



# TEST

# SCADA UPDATE

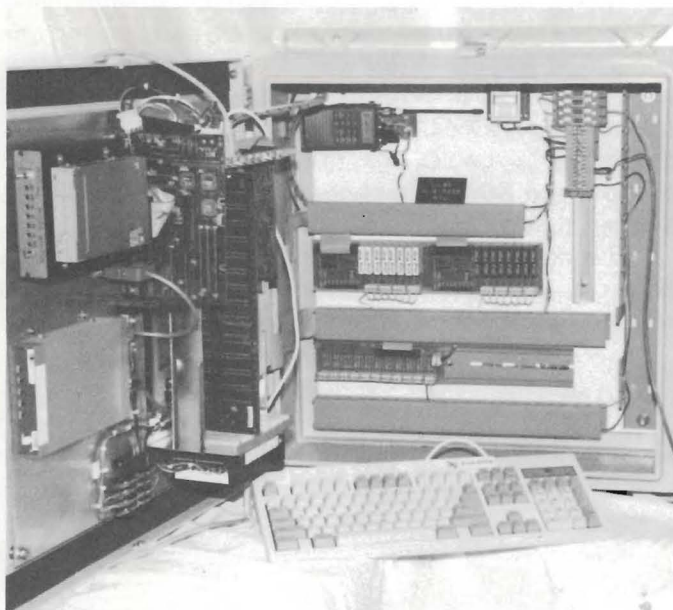
Total Engineering Services Team, Inc.

Fall 1991

## NEW TYPE 1200 RTU

TEST's new Type 1200 RTU/SCADA works with many PC based industrial I/O systems using a **generic PC BUS interface**. These interface products are manufactured by National Instruments, MetraByte, Computer Boards, and many others. The system design benefits from our installation experience over the past three years, and offers a more capable RTU system at a lower cost. While still based on industry standard components, the Type 1200 uses *TEST designed and fabricated* termination boards that reduce both the cost and cabinet size of these RTU systems.

The Type 1200 also introduces a new packaging concept with the computer components mounted on the enclosure door. This new arrangement allows more termination room on the back panel, and improves access to the PC and modem components. This new scheme will also be used in TEST RTU's based on the Metrabus I/O system, which is now termed a Type 1000 RTU.



TEST Type 1200 RTU

## NEW TEST SCADA SOFTWARE RELEASED

Existing TEST Customers began receiving the latest version of TEST's SCADA program in March of 1991. This version is the first released since August of 1990, and contains many enhancements as well as several improvements to existing features.

**Corey Moragas**, Technical Programmer at TEST, has been working on the revisions since September of 1990. The new program was installed at a test location in early February before being generally released. As always, the new program is compatible with earlier releases, and is available immediately for customer or TEST SCADA Technician installation.

The most noticeable improvement in the program is the new **MAIN MENU** system based on a standard PC "Pull-Down" design. The menu system allows the operator to do most of the common program functions with almost no typing, and supports a mouse if one is available. This new main menu can be used in addition to the original menu system, now termed the **USER MENU**.

A major technical enhancement is the new **"IMAGE SAVE"** feature. This is a background function that automatically and continuously saves all channel values, alarm states, and other dynamic data within the program. This will greatly simplify the real-time storage of totalizer and counter channel data as well as other variables like orifice plate changes. It also assists in recovery from computer crashes that previously caused the loss of data not already stored in configuration files.

An improved **"DEADBAND"** feature for all Value type channels is now available. The *individually* adjustable deadband will prevent repeat alarms from channels that hover near an alarm setpoint. The alarm delay is still available to prevent false alarms from occurring, and the new deadband feature will further improve the system's ability to **exactly** meet you SCADA alarm needs on a channel-by-channel basis.

Other new features include a simplified *Poll and Report* option, individual *Decimal Place* settings for each channel, and more user programmable *Function Key* operations.

Another much requested feature is an *Enhanced Text Editor* that is basically a small word processor. The editor can be used for general text editing as is often needed at HOST locations.

Although maintenance releases of this version are expected throughout the year, the next major release of the SCADA program will be in the Spring of 1992. The new features will allow much larger Host systems and will be the first version to provide an optional graphics display program.

