An international forum for the expression of ideas and opinions pertaining to the submarine telecoms industry
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editor’s Exordium</td>
<td>3</td>
</tr>
<tr>
<td>SubOptic Survey</td>
<td>4</td>
</tr>
<tr>
<td>Emails to the Editor</td>
<td>5</td>
</tr>
<tr>
<td>NewsNow</td>
<td>6</td>
</tr>
<tr>
<td>Maintenance News</td>
<td>10</td>
</tr>
<tr>
<td>A Simple View</td>
<td>13</td>
</tr>
<tr>
<td>A Troubled Chapter</td>
<td>15</td>
</tr>
<tr>
<td>Autonomous Submarines</td>
<td>20</td>
</tr>
<tr>
<td>Telecom experts display market savvy</td>
<td>24</td>
</tr>
<tr>
<td>Breaking with Convention</td>
<td>28</td>
</tr>
<tr>
<td>Dublin is Attached to Boston</td>
<td>32</td>
</tr>
<tr>
<td>Hibernia Atlantic</td>
<td></td>
</tr>
<tr>
<td>Alasdair Wilkie</td>
<td></td>
</tr>
<tr>
<td>Tracking the Cableships</td>
<td>34</td>
</tr>
<tr>
<td>Letter to a Friend</td>
<td>38</td>
</tr>
<tr>
<td>Jean Devos</td>
<td></td>
</tr>
<tr>
<td>Upcoming Conferences</td>
<td>39</td>
</tr>
</tbody>
</table>

## Advertisers

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Eastern</td>
<td>5</td>
</tr>
<tr>
<td>C&amp;W GOES</td>
<td>6,7,8,9,12</td>
</tr>
<tr>
<td>GMSL</td>
<td>10,11</td>
</tr>
<tr>
<td>WFN Strategies</td>
<td>12</td>
</tr>
<tr>
<td>CTC</td>
<td>19</td>
</tr>
<tr>
<td>BJ Marketing Communications</td>
<td>22</td>
</tr>
<tr>
<td>Fugro</td>
<td>23</td>
</tr>
<tr>
<td>Thales Geosolutions</td>
<td>26</td>
</tr>
<tr>
<td>Nexans</td>
<td>27</td>
</tr>
<tr>
<td>Caldwell Marine</td>
<td>30</td>
</tr>
<tr>
<td>OFS</td>
<td>31</td>
</tr>
<tr>
<td>Lloyds Register</td>
<td>33</td>
</tr>
<tr>
<td>STF Marketplace</td>
<td>36</td>
</tr>
<tr>
<td>Parkburn PHS</td>
<td>37</td>
</tr>
</tbody>
</table>
Welcome to the 9th issue of SubTel Forum!

In a recent sailing trip on the Chesapeake Bay, I had the opportunity to clear my head, take in the sights, and ponder an ever-increasingly interesting future. On this particular exploit I had the opportunity to sail among other places, to Tangier Island in the middle of the bay, which was discovered by John Smith of Pocahontas fame around 1610, and settled some thirty years later by the extended Crocket family.

And a thought came to me - about the longevity of our industry - about hundreds of individuals that have indeed served the industry through the years - about the corporate pillars of our community that despite name changes or logo redraws, have withstood the test of time - and on that old-world island in the middle of the bay I found solace and new insight.

This issue brings what we hope to be new insight to you our readers, and we have included again a one-page industry survey cosponsored by SubOptic 2004, which we hope more will take the time to complete and forward, the results of which will be shared in an upcoming issue of STF.

Wishing you fair winds.

Wayne.
SubOptic 2004 and Submarine Telecoms Forum magazine are co-sponsoring the first annual Submarine Telecoms Industry Survey, the results of which will be shared online and published in an upcoming issue.

One lucky responder will receive a free copy of the 2002 edition of Undersea Fiber Communication Systems, which was edited by Jose Chesnoy, Head of System Design & Technology, Alcatel Optics Group, France.

Please take a moment to respond by printing this page and mailing or faxing to:

WFN Strategies
19471 Youngs Cliff Road, Suite 100
Potomac Falls, Virginia 20165 USA
Fax [1] 703 444 3047

1. Which best describes you?
   - Academic
   - Engineer/Project Management
   - Management
   - Marketing
   - Other

2. What best describes your business?
   - Cable owner
   - System Integrator
   - Cable Installer/Maintainer
   - Marine Surveyor
   - Other

3. Which Keynote Speaker would attract you to attend SubOptic 2004?

4. What would you find the most stimulating and relevant topic for a SubOptic Roundtable?

5. Are you planning to attend SubOptic 2004?
   - Yes
   - No

6. Are business conditions improving or getting worse?
   - Improving
   - Worse

7. Are you optimistic or pessimistic about the future?
   - Optimistic
   - Other
   - Pessimistic

8. Does your current business performance indicate that we are still in a recession, or has your business not been affected?

