoshi Minaki, Senior Vice President of Yokogawa's International Business Headquarters. "Our reputation for reliable products that are technically advanced and well supported by a global service and support network is being recognized throughout the world. We have accelerated our expansion plans in the US by moving our control system headquarters to Houston, Texas, to better serve the refining and petrochemical markets."

About Shell

Shell Chemical LP is one of the nearly 70 companies engaged in the chemicals businesses for the Royal Dutch/Shell Group. With a multi-billion-dollar annual turnover and significant investments in manufacturing assets around the world - both direct and through joint ventures – Shell Chemical LP is among the largest petrochemical producers in the world. The products that Shell Chemical LP makes and supplies - petrochemical building blocks and polyolefins - ultimately touch everybody's lives. The end products of the petrochemicals industry are all around us – in thermal and electrical insulation, medical equipment and sterile supplies, computers, lighter and more efficient vehicles, paints and biodegradable detergents, to name but a few. Petrochemicals have transformed countless aspects of the modern world and our lives would be very different without them. For more information visit www.shell.com/chemicals.

About Yokogawa

Yokogawa Corporation of America is the North American unit of Yokogawa Electric Corporation, a US \$3 billion company that is a global leader in the instrumentation, process control, and automation fields. Headquartered in Newnan, Georgia, Yokogawa Corporation of America serves a diverse customer base with market-leading products including analyzers, flowmeters, transmitters, controllers, recorders, data acquisition units, meters, instruments, distributed control systems and more.

Yokogawa's global network of 29 manufacturing facilities, 101 affiliate companies, and over 500 sales and engineering offices spans 29 countries. Heavily committed to innovative products of the highest quality, Yokogawa has secured more than 4,500 patents and registrations, representing a number of important innovations that include the world's first distributed control system and the first digital sensors for flow and pressure measurement. Industrial automation and control, test and measurement, information systems and industry support are the core businesses of Yokogawa. For more information about Yokogawa Electric Corporation, please visit our website at www.yokogawa.com.