All current TEST SCADA customers are eligible to receive the standard update at no additional software cost. Please contact TEST for information on receiving the new version for all your RTU and HOST computers.

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## RTU TYPE NUMBERS INTRODUCED

After more than three years of producing its own SCADA systems, TEST has established a Type numbering system to assist in identifying the various configurations. A quick breakdown is as follows:

TYPE	DESCRIPTION
1000	Large PC based system using Metrabus I/O.
1200	Medium PC based system using Generic PC based I/O
2000	Small simple RTU using Type 1000 Host software.
100	LB-100 Voice Alarm System
24	Small, Output only Touch Tone remote control system.

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## NEW MANUALS

TEST has been very busy installing new SCADA systems, many of which required "one small change" to the system software. The TEST RTU/SCADA documentation package has been revised and reprinted to reflect the many changes made since the last printing in January of 1990. As you may know, our policy is to make *all enhancements available to all current users*, so there is only one program and one set of documentation to maintain. When you get the new books, you may find that there are many features that are new to you.

The new software documentation began shipping to existing customers in late August. *Deane Webb*

handled the production of the books, and has compiled an RTU installation list. One free manual will be made available for each SCADA system customer. Additional copies can be purchased at a minimal per-copy cost. Contact Deane in Gretna if you need any additional information.

All users should also have complete and up-to-date installation drawings at both the field and office locations. If you do not have these on file, please contact TEST so that we can get you the CAD drawings that we prepare for each installation.

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## SCADA SCHOOLS

TEST Training has been busy with SCADA schools at both the Gretna and Houston Training Centers. *Three Day Classes* have been offered for current users of TEST's systems. These classes are tailored for each group, and are generally for field technicians and operators who deal with the system on a daily basis.

Over 120 people have attended *One Day SCADA Seminars* given in both New Orleans and Houston. The Seminars are for field, office, and engineering personnel who want to become more familiar with the capabilities of today's SCADA systems. These seminars are not sales presentations, but provide an intense introduction to the features, problems, and solutions currently available in offshore and remote SCADA systems. The seminars are currently being offered free of charge to qualified current and potential SCADA users.

Recently representatives of *MESA Petroleum, Total Minatome, CXY Energy, and McMoRan Offshore* have attended the three day classes, and over 35 companies have sent representatives to the Seminars.

TEST is also providing training and installation support for *TEXACO Offshore* on its own SCADA system. TEXACO has taken a very aggressive approach to SCADA technician training, and TEST is pleased to have been a part of their efforts.

If you are interested in receiving SCADA training, please contact the TEST office nearest you for class and seminar schedule information.



## NEW INSTALLATIONS

TEST's list of installations continues to grow every month. **Freeport-McMoRan Offshore** started up EC-311, WC-240, and VR-162. These radio based systems were connected back to host computers at WC-458 and VR-146. McMoRan recently sold some of these platforms, and TEST easily converted two of these locations to phone operation for their new owners, **Aquila** and **Energy Development Corp.**. This demonstrated the flexibility of TEST's RTU System as a valuable resource in the fast changing offshore business. **EDC** has also installed a new Type 1200 RTU at their MP-209 platform, reporting to the Burwood base via cellular phone.

**MESA** installed HI-55 and GA-102L, and connected them to a new Galveston Base Host system using cellular phones. The existing TEST system installed at MESA's WD-61 was also upgraded to allow both phone and radio communications to the field host as well as the Lafayette Office.

**CXY Energy** added a TEST Type 1000 SCADA system to their new Drake's Bay production facility. This system is the largest system built by TEST, and will reports back to a new Buras La. office. The new RTU can also report to their Lafayette office where 4 of CXY's other RTU's were already reporting.

**W. W. Buchanan** has been busy installing four (so far!) Type 100 voice RTU systems from TEST. These systems are at EC-24, GA-125, SMI-107, and EI-164. They report via cellular phone to several Buchanan and contract operator office locations.

**OXY Offshore** has installed a Type 1200 RTU that is the first online system provided by TEST. This unit uses a microwave circuit to provide 25 second updates between the RTU at BR-133A and the host system at BR-133E.

**Louisiana Land and Exploration** has selected TEST RTU's for the new GA-313 and HI-A523 platforms. These units were installed in the fab yard this summer for startup in the fall.

**Escambia Partners** will be installing four Type 1200 RTUs on a sour gas pipeline near Atmore, Alabama in September. The units will assist in **leak detection** as well as general facility operation.

**Seagull Energy** is now operating a Type 1000 RTU at their GA-343 Gas Facility. This unit reports via radio to their Surfside, Tx. office.

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## TYPE 100 NEWS

TEST's digitized voice RTU, the Type 100, has been enhanced to work with telephone answering machines. The new call out program allows a special

access code to be entered that will cause the system to announce it's location, the first-out alarm, and any additional alarm points before hanging up. Using this feature may eliminate the requirement for a full time operator or answering service in many instances.

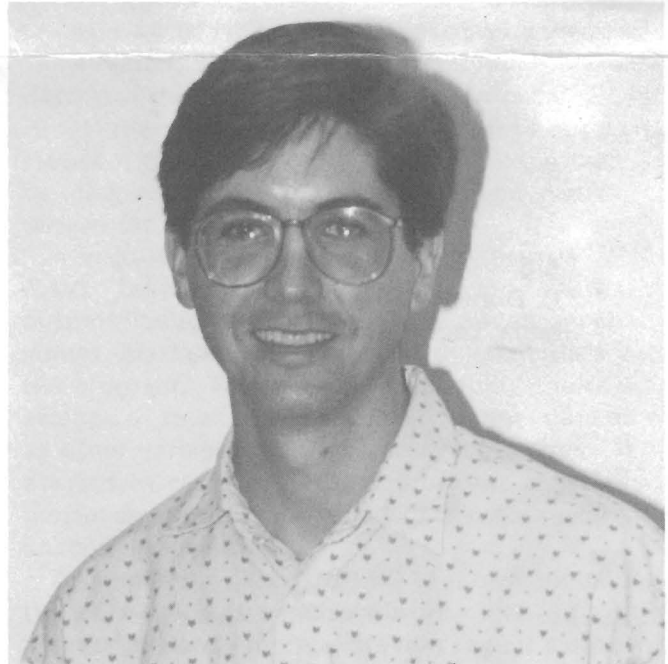
The Type 100 can also be interfaced to standard TEST RTU systems using a simple parallel printer interface. RTU Status and Output points can be mapped into the alarm table of the Type 100. This allows the voice and telephone access functions of the Type 100 to be more easily interfaced with standard TEST RTU applications.

The new program is compatible with all existing Type 100's (formerly called the LB-100) installed to date. Contact TEST if you find you can use the new program version.

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## HAVE YOU MET....

**Stan Taravella.** Stan is the SCADA Shop Supervisor responsible for the fabrication and checkout of all RTU systems built in TEST's Gretna facility. In addition to the SCADA projects, Stan also assists in training, electronics product development, gas detector and PC repairs, and about a million other things.



Stan came to TEST in 1989 after working with a large SCADA company that left the New Orleans area. Their loss is our gain, as Stan has greatly improved our entire electronic shop operations. Stan is normally available in the Gretna office to help with questions on your TEST SCADA system.

## **DID YOU KNOW...**

That you can easily estimate the *distance to the horizon* if you know the height of the observer's eye? We normally use this calculation to determine the distance that a radio signal can travel before hitting the earth, but the technique comes in handy for other applications as well.

To use the formula, all you need to know is the height of the eye (or antenna) above the ground. The height *in feet* used in the formula will produce a distance to the horizon *in miles*.

The formula is:

$$\begin{array}{l} \text{Distance} = 1.22 \times \sqrt{\text{Height}} \\ \text{(miles)} \qquad \qquad \qquad \text{(feet)} \end{array}$$

For example, a height of 100 feet gives a horizon at 12.2 miles. A height of 200 feet estimates the horizon at about 17 miles.

## **FOR MORE INFORMATION..**

Total Engineering Services Team, Inc. (TEST Inc) provides engineering, fabrication, and other technical services to oilfield customers worldwide.

If you need any further information on TEST's SCADA systems please contact the TEST office nearest you:

Gretna	(504) 368-6792
Lafayette	(318) 235-9013
Houston	(713) 688-9621
Ventura	(805) 658-0403
Anchorage	(907) 276-5660

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