9. How have client requirements changed over the last three years?
   -

10. How has the type of project you handle changed over the last three years?
    -

11. How would you rate the content of Submarine Telecoms Forum magazine?
    - Excellent
    - Unsatisfactory
    - Good
    - Poor
    - Satisfactory

12. How would you rate the content of News-Now and the STF website?
    - Excellent
    - Unsatisfactory
    - Good
    - Poor
    - Satisfactory

13. Would you like to see any changes in STF or NewsNow, or other website information services?
    -

14. In your opinion, what does the industry most need?
    -

Name: ____________________________
Company: _________________________
Address: __________________________
Cty: ______________________________
State/Province ____________________
Country: _________________________
Telephone: _______________________
Email: ___________________________
Read your latest edition, packed with great stuff as usual.

Les Valentine, Nexans

Very good website - most informative.

Sonya Comstock, KDDI-SCS America, Inc.

Thanks - and keep up the good work

Peter Phibbs

Congratulations on your paper I enjoy it immensely; obviously a daily paper would be great but hey is there enough news!

Mike Wiseman, Esq.
A brief synopsis of current news items from NewsNow, the weekly news feed available on the Submarine Telecoms Forum website.

**Alaska Cable Contract Awarded**

General Communication, Inc. (GCI) officials have announced the building of a $50 million fiber optic cable connecting Seward, Alaska and Warrenton, Oregon.


**Asia Netcom Unveils IP VPN Solutions**

Asia Netcom has announced key enhancements to its IP VPN (Internet Protocol Virtual Private Network) solution for enterprise customers. For the first time, businesses in Asia Pacific will be offered five classes of service (CoS) combined with the option for usage-based pricing.


**Broadwing Sale Closes**

Corvis Corporation and Cequel III, announced that their joint venture, C III Communications, LLC, has closed on the purchase of Broadwing Communications, subject to regulatory requirements.


**BT Adds MPLS Nodes in US**

BT announced its strategy to expand its commitment to US corporations. An extended IP infrastructure, owned by BT, will support a more comprehensive suite of ICT and telecoms services, enabling US multi-site corporations to be more competitive internationally.


**C2C Woes Continue**

Singapore Telecommunications Ltd. (SingTel) has cancelled a loan commitment to unit C2C Pte Ltd., which operates a US$2.0 billion, 17,000-km cable network linking seven countries across Asia.


**Cable to Tasmania Completed**

The 240-kilometer installation of submarine optical fiber cable across Bass Strait commenced from Godfreys Beach at Stanley, Tasmania on 4 May 2003 and was completed at Inverloch, Victoria, on 23 May 2003.

C&W to Exit US
Cable & Wireless (C&W) has announced a major refocusing of its group operations.

Carrier Doubles Capacity at NAP
Terremark Worldwide, Inc. has announced that EPIK Communications, Inc., has doubled its presence in the NAP of the Americas.

FLAG Expands in Europe
FLAG announced that it will enhance its European network through an agreement with Verizon.

FLAG Telecom Files Reports
FLAG Telecom has announced that it has filed all reports required by Section 12 of the Securities Exchange Act of 1934 subsequent to the company’s emergence from protection under Chapter 11 October 9, 2002.

Global Crossing/STT Deal Gets Time
The U.S. Bankruptcy Court has ruled in favor of key Global Crossing motions to amend its purchase agreement with ST Telemedia (STT), and extend its exclusivity.

Global Crossing Monthly Report Released
Global Crossing has filed a Monthly Operating Report (MOR) with the U.S. Bankruptcy Court, as required by its Chapter 11 reorganization. Results reported in the May 2003 MOR are unaudited.

Gulf of Mexico System Signs Customer
Gulf Fiber Corporation has announced that BP has contracted with the company for fiber optic communications services to several of its new deepwater developments in the Gulf of Mexico.
www.subtelforum.com/NewsNow/1_june_2003.htm

IT International Telecom Wins Contract
IT International Telecom announced that it has been awarded a contract to supply a non-repeatered system between the Gaspé and the Îles de la Madeleine in Quebec, Canada.
Indian Carrier Announces Services on i2i
Bharti announced the launch of international data services using the Network i2i submarine cable.

International Telecom Group Unit Sold
The office of the International Telecom Group in Toms River, New Jersey, has been sold. The new company is named Caldwell Marine International.

Level 3 Raises $325 Million
Level 3 Communications, Inc. has announced that it has priced the offering of $325 million aggregate principal amount of its 2.875% Convertible Senior Notes due 2010 in an underwritten public offering.

New Bid for Global Crossing
XO Communications, Inc. has announced an offer to acquire all assets of Global Crossing Ltd. and Global Crossing Holdings Ltd for over $700 million, increasing proceeds available to Global Crossing creditors by over $100 million versus the current bid by Singapore Technologies Telemedia Pte Ltd.

New Scandinavian PoPs for T-Systems
Deutsche Telekom’s T-Systems International Carrier Sales & Solutions (ICSS) has announced a new Local Business Unit for ICSS in Denmark as well as Points of Presence (PoPs) in Copenhagen and Oslo. The new PoPs ensure reliable and high-quality transmission of voice and data, via T-Systems’ worldwide backbone, the Telekom Global Net.
www.subtelforum.com/NewsNow/18_may_2003.htm

Parkburn Consolidates Brands
Parkburn Precision Handling Systems Limited (P-PHS) is a new name, but a very experienced player which now encompasses the traditional 30 year
class heritage of the Dowty brand naval and commercial handling systems as well as the recently acquired company IPR and service rights of Marine Projects Developments Limited.


Sale of Pacific Crossing Ltd. Approved

Pivotal Private Equity has announced that the U.S. Bankruptcy Court has approved the sale of Pacific Crossing Ltd. and its subsidiaries (PCL) to Pivotal Telecom LLC, for $63 million. Judge Peter J. Walsh has signed the sale order that approves Pivotal Telecom as the buyer.


Teleglobe Acquisition Completed

The purchase of the core voice, data, Internet and mobile roaming businesses of Teleglobe, Inc. by Teleglobe International Holdings Ltd. has been completed.


VSNL Launches Units in the US, Sri Lanka

Videsh Sanchar Nigam Limited (VSNL) has announced the formation of VSNL America Inc., a wholly owned subsidiary in the United States.


XO Communications Ups Bid for Global Crossing

On May 30 billionaire investor Carl Icahn, who controls more than 80 percent of XO Communications Inc., a regional phone company, offered more than $700 million for bankrupt long-distance carrier Global Crossing, or $250 million in cash and the rest in debt, stock and warrants.


WFN Strategies Establishes ASEAN Strategic Partnership

WFN Strategies of the USA and Thag Sdn. Bhd. of Malaysia recently announced the establishment of a strategic partnership to promote areas of mutual interest in Malaysia and North America.

CTC Marine Achieves ISO 9001:2000 Accreditation

As a result of their drive to meet and exceed the needs of customers, CTC Marine Projects has successfully achieved ISO 9001:2000 accreditation.


Cable Maintenance Contract for Hibernia Awarded

The cable maintenance contract for the Hibernia Atlantic cable system, which stretches from Dublin to Canada, to Liverpool via Boston and back to Dublin again, has been awarded to Global Marine Systems Limited.


Carriers Upgrade Malaysia-Japan Backbone

Internet Initiative Japan (IIJ) has announced that its 26.7% affiliate Asia Internet Holding Co., Ltd. (AIH) has reached an agreement with TMNet Sdn Bhd to upgrade TMNet’s A-Bone connectivity between Malaysia and Japan to 300 Mbps from 45 Mbps.

www.subtelforum.com/NewsNow/18_may_2003.htm

Cables Damaged by Earthquake

At least three cable ships are en route to Algeria to repair submarine cables damaged by a devastating earthquake on Wednesday.


Deep Water Cable Repair Record for Alcatel

Alcatel has successfully completed a fiber optic cable repair in depths close to 9400 meters — breaking the world record for deep-sea cable repair operations.


FT, TM to Share Capacity Some Asian Capacity

France Telecom and Telekom Malaysia have an agreement on sharing some of their Asian capacity.

**Hibernia Atlantic Update**

Hibernia Atlantic has opened its dedicated superhighway from Ireland to New York and Boston – the only direct transatlantic submarine cable network linking Ireland to the United States.


**FiberNet Provides Wavelengths for FLAG Telecom**

FiberNet Telecom Group, Inc. has signed a 15-year agreement with FLAG Telecom Network USA Limited, for transport services within the New York City metropolitan area.

www.subtelforum.com/NewsNow/18_may_2003.htm

**Global Marine, BP Sign Agreement**

BP Exploration Company Ltd (BP) has signed a submarine cable maintenance agreement with Global Marine.


**Interoute Restores OTE Traffic Lost to Earthquake**

As reported earlier, a recent Algerian earthquake damaged FLAG and SEA-ME-WE-3.


**New Services Tested over MedNautilus Network**

PacketLight Networks, announced that it has successfully completed a trial to transport multiple services — TDM and Gigabit Ethernet over 10Gbps/STM-64 links — on MedNautilus terrestrial fiber network.


**Network Renews Contract**

TeliaSonera International Carrier (TS IC) has announced that DANTE renewed its contract to buy IP transit for the pan-European gigabit research network GEANT.

www.subtelforum.com/NewsNow/1_june_2003.htm

**SEA-ME-WE-3 Repairs Completed**

The SEA-ME-WE-3 cable, damaged last month in the Algerian earthquake, has been repaired.

WFN Strategies assists clients involved in a variety of activities from business development, marketing & sales planning/implementation to installation support, submarine cable provision, system design, system or product procurement, system engineering and investment services.

One of our key strengths is the ability to help you re-evaluate your products or services for alternate markets and future market positioning.

Our corporate mission is simple: To assist customers by increasing their profitability, corporate and stockholder value.

WFN Strategies, LLC
19471 Youngs Cliff Rd
Suite 100
Potomac Falls,
Virginia 20165 USA

Tel: +1 (703) 444-2527
Fax: +1 (703) 444-3047
Sales@wfnstrategies.com
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To add my thoughts to others, these last few years in the submarine system market have been pretty bad. Actually, it has been damn ugly. Many new entrants have disappeared, which is old news, as well as some old-line companies who have been forced into financial positions one would never have imagined. Unfortunately, this is still an ongoing event.

So, what does it all mean?

Business is bad and hundreds of thousands of people are out of work worldwide. Not good. Or is there some good, albeit limited, after all?

Each of us has our own opinion, and my opinion is straightforward. The telecoms industry has made the same overbuild mistakes as the oil companies in the 1980’s, as well as steel, automotive, defense and many other industries. No one ever seems to plan for a bust. But sure enough, a downturn always occurs. This is the force of nature, market nature, and as an old American television commercial said, “You don’t fool with Mother Nature.”

We did, and some gained financially in the short term, while the consumer gained from new technologies and better pricing for services.

I have long felt that the long haul market was slightly overrated. Building to span and connect the continents so that Internet, data and voice may be exchanged, to where redundancy already existed, and to where one is not sure why it needed to be there in the first place, seemed to be the goal. What a goal!

Frankly, I have never heard an analyst say, “We got it wrong”. Maybe they have, but I wasn’t there to hear it. The objective being achieved, the consumer benefited from lower prices while increasing instability. Like Lady Justice, the consumer and supplier were blind.

Not all efforts end in failure, or Chapter 11. Apollo, Southern Cross, Australia Japan, Japan-US, and many other systems have survived. Why? Simply put, these systems were backed and utilized by major carriers and operators who already had a customer base. No doubt each of these systems have had to face the impact of the downturn, but they are still active and very much alive. What I find interesting is that they are able to maintain their respective operations without having the benefit of court approved restructure, which allows debt to be made just about non-existent. Looks like these systems, as an example, have some pretty good management and teamwork. To me, this little fact is very impressive.

The telephone industry is pretty uncomplicated to describe, albeit complex to run. A carrier/operator collects revenue all week...
and the puts money in the bank on Friday. Then on Monday, it begins to look at spending. A telephone or communications system is like a living creature - it takes food to fuel its activity. That fuel is consumer need and revenue. To meet need, an operator must repair, replace, keep up with technology changes, and expand as needed. That is and will be the nature of its existence. That is where revenue and profit are needed. When cost exceeds the selling price even after all cost factors have been brutalized, then low prices are not beneficial.

This is also the nature of the operator problem. Over the last several years, we the consumer, have benefited from lower prices. Without the new entrants, it is hard to believe that the old-line operators would have lowered their prices for the good of the consumer. So, once again, competition showed itself to be good to a point.

The point where competition is not so good is when prices become so low that companies cannot afford to stay in business. When companies go out of business it is mostly due to over extended loans and questionable management decisions and a whole host of simple problems from political to practical. However, based on some recent CEO packages failure pays well! No company, no investor, no economy, no country ever gains where there is high unemployment. Everyone loses. In other words, prices may need to go back up, as too much capability and talent have been lost which reflects on stability.

The word “rationalization” has been used a lot in our industry. My dictionary poses two interesting definitions:

1. (Psychiatry) a defense mechanism by which your true motivation is concealed by explaining your actions and feelings in a way that is not threatening.

2. The cognitive process of making something seem consistent with or based on reason.

While neither meaning seems appropriate, I think we are all trying to create a process of applying reason, experience and action in a thoughtful manner so it may create stability.

The phrase, “What makes good business sense” has also been used, which, it seems, is usually said when no one can come up with a good idea.

The long haul market has been the dominant feature of our market. As such, during its reign of dominance, it forced the short haul market to be gravely overlooked. When this occurred, it started to turn the blood off from the brain. Only by local operator and business need can you expand connectivity.

The market and ensuing opportunities are coming back, and this time major projects are not the leader. Short haul systems for telecom, science and offshore petrol-chemical communication needs are advancing. It seems that need is being regenerated and although this will not put an abundance of people back to work, it can be a humble start.

Hopefully, if there is a next time of substantial market growth, we will be better at our decisions in making it a stable and sustained growth. Hopefully.

Jack Runfola has spent over 25 years in senior management positions primarily in business development, submarine fiber optic cable manufacturing and project management in telecom, offshore petrochemical and defense industries. Among his accomplishments, he was involved in building the world’s largest privately owned optical festoon system. He recently became associated with WFN Strategies as Senior Consultant.
A TROUBLED CHAPTER

Chapter 11 Leaves its Mark on the Submarine Telecom Industry  by Daniel J Carragher

The depressed state of the undersea cable industry has lead to multiple filings under the U.S. bankruptcy laws by companies caught trying to build out or pay for their networks at the time that pricing and demand for their systems plummeted. The favorable U.S. reorganization laws have been used in conjunction with multinational insolvency proceedings, as Chapter 11 gives companies a unique opportunity to retain control of their business and attempt to reorganize. Chapter 11 also allows the companies to eliminate mountains of debt and emerge unencumbered by the crushing debt that brought them into bankruptcy. The surviving owners, or distressed asset buyers, then have a competitive advantage in the marketplace.

The public nature of the proceedings allows for the review of detailed financial information about the companies, the deals they cut with their creditors and the infighting between and among competitors, owners and creditors. This article will provide some of the details of three such proceedings, FLAG Telecom, Asia Global Crossing and Pacific Crossing, all of which began in 2002 and all of which have either been confirmed or resulted in sales of substantially all assets.

FLAG Telecom

FLAG Telecom was a Bermuda company that acted as the holding company for about 50 corporate entities operating a global telecommunications network serving the international wholesale broadband market. Its owned undersea cable network included FLAG Europe-Asia (FEA) Network, FLAG Atlantic-1 (FA-1) Network and FLAG North Asian Loop (FNAL) Network. In addition, FLAG had
terrestrial networks and had acquired terrestrial backbone capacity across the U.S. and trans-Pacific undersea capacity.

FLAG Telecom, the holding company, raised over $633 million in its IPO in February 2000, and in the ensuing months raised over $576 million in additional funds from the sale of bonds in the United States and Europe. FLAG Limited then issued another $430 million of bonds. In addition, a banking syndicate provided a $575 million construction line to FLAG Atlantic, of which $286 million was drawn before the bank group terminated its commitments in 2001. Even higher credit lines were extended to the FLAG companies, but hard times hit before FLAG could use them.

On April 21, 2002, the FLAG companies filed U.S. Chapter 11 proceeding in the Southern District of New York. FLAG simultaneously filed the necessary documents pursuant to Section 161 of the Companies Act 1981 of Bermuda in order to commence proceedings in the Supreme Court of Bermuda for the appointment of Joint Provisional Liquidators. At the time of the bankruptcy filing, FLAG had consolidated assets of $3.3 billion and consolidated debts of $2.6 billion. The filing was triggered by the declaration of a default the day before on the FLAG Atlantic bank credit line and the seizure of funds in certain European bank accounts. FLAG immediately moved $210 million out of the other banks in the FLAG Atlantic syndicate.
to FLAG Pacific accounts and filed bankruptcy the next day to prevent any more seizures. Once the Bankruptcy Code’s automatic stay was in place, the funds were returned.

FLAG’s goal in the Chapter 11 case was to keep the company intact, restructure its balance sheet and emerge from Chapter 11 as quickly as possible to avoid interference with customer relationships. It achieved that result when it obtained confirmation of its reorganization plan on October 9, 2002 less than six months after the companies filed.

Under FLAG’s complex debt restructuring plan, ownership of the holding company was transferred to various creditor groups. A substantial portion of the companies’ cash reserves were used to partially satisfy the holding company bond debt.

The creditor groups received all of the stock of the reorganized company, and preexisting stock holdings were canceled. The estimated value of the stockholders equity distributed to creditors upon emergence was $272 million.

The equity was distributed to FLAG Limited bondholders (62.8%), the FLAG Atlantic banks (26.25%), the holding company bondholders (5%), and individual creditors (Alcatel (4.38%) and CIENA (1.58%)). The reorganized company had only $71 million in financial debt upon emergence (some of which can be prepaid at a discount) as opposed to the $1.23 billion in existence at the time of filing.

The effect of the reorganization was the creation of a solvent company with a healthy balance sheet. The company has recently filed its overdue Form 10-K and 10-Q reports with the SEC and hopes to have its stock re-listed on the NASDAQ later in the year.

Asia Global Crossing
Asia Global Crossing did not reorganize in Chapter 11. Instead, it filed for relief in November 2002 as the last step in its plan to sell off its assets.

Asia Global Crossing was formed as a joint venture company between Global Crossing, Softbank Corp. and Microsoft Corporation in November 1999. The respective ownership shares were: Global Crossing (58.9%), Softbank Corp. (14.6%) and Microsoft Corporation (14.7%), with the balance of the stock held by the public. Its stock was traded on the New York Stock Exchange but was delisted on February 28, 2002, a month after Global Crossing filed for Chapter 11.

Asia Global Crossing owned the East Asia Crossing (EAC) subsea cable system and, through Pacific Crossing Ltd., an 84.5% controlling interest in the Pacific Crossing (PC-1) system. Its networks connected Japan, Hong Kong, Taiwan, South Korea, the Philippines and Singapore to each other and to the United States.

To finance construction of EAC, Asia Global Crossing placed $408 million of Senior Notes in October 2000. When Global Crossing withdrew its $400 million in standby credit support to Asia Global Crossing in December 2001, Asia Global Crossing went into restructuring mode. In February 2002, it engaged Lazard Frères to restructure the obligations under the Senior Notes and to pursue a sale of the company. Lazard solicited buyers for the company and pursued some 30 strategic and financial buyers. The sale process culminated in November 2002 in an offer from Asia Netcom, a Bermuda investment vehicle formed by China Netcom Corporation (Hong Kong) Limited, a member of the China Netcom group, one of two wireline operators in China.

To accomplish the sale to Asia Netcom, Asia Global Crossing and its U.S. operating subsidiary, Asia Global Crossing Development, filed for Chapter 11 protection in the Southern District of New York on November 17, 2002. Concurrently, Asia Global Crossing Limited petitioned the Bermuda Supreme Court for the appointment of provisional liquidators and commenced a winding-up proceeding under Bermudian law.

The sale to Asia Netcom provided $81.2 million in cash to Asia Global Crossing’s creditors.

The buyer agreed to honor prepaid capacity agreements on the EAC network valued between $277 million (at estimated cost to perform) and $1.1 billion (at gross dollar amount of capacity...
purchased by customers). Outstanding construction obligations of $280 million to NEC and KDDI were settled in connection with the sale. A Chapter 7 trustee will handle the distribution of the $81 million sales proceeds, as the creditors and the company could not reach agreement on how to handle the funds. Needless to say, bondholders will receive a fraction of their debts, and the interests of shareholders were completely extinguished.

Pacific Crossing
Pacific Crossing took another route through Chapter 11. Pacific Crossing owned Pacific Crossing-1 (PC-1), one of only two trans-Pacific fiber optic cable systems with available capacity linking Japan and the US. The total cost of the PC-1 project was $1.35 billion, and most of the cost was financed.

Pacific Crossing was owned 84.5% by Asia Global Crossing and 15.5% by Vectant Inc. Pacific Crossing sold capacity to Global Crossing and Asia Global Crossing, which in turn resold it to end users under long term contracts. The PC-1 system was operated and maintained under turnkey contracts with Global Crossing affiliates and their subcontractors, so Pacific Crossing had no employees of its own. Global Crossing, which filed for Chapter 11 protection in January 2002, stopped providing many of the services, and Pacific Crossing transitioned those to Asia Global Crossing and others.

In May 2002, prior to filing Chapter 11, Pacific Crossing engaged investment bankers to sell the PC-1 system. At the request of the bank group, an independent crisis management firm was brought in to run the company. The investment bankers contacted 30 potential strategic buyers and 23 potential financial buyers.

The Pacific Crossing companies filed for Chapter 11 protection on July 19, 2002 in the District of Delaware with no buyer identified. As of the petition date, Pacific Crossing owed at least $716 million to its bank group. The sale process continued during the bankruptcy case, but only four parties, including two who were acting jointly, submitted indications of interest by the September 20, 2002 deadline. Negotiations with buyers continued until early January 2003 at which time a lead bidder was selected, but it then withdrew its offer. Further negotiations transpired until finally, in early May 2003, Pacific Crossing sought permission to sell the PC-1 system to Pivotal Telecom LLC, a Phoenix buyout firm, free and clear of liens, claims and encumbrances, for $63 million. The sale was finally approved on June 3, 2003 and is expected to close by November following regulatory approvals.

Differences and Common Threads
The three cases demonstrate the wide variance in outcomes and uses of the Chapter 11 process.

FLAG initially used Chapter 11 defensively when its banks precipitated a crisis by starting to seize assets.

However, FLAG then accomplished a complete restructuring in the Chapter 11 case and emerged with its assets and businesses intact.

Asia Global Crossing used the process in a more typical fashion in the current environment. It held off its creditors while it shopped the business and then filed Chapter 11 to seek approval of the sale. Rather than having to seek approval for the transaction from public shareholders who were getting no benefit from

Dan Carragher is a partner in the Boston office of the law firm of Day, Berry & Howard LLP. He is a member of the American Bankruptcy Institute and is a fellow of the American College of Investment Counsel. He is Board Certified in Business Bankruptcy by the American Board of Certification and is a graduate of Dartmouth College and Boston University School of Law.

Day Berry & Howard has represented debtors, creditors, equipment lessors, and suppliers in several Chapter 11 cases in the telecom and broadband sector, including Teleglobe, 360 Networks, PSINet and others.
the sale, the company was able to obtain expedited bankruptcy court approval of the sale process and the ultimate sale to the buyer. The buyer of the EAC assets from Asia Global Crossing was a strategic buyer that has now acquired the assets at a favorable price.

Pacific Crossing filed before it had identified a buyer and was racing the clock to see if it could complete a sale before it ran out of cash and had to shut down PC-1.

The sale to a financial buyer is also typical of many Chapter 11 cases in the telecommunications area where low prices have attracted private equity buyers who hope to stabilize or improve the businesses before reselling them to strategic buyers.

These cases, along with many others by carriers and system owners, reflect the extreme decline in value and marketability of subsea cable systems in recent years. The sale of PC-1 for less than five percent of its cost is dramatic evidence of the decline in values.

These cases also illustrate the simultaneous use of U.S. and foreign bankruptcy laws, with the U.S. proceedings taking the dominant role. Chapter 11 generally allows management to remain in control of the company and is the preferred vehicle for restructuring ailing businesses. In a global industry like telecommunications, we are likely to see this pattern repeated in the future.
Offshore marine industries, including both commercial and research disciplines, have received many advances in marine equipment technologies from the world’s navies. The military, making significant strides in all areas of intervention, inspection and surveys, have provided a steady stream of advances to the non-military arena from the earliest days of marine exploration to the present day scene.

Technologies such as Side Scan Sonar, ROV, AUV and Manned Submersibles can all be traced back to naval development roots. Perhaps the most significant contribution in recent years is the Autonomous Submarine. Submarines started their practical development over 100 years ago. In that time they have provided naval organizations with practical and safe means to conduct submerged operations independent of surface support. Utilizing nuclear or diesel engines, submarines have been responsible for cable, pipeline and other submerged structure inspections, hydrographic surveys, marine research, new system testing, in addition to their security and offensive capabilities.

Manned Submersibles represent a diluted form of the autonomous submarine technology. During the 1980s, Manned Submersible use weaned, giving way to emerging ROV technologies. Although the two share similar support ship needs and sea state limitations, ROVs ultimately cost less to operate.

By Jules E. BenBenek PhD

The RS Series Autonomous Inspection and Research Submarine is the first of a line of submarines that is now available outside of the military arena. Used extensively for over 12 years, the 50-foot RS Submarine has proven to be a safe, practical and cost efficient sub-sea platform. Eliminating the need for weather sensitive deployment support ships, the RS Submarine can operate in sea states that would otherwise cause delays in projects utilizing ROV or AUV platforms. Total operating costs are calculated without such support and represent an overall savings approaching 30%, when compared to mid-column working class ROV operations with surface support requirements.

RS Submarine Safety

During the past 10 years ABS and GL have formulated classification rules for engineering, construction and maintenance of Manned Submersibles used in the growing tourist sector. This has created a segment, which over time has proven to be among the safest in the marine vessel industry. To date, over 20 million individuals have boarded tourist submersibles ranging in size from 10 to 60 passengers without incident. The RS Submarines were designed, built and are maintained to these proven and safe industry standards. Due to their classification and compliance to SOLAS standards, many worldwide underwriters economically and competitively insure The RS Submarines.
Practical Applications

The RS Submarines open new doors for the researcher and offshore commercial engineer alike. Operations are no longer restricted to a small area on the sea floor per dive session. Up to 6 passengers can be transported to several dive locations in any given day, spending more quality time engaged in work. Sea State is much less of a factor and price is significantly reduced by the elimination of the costly deployment ship. Tasks and phenomenon can be viewed in real time, where rapid judgment and assessment can be made.

Operations such as pipeline and cable inspections can be performed simultaneously with the installation, allowing for corrections to be advised before problems escalate or perhaps even begins. Engineers can efficiently conduct cable suspension assessment and intervention over large areas. The RS Submarine can provide assistance to ROV, Hard Suit and Commercial Diving operations as well. An engineer, who must otherwise wait for the description of the submerged project’s status, can now inspect as the diver works. The generous energy budget of the RS Submarine allows for a variety of hydraulic tools to be used, as in Working Class ROV applications. Hard Suit operators can be transported from one dive site to another without the need to surface and benefit by having an engineer or group of peers in close proximity to assist in documentation or intervention.

Qualified individuals at the target scene can assess projects that are sensitive to marine archeological, environmental and biological issues. Cable and pipeline lays, to name a few, are often hampered by lengthily environmental concerns, and often are challenged or litigated in court. Expert testimony is more acceptable in such cases when real-life evidence is presented, as opposed to remotely acquired data or third party interpretations. Proof of the existence, or as important, proof of the absence of certain marine life, can be more accurately determined by the professional at the dive location, and the reports and testimony generated by this approach are logically given more weight.

Hydrographic surveys are carried out much in the same manor as in AUV operations, with the exception of human control and decision-making being present at all times. Unlike traditional tow fish operations, the side scan or multi beam system is attached to the hull and operated by skilled technicians onboard the submarine. Data is acquired and processed in real time. The RS Submarine can suspend the hydrographic survey temporarily to visually inspect anomalies, eliminating the need to return with an ROV to accomplish the same task at some future point. The result is a completed survey with anomalies accurately documented. As with other RS operations mentioned, Sea State is much less a concern and delays caused by foul weather reduced, further saving time and money.

The RS Submarine is an ideal platform for naval and security operations. ASW and new system testing can be performed for a fraction of the cost normally allocated to such tasks. The RS Submarine has 8000kg of reserve buoyancy and therefore is capable of carrying a myriad of bolt-on or internal ancillary equipment.

Hydraulics as well as various voltage supplies and computer interface protocols are available for a broad range of applications.
In normal operations, the RS Submarine is deployed with all hands, including technicians, engineers and researchers from the pier, and arrives at the dive site utilizing independent and reliable diesel power. The vessel’s 400 Nautical Mile range can be further increased by at-sea refueling if needed.

The Submarines are fitted with a snorkel Induction System, which is designed to allow the submarines to transit submerged during rough weather condition, while still capitalizing on the diesel power plant’s range. The Snorkel also proves as an effective stealth component for ASW, coastal and harbor security missions.

The RS Submarines are equipped with a full galley, including refrigeration, stove, sink and a microwave. A sleeping compartment, head and en-route entertainment provide both comfort and livability to the crew on long missions.

The RS-1 and RS-2 are fitted with both bow and stern thrusters, allowing the vessels to maneuver in their own diameter. Vertical station keeping thrusters, normally recessed in the sail, are hydraulically deployed when accurate altitude positioning is required.

A large, 1.1-meter hemispherical view-port in the bow allows several individuals to observe the worksite simultaneously, while a single cupola view hatch on the sail provides complimentary viewing in 180 degrees.

Six function hydraulic manipulator arms are available, and provide one of many means to perform intervention at depth. Additional specialized equipment, both hydraulic and electric can be installed at the request of the clients.

Summary
Eliminating the need for costly and weather sensitive deployment ships, the RS Submarine has proven itself to be a cost efficient platform when compared to ROV and AUV operations with deployment requirements. Sea state is less of a concern, allowing for the reduced likelihood of weather related project delays.

The RS Submarine represents the most recent and significant military technology to be made available to the civilian market. The culmination of more than 100 years of development, and 12 years of direct offshore applications, assures the reliability, safety and practicality of this tool.

RS Submarine Operations
Dr. Jules E. BenBenek holds Masters Degrees in Nuclear Physics, Optical Sciences, Communications and Engineering as well as Doctorate degrees in Physics, Human Resources and Communications, at Harvard University and the Metropolitan Collegiate Institute (London) respectively. He was employed 20 years with RCA as Vice President of Research Labs. He served as an Engineering Officer in the US Army War Department Technical Staff and consulted for NASA and other agencies. Dr. Jules BenBenek is currently employed as Director of Applied Technologies with Kokes Marine Technologies, LLC.

Dr. Jules E. BenBenek holds Masters Degrees in Nuclear Physics, Optical Sciences, Communications and Engineering as well as Doctorate degrees in Physics, Human Resources and Communications, at Harvard University and the Metropolitan Collegiate Institute (London) respectively. He was employed 20 years with RCA as Vice President of Research Labs. He served as an Engineering Officer in the US Army War Department Technical Staff and consulted for NASA and other agencies. Dr. Jules BenBenek is currently employed as Director of Applied Technologies with Kokes Marine Technologies, LLC.
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Local telecom experts display market savvy

By Andy Riga
Reprinted from the Montreal Gazette

Jacques Lèvesque, Mike Kennah and John Graham are experts in sinking telecoms assets, literally and figuratively.

The owners of Canada’s only installer of underwater fibre-optic cables sold their Kirkland firm to a US giant at the peak of high-tech market euphoria in 2000, staying on to run things as the industry self-destructed.

In April, with telecom finally showing signs of recovery, the three entrepreneurs bought IT International Telecom Group back from General Dynamics Corp at a discount. Price tags weren’t revealed, but in 2000 anything telecom-related fetched a high premium. The buyback comes when investors are still telecom-phobic. They sold high and bought low.

So far, the wager is paying off. In the six weeks since they took control, they nabbed two contracts worth a total of $3.8 million – one in Nova Scotia, the other in the Bahamas.

“General Dynamics is focusing more on its military side and we saw a bright future for the business, so we decided to buy back our freedom,” said Lèvesque. ITG’s president.

The walls of ITG’s boardroom are covered with maps crisscrossed with coloured links showing marine fibre-optic lines. Much of that mass of spaghetti was created during telecom’s heyday when there was a mad rush to connect the world to handle growing Internet traffic.

ITG was launched using a $250,000 bank line of credit in 1996. The company, which says it has

Entrepreneurs founded fibre-optic company, sold to a US giant at the peak of high tec euphoria, and recently bought it back
been profitable every year since, flourished without outside investors or government aid. Its workforce numbers 21, including 13 in Kirkland, where engineering and sales are centred, six in a 45,000 sq ft Halifax plant and two in a British office.

ITG’s four founders, including Kennah and Graham, were from the marine division of Montreal’s Teleglobe Inc., which by 1996 was leasing rather than building fibre-optic capacity so it could focus on its core business – serving all of Canada’s international telecom needs.

“We saw the industry was going to take off, a golden opportunity to take our experience and walk out the door,” said Kennah, ITG’s chief operating officer. “Internet usage was doubling every three months and eating up capacity.”

They didn’t leave empty-handed: Teleglobe immediately hired the nascent company. Initially, ITG did consulting and maintenance work for Teleglobe and other carriers such as AT&T. They used profits to buy specialized equipment that dives 1,500m under water, digs metre-deep trenches, and buries cables. Within two years it was working on bigger projects – on its own for routes of under 350 kilometres, and as a sub-contractor for larger rivals on longer, trans-oceanic routes.

“The big players subcontract to us because we’re cheaper,” