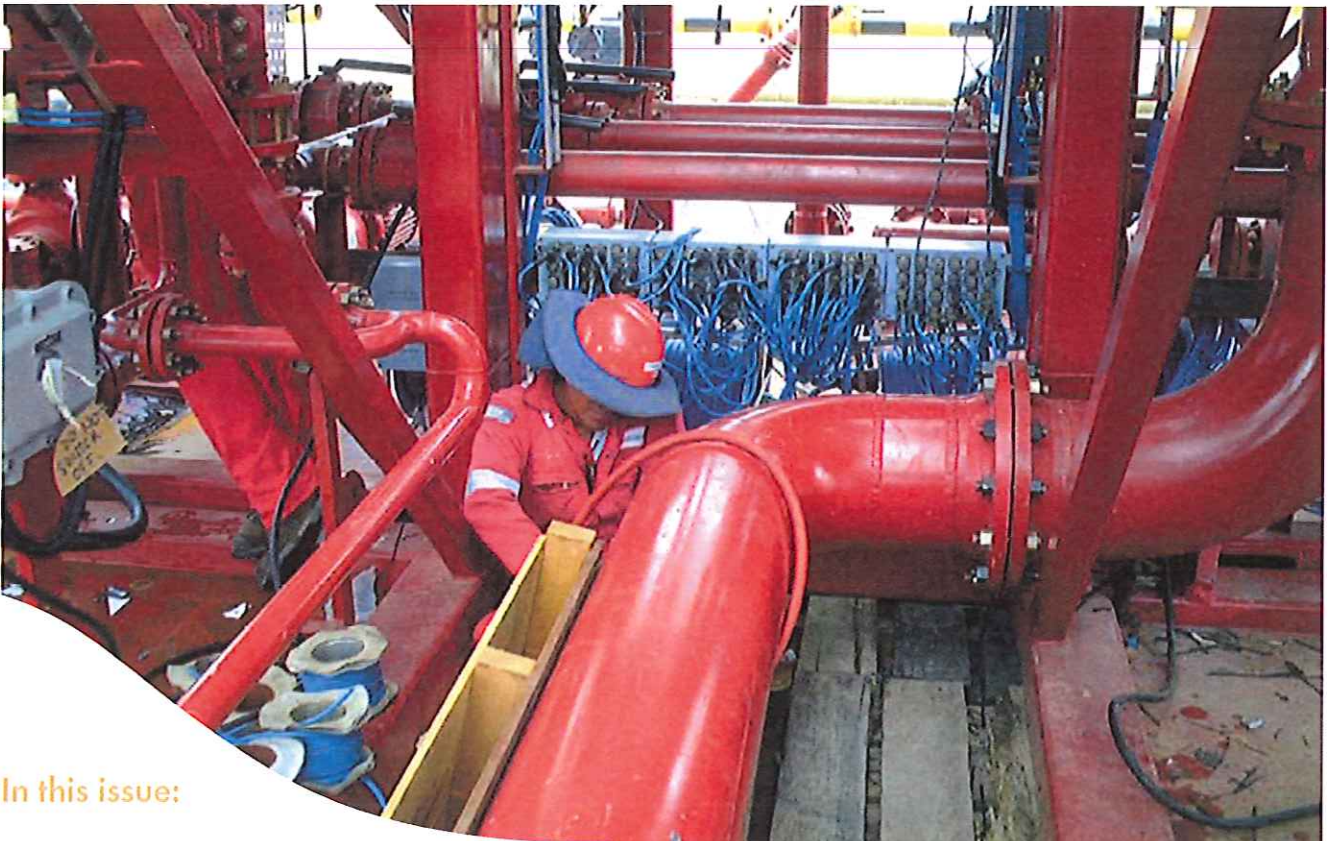
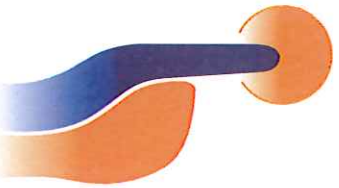




# COMMS COURIER



## In this issue:

### WallWatch.

The inline, realtime wall thickness monitoring system

### Software enhancements and planned deliveries

### Training schedules

### Vista compliance

### DataCast.

Global data transmission you can rely on

## Welcome

Welcome to the first issue of the Fardux Comms Courier - our quarterly newsletter designed to keep our client community up to date with developments, changes and issues concerning Fardux products and services.

Our website has been upgraded recently to include a number of exciting new features - please see it at [www.fardux.co.uk](http://www.fardux.co.uk). It forms the centre of our communication suite, offering the latest product information and technical data.

