FIA
The Fibreoptic Industry Association
www.fibreoptic.org.uk

NEWSLETTER

Issue 74

February 2004

THE FIBREOPTIC INDUSTRY ASSOCIATION
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A warm welcome
to the following
NEW MEMBERS

Corporate
543 - Cooper Armer International Limited
544 - SCD Networks Limited
545 - GMC Networks
547 – Capital Cabling Limited

Personal
541 – Sean McGoldrick
542 – Peter Jamieson

Student
546 - Abdul Ghaffer

Are You Getting Enough?
FIA Newsletters that is!

The **FIA Newsletter** is undergoing a series of changes, over the next few issues, to make it even more informative and easier to access. But does it go to the right people in your organisation?

We currently e-mail the Newsletter to over 500 individuals spread across our member organisations. But could we do better?

The Newsletter contains the latest news from the FIA. In addition, it provides technical information that you may find of interest and also regularly contains commercial news and items that relate to operational matters such as CSCS Certification.

If you think that your colleagues should receive an e-mailed copy of the Newsletter please simply ask them to e-mail the FIA Secretariat (**jane@fiasec.demon.co.uk**) advising of their e-mail addresses - or why don't you do it for them - **a gift that costs you nothing**.

This Newsletter is provided as a means of maintaining communication between and with our Members.
It can, therefore, promote the activities of Members to other Members. Articles, product information, news items etc. are always welcome.
Please send the information via email (jpg illustrations) to Jane Morrison via jane@fiasec.demon.co.uk

Splice Loss Specification - "Get Real"

Introducing TSD-2000-4-1-1: OPTICAL FIBRE CABLING: INSTALLATION: INSTALLATION PRACTICE: SPLICING

Fusion splicing is a long-established and well-proven approach for the provision of low loss, high return loss and environmentally stable connections both internal and external to buildings. Over the years, the capability of fusion splicing equipment has improved substantially, as has the control over the tolerances of optical fibres themselves. This has resulted in a steady reduction in achievable splice loss to the point where further significant performance improvements can no longer be made without direct influence over the optical fibres.

Nevertheless, clients are ready to impose ever more stringent requirements on installers. The impact of specifying overly ambitious or incorrectly defined splice loss requirements must concern both the client and the installer. The installer may be faced with a considerable degree of rework that can have dramatic commercial consequences, while the client may be faced with considerable project delays, the resolution of which will add further costs.

A new FIA Technical Support Document is being written to address this increasing problem of excessive or "over-"specification of splice losses. Expected to be published in May 2004, **TSD-2000-4-1-1** will establish, in a commercially neutral manner, the most appropriate way in which to specify and verify the performance of optical fibre fusion splices; it will also define reasonable and commercially acceptable limits for the splices under specific conditions.

The New UK Installation Standard: BS 6701:2004

Entitled "**Telecommunications equipment and telecommunications cabling - Specification for installation, operation and maintenance**", BS6701:2004 has been prepared to reflect the publication of the BS EN 50174 series of installation standards and the withdrawal of BS 7718. The new BS 6701 is a BS specification - and not a simply a Code of Practice - making it a tool for determining conformance within contract law. Moreover it is referenced from the 16th Edition Wiring Regs making it, in essence, mandatory for every installation.

In effect, BS 6701: 2004 will become a one-stop shop for specifiers and installers wishing to simplify their quality assurance methods. It extends the requirements of the BS EN 50174 series of installation standards to all types of cabling, the equipment connected by the cabling and most importantly the operation and maintenance of both.

"**Don't be fooled into thinking that telecommunications is voice services – it is everything that we use cabling for**" said Mike Gilmore, Standards Director of the FIA and Chairman of the BSI group that has produced the new BS 6701. "**This is the most important installation standard to be produced since the original BS 7718 in 1991**". It is likely to have a major impact on the FIA Approved Installer Scheme.

The Draft for Public Comment of BS 6701 has been freely available to FIA members via the Standards Forum since late December and a number of members have provided comments into the FIA Technical Director that will be addressed in the published standard.

FIA Seminars - Dates for your Diary

The FIA will be holding four one-day seminars this year. Two will be held in the London serving the South-East; the other two will serve the North, being held in the Manchester area. The dates are:
London: 25th May and 21st September
Manchester: 27th May and 23rd September.

The topics on each day are still being addressed and we will advise all our members as soon as the information is finalised.

Stolen Equipment – can we help?

Regrettably, equipment theft is on the increase once again. LSPM, splicing and OTDR equipment has always been attractive to "savvy" thieves. Even more frustrating is the theft of such equipment by the opportunist thief who has no idea what they have stolen but will happily trade their ill-gotten gains for enough cash for their next fix. It has even been known for equipment worth many thousands of pounds to be "trashed" when it is realised that its value to non-experts is lower than a car stereo. The FIA cannot do very much about the latter situation but we can provide some more general assistance.

If you have any equipment stolen please contact the FIA Secretariat listing the equipment types and serial numbers along with any distinguishing features. We will immediately circulate the information to members (sparing your blushes by omitting your company details) and place it on the FIA web-site under a special "Stolen Kit" banner.

If you can think of any other measures we can take to help you please do not hesitate to submit them.

FIA Council Members – Arrivals and Departures

The FIA Annual General Meeting took place on 4th December 2003 (see below). The FIA Council takes this opportunity to express its thanks to **Dave Carswell** of **Black Box Networks (North-West) Limited** and **Adrian Buckingham** of **IBS Limited** for their time and work on the Council in 2003. Both members stood down from the Council due to work commitments within their respective companies.

In their place we welcome three new Council members: in alphabetical order, Lee Funnell, Peter Lythgoe and Ken Williams. They have provided their personal statements below. This year there were more nominees for Council positions than there were available positions. In such situations someone has to lose out and the FIA Council would like to record its appreciation of **Neil Townsend** of **Fibre Optic Communications (FOC) Ltd** for standing for election - we hope that he will not be deflected and will stand again next year.

At the FIA Council Meeting which followed the AGM, responsibilities were allocated to the new Council members and some changes were made to existing roles. In particular, Peter Thompsett accepted Council responsibility for the commercial activities of the FIA in 2004 (in addition to his job as Vice-Chairman) although day-to-day tasks have been allocated to Andrew Watson.

Lee Funnell, Directors Portfolio: QUALIFICATIONS

During my time at KRONE (UK) I have become increasingly concerned over the standard of installation practices that are performed by installers in both the copper and fibre industry. Much work has been done over the last three years to improve the education of both the installer and customers alike. Fibre is continuing to increase its market share and is now more commonly used in local area networks and I am keen to support the FIA and its members presently and into the future with better solid technical advice and support for all users of the industry.

My enthusiastic links with industry from all sectors places me in a great position to support the FIA and all of its activities in a positive and enjoyable way.

Peter Lythgoe, Directors Portfolio: INSTALLATION (joint responsibility with John Cupitt of Dwellight Limited)

I am passionate about standards and good practice and if appointed to the committee will direct my energy into assisting to raise the awareness with clients (end users) and industry opinion formers of the need for such in the implementation of fibre networks. The boom years are over and now is an opportunity to reverse the dilution of skill and knowledge that the boom brought. An opportunity for education into the need for fibre appreciation at all levels from clients and consultants to operatives in the field, extolling the benefits of replacing 'buzz words' with real knowledge.

August of this year saw me celebrate 40 years in the infrastructure industry, I say celebrate as I've thoroughly enjoyed my working life, 30 years as a planner and planning manager with BT with an involvement with fibre since 1988. Since 1995 I have been Managing Director of Lythgoes Ltd, which is a communication consultancy specialising in infrastructure but through popular demand of our clients such as ntl and Vodafone now offer turnkeys solutions.

Ken Williams, Directors Portfolio: PASSIVE COMPONENTS

I have been involved with structured cabling and more often than not fibre, since 1987 when I serviced and repaired fibre optic LANs.

From about 1990, I moved from fixing the equipment to an operational role looking after large cabling installations. Thereafter, I have occupied various operational roles within the structured cabling market place up until my appointment with ITT where I made the move across into product management.

I believe I can bring to the FIA a broad, objective view on the various developments that have come about, and continue to occur, within the fibre world as it applies to structured cabling.

FIA AGM Information

The Minutes of the FIA Annual General Meeting have been circulated to members. If you don't have access to them but want to check on the reports and decisions made go to **www.fibreoptic.org.uk/pdf/agmdec03.pdf**. The audited accounts for 2002-2003 can be found at **www.fibreoptic.org.uk/pdf/aa0203.pdf**.

Roy Atterbury Steps Aside

Roy Atterbury has been involved with the FIA since its birth more than ten years ago. He has, more recently, confined his activities to obtaining input for, and drafting, the FIA Newsletter.

Changes to the format of the Newsletter mean that he will not continue in this role. A full and proper tribute to Roy will be included in the next FIA Newsletter - in the meantime everyone in the FIA would like to say thank you for all your efforts over the years.

Members should take note that, with immediate effect, articles, product information, news items etc. are always welcome and should be sent via e-mail (jpg illustrations) to Jane Morrison via **jane@fiasec.demon.co.uk**

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Make sure there's an *able* in your c*able*…

City & Guilds have developed a new qualification to help installation technicians update their skills and prove their abilities.

The Certificate in Communications Cabling (scheme no. 3666) is a level 2 qualification and is ideal if you're looking for an introduction to the specialist skills needed for the installation of fibre optic and copper communication links. It's FIA endorsed and has been developed in consultation with sector skills councils and industry representatives. To achieve the full Certificate you'll need to complete the core unit that covers the basic principles of communications cabling, plus one other optional unit chosen from the following three topics: *Fibre Optic Cabling in an Internal Environment*, *Fibre Optic Cabling in an External Environment* or *Copper Cabling in an Internal Environment*.Assessment is through a combination of both multiple choice tests *and* practical assignments, so you can be confident of learning not only the theoretical knowledge of the field but of gaining important hands on skills as well.

For more information visit **www.city-and-guilds.co.uk** or phone 0207 294 2800.

Are you an FIA member? Are you a Training Provider?

Please ensure that you update your details that are held on the FIA Web Site as regularly as possible.

It is a valuable resource on the site that is accessed many times each day. Both Approved and Non-Approved Training Providers are featured.

A new FIA Approved Training Provider

Total Communications Training Limited, Harlow, have been awarded FIA Approved Training Provider status.

Total Communications Training is the UK's leading training provider with specialisation in the field of the provision of training courses in networks, structured and fibre optic cabling systems. They are a fully approved 3466 City and Guilds training provider and await accreditation to deliver the new 3666 certificate. Specialities include providing best-fit solutions for a broad range of subject areas. The portfolio of courses offered is unlimited, covering everything from "how to install a Category 6 structured cabling system" through to "advanced network configuration".

Total Communications Training operates from three fixed training sites in London, Birmingham and Manchester and can deliver training as required "on–site" directly to customers.

FIA Members e-Guide

The well-established FIA Guide to Members Products and Services is due for an electronic make-over. From Q2, 2004 onwards the Guide will be available as an electronic document only. This allows more rapid updates to be produced and allows significantly more editorial content to be included together with additional advertising space at lower cost to members.

Jane Morrison, FIA Secretary, will be in contact with all members in due course to determine your advertising needs.

OM3 delivers 10Gb Ethernet over 600 metres

ITT Industries, Network Systems and Services, a world leader in high-density fibre solutions for enterprise backbones, storage area networks and campus environments, have announced that recent independent performance tests have proven that 10Gb Ethernet can be supported over drive distances in excess of 600 metres utilising their standard OM3 fibre cable product.

Using commercially available test equipment, Nitro Associates Ltd an independent fibre consulting company completed 10Gb Ethernet testing using ITT Industries OM3 multimode fibre. The primary aim of the testing was to see how many optical interconnects could be incorporated within a maximum drive distance channel while still operating error free at 10Gb/s data transfer rates.

"The whole idea behind the testing was to independently underwrite and confirm the performance of ITT Industries, NS&S's standard OM3 solution, as it would be deployed in a customer installation. All components used were sourced straight from our stock inventory," said Ken Williams, Product Marketing Manager, Fibre Systems. "We wanted the testing to reflect a real world situation of fusion spliced and connectorised components and also avoid an artificial test scenario where optimised product is selected."

Point to point (2 connections) test results showed a drive distance in excess of 625 metres being achieved. Up to five additional connections were then introduced and 10Gb/s data transfer rate was still achieved with 0% loss of packets.

"The design options that are opened up by using ITT Industries' OM3 fibre that can drive the very latest high speed protocol twice the specified distance and accommodate multiple interconnects are excellent both for a campus where distance is an issue and in data centres where design flexibility and diverse routing is required," added Alan Richardson, European Sales Director.

A detailed white paper providing further information on the testing is available on request by contacting Ken Williams – **ken.williams@ittnss.com**

FASE II on board HMS Ark Royal

The aircraft carrier HMS Ark Royal has become the first Royal Navy ship to carry the TRITEC FASE II as part of its network maintenance equipment.

TRITEC already has an excellent reputation with the Ministry of Defence for providing equipment for installing and maintaining optical fibre links and networks worldwide. The compact and robust design of the FASE II has influenced both the RAF and Army's decision to select this piece of equipment.

Technology in the Royal Navy has advanced considerably, and all of the internal Communications and Information Systems (CIS) LANs are moving over to fibre. In the past the Navy commissioned all fibre work to external contractors, which could only be carried out when the ship was in re-fit.

It has now become essential that the Royal Navy has the capability to maintain these systems at sea.

An increasing number of Royal Navy technicians are being trained for fibre installation, and this trend has led to the requirement for a fusion splicer to be kept on board.

Jonathan Hunt, sales & marketing manager of TRITEC said, "An on board fusion splicer for maintenance purposes may not be used very often. It is essential, therefore, that the operator can quickly respond to a fault in the network and repair the break easily, without having to consult the splicer user manual. We are delighted that, once again, its ease of use was the key reason why the FASE II was chosen for this application."

With the likelihood of ships spending more time away from port, and fibre technology advancing throughout the Royal Navy, it is expected that more vessels will be equipped with TRITEC fusion splicers in future.

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OTC becomes NetTest European Service Centre

Optical Test and Calibration Ltd (OTC) have serviced, repaired and calibrated OTDRs, power meters, light sources and many other types of test equipment ever since their UKAS-accredited laboratories opened back in 1989. NetTest have established a strong position as test equipment suppliers in this market and it was natural that OTC's service capabilities would make an ideal support base for the NetTest range.

OTC was appointed as a UK Service Centre for the NetTest Photonics/Photonetics range of tunable lasers in June 2002. This has now been expanded and in August 2003 NetTest officially appointed OTC as a European Service Centre for their fibre optic products – including NetTest family brands such as Laser Precision. In conjunction with another recently appointed service centre, CTDI Nethouse in Germany, NetTest has ensured that the rapid service demanded by customers in Europe, Middle East and Africa will continue to be achieved. Engineers from OTC have visited NetTest in Utica, USA for extensive training in support of the product range.

OTC Managing Director Mike Harris said "I am very pleased to be able to extend our proven policy of offering Centre of Excellence service to another major test equipment house – NetTest – who have a large existing Customer base in Europe and realistic plans to expand significantly. This agreement will enable OTC to improve our service to our Customers still further, and it gives us yet another recognition of professionalism to set alongside our extensive UKAS accredited schedule of measurements and similar service agreements which corporations such as ILX Lightwave and Agilent Technologies' Wirescope Operations."

The portfolio of NetTest instruments within the service agreement include the CMA4000 and CMA8800 series of test platforms along with the GN, OVS & TFB range of handheld products and NetTest and Photonetics tuneable sources. Both warranty and out-of-warranty service is offered. Support will also be offered on the older Laser Precision products.

For further information call NetTest Service on +44(0)1274 468830, or mailto: **nettest-service@otc.co.uk**