Future issues of Comms Courier will seek to develop our community relationship and provide a platform for you to share your experiences and expectations with our hardware and software.

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Tel: +44 (0) 1603 777980 | Web: [www.fardux.co.uk](http://www.fardux.co.uk) | Email: [fardux@wellwisegroup.com](mailto:fardux@wellwisegroup.com)



# Pick your own training schedule

Until now, we have always offered training schools an as-and-when required basis, either at our UK facility or at our clients' premises.



This year, in response to your feedback we have decided to offer a range of training schools throughout the year at our facility in Wroxham England, which will be open to any interested participants.

All you have to do is fill in the simple Training Application on our web site to apply for a place. Once we have received your request, we will acknowledge receipt and advise you of costs, terms and conditions by return. In addition, we will regularly contact supervisors to remind them of impending training schools.



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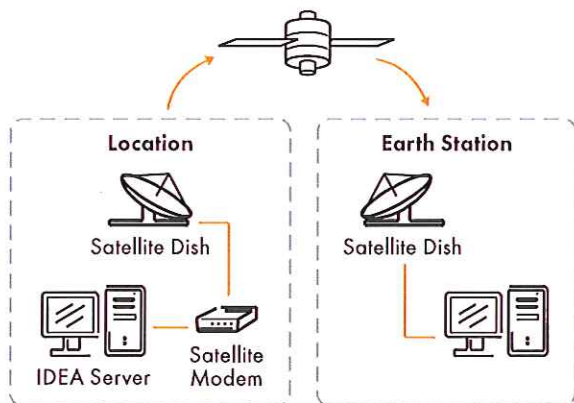
We expect demand to remain strong for the training schools we deliver at client premises and you can also use the web site Training Application to book these. Please go to [www.fardux.co.uk/train.htm](http://www.fardux.co.uk/train.htm)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>Fardux operator basic</b>		11-15th			12-16th			11-15th			10-14th	
<b>Fardux operator advanced</b>				14-18th						13-17th		
<b>Fardux technicians school</b>			TBA						TBA			



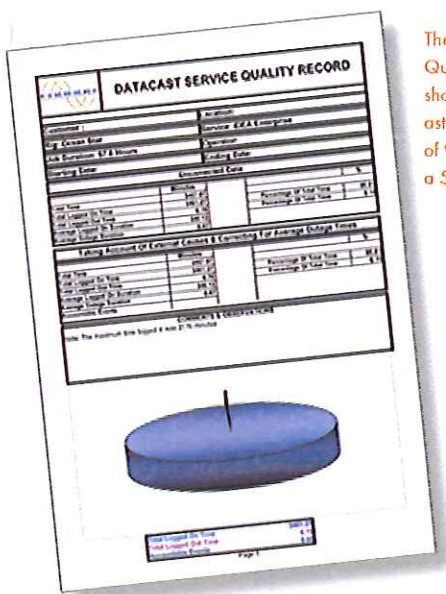
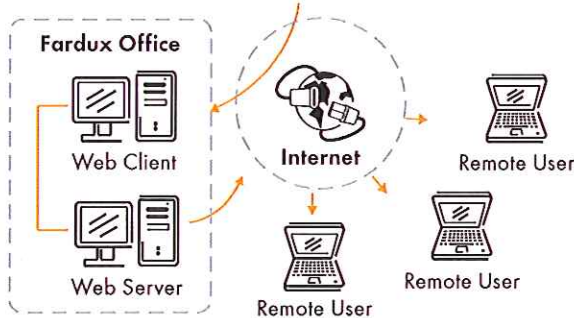
# Realtime rig data, worldwide!

Since 2002, Fardux DataCast has been transmitting realtime rig data and making it instantly available anywhere in the world via our unique web interface.



The DataCast concept is simple:

- Data is transmitted from rig to shore via satellite communication
- Once received at the earth station, the private IP address is mapped and routed to a public IP address
- Encrypted data is pulled from the rig server via the internet and fed into our rig client application
- This in turn feeds our DataCast web server with a Java and HTML 128-bit Verisign encrypted view of the interface
- Users of the system use their unique login details to view plots, reports, sequences, downloads and job data exports



The Service Quality Record shows an astonishing uptime of 99.81% during a 57.8 hour job.

## Uptime you can rely on

Satellite and long-haul TCP/IP communication is not always an exact science. DataCast's autostart routines have been perfected over time to produce the best quality up-time for real-time applications available today. When data delivery is not possible, DataCast Rig Client continually pokes the remote rig server until such time as communication is re-established. Data not already transmitted then flows into the remote replicated database.



To see how DataCast works, take a look at our live demonstration at: [www.fardux.co.uk/datacast\\_software.htm](http://www.fardux.co.uk/datacast_software.htm) and click the demo link.



# Fardux software now Vista compliant

Microsoft Vista has many different flavours, as well as 32-bit and 64-bit variations.



Microsoft no longer allows third-party software to write files to the program file directory. This means the software first has to identify which version of the OS is being used so that it can write files to the appropriate location.

To satisfy all of our clients, our engineers ran a rigorous test programme to be sure that Fardux software would work, whatever version of Vista it runs on. Although this in itself was a challenge as many other manufacturers have not yet released Vista compliant peripherals.

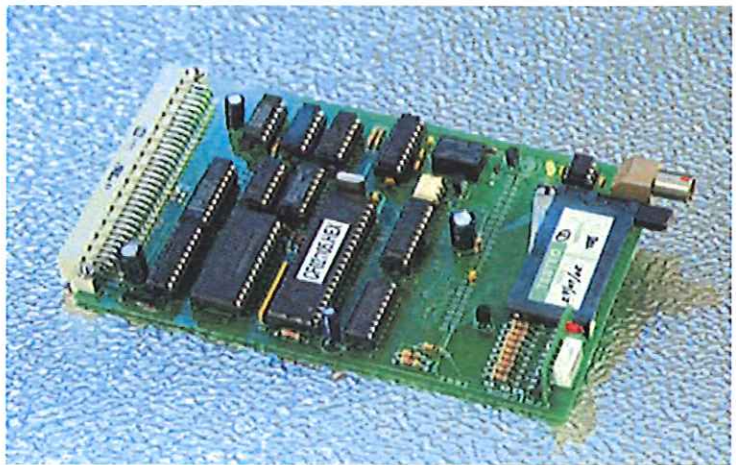
The result is that Fardux can now offer Vista compliant releases of its Enterprise and Lite software. We are also able to supply Vista upgrades to existing clients - please contact us for full details of upgrade pricing.

## Analogue to digital conversion - a tale of bits.

To keep pace with the trend for higher pressure transducers, Fardux have increased the resolution of their processor cards.

Until now, the analogue-to-digital converter cards used in the Fardux Enterprise and Lite data loggers have had a maximum resolution of 16-bits. 16-bits means 2 to the power of 16, or in oilfield terms, 1 PSI in 65535.

New pressure transducers are now being supplied with ranges of 20 KPSI or more, demanding much greater accuracy and resolution from the processor card.



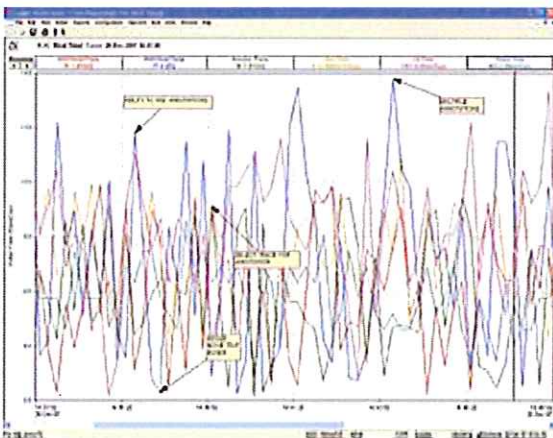
To meet this new challenge, Fardux is developing a 24-bit analogue card which will be able to detect far smaller pressure changes within the system. In fact, so accurate is the new card proving to be that it is able to detect pressure changes of just 0.0015 PSI, compared to 0.381 PSI from the 16-bit card.

To upgrade from the 16-bit card it will be necessary to replace the chip on the IDEA Enterprise or Lite processor card. When the new card is available, we will provide full upgrade instructions or offer a chip-change service to our clients.



# Fardux new software release version 3.0

Including some exciting new features as well as some requested bug fixes, the new Fardux software release is now available.



## Bug fixes in Version 3.0:

- All references to gauges and bottom hole temperature and pressure have been removed
- The system no longer beeps when events are unacknowledged
- Pressures over 20,000 PSIG are now displayed to 2 decimal places on modbus values
- Chloride and H2S readings are now displayed as real numbers on reports
- All data editing has been removed from client stations
- Some minor text changes have been made in the channel configuration dialogue to more easily identify between hardware inputs and software configuration
- WITS and Modbus variable have been removed from the Idea Lite code
- The width of the dialogue in the setup directories has been increased to better display the full pathnames

## New features and enhancements:

- Plot annotations enable the user to add text boxes to plots and trends
- An increased number of special values from 10 to 20, giving more options for external data recording
- The existing macro functionality has been greatly enhanced, with the following features:
  - Decimal precision on macro calculations
  - Use of tag names in expression rather than mib variable names
  - The expression can now be fully edited
  - The next and previous button have been added to scroll through macros
- There is now a bar showing progress when editing data, producing reports or viewing plots
- All the external input status has been moved into one new dialogue, enabling instant views for status of Modbus, ASCII, WITS and WOCS inputs
- On creating a custom report, the order of any variable in the list can now be rearranged
- The setup directories dialogue has been updated
- Excel now has a default location to better allow the edit launch from the main menu
- The software now uses the latest version of Windows Installer



To for the most recent versions of Fardux software, please visit our web site: [www.fardux.co.uk](http://www.fardux.co.uk)



# In Safer Hands with WallWatch

With more and more sand stimulation procedures being carried out throughout the oilfield, risks to health and safety due to erosion of the pipe by the "sand" in the flow increase dramatically.

The presence of sand can be determined by the use of the sonic sand detectors like Fardux **SandSnoop**, but this can only give operators an indication that sand is present. Conventionally the pipe thickness is measured by manually placing a probe on the pipe at a predetermined spot for several minutes to measure the wall thickness. This thickness is often not constant due to the manual nature of the measurement.

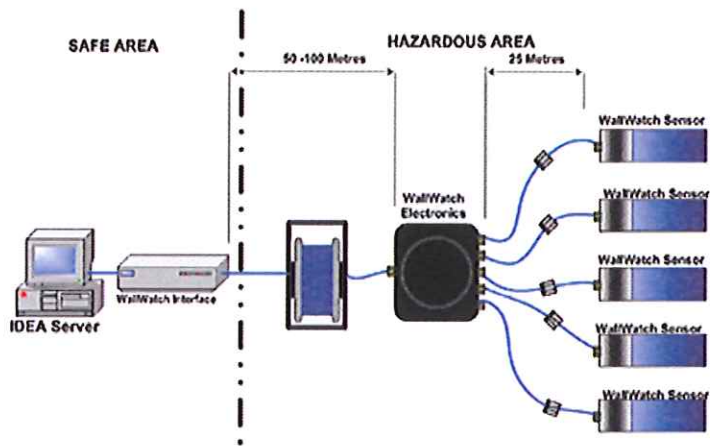
Due to the high velocities involved in some instances, the flow can erode the pipe work to an unsafe wall thickness in a matter of minutes. By definition, this places the operator at even greater risk, as pipe thicknesses are usually monitored where the erosion is more likely to happen.

In order to increase the safety of both the installation and the operator, Fardux are in the final stages of a three-year development program to automate wall thickness measurement with its new product **WallWatch**, storing the results in the IDEA Enterprise logging package.

## So how does it work?

Similar to conventional wall thickness measuring equipment, Fardux **WallWatch** utilizes a high frequency acoustic spike to measure the amount of metal in place. The acoustic signal is reflected back by the inner pipe wall and is received by the same sensor. The time it takes from transmission for the reflected signal to be detected gives the thickness of the metal and enables the system to calculate the wall thickness.

But that's where the similarity ends, because unlike conventional thickness checkers that only use a single point of measurement, the **WallWatch** system uses an array or mat of sensors which are wrapped around the

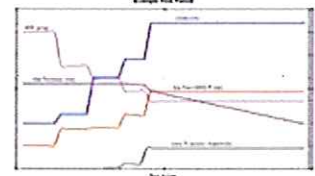


pipe and clamped in position to produce a far more accurate profile of the wall thickness.

Each sensor array contains 14 individual acoustic thickness transducers, each capable of measuring wall thickness from 5 to 25 mm.

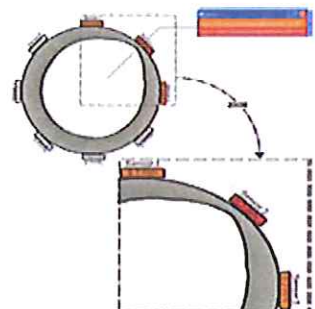
Because the data is then stored in the IDEA database, this allows the full functionality of the IDEA monitoring, display and alarm functions, as well as a powerful visualization tool which displays a cross sectional slice through the pipe.

**WallWatch** is now in the final stages of development, and should be available from mid February 2008. Make sure you check the Fardux web site for details.



Above: Plot From The IDEA Data Acquisition System With WallWatch & SandSnoop Active

Below: Example Cross Section Through a Pipe Using The WallWatch Sensor



To find Fardux hardware, please visit our web site:  
[www.fardux.co.uk](http://www.fardux.co.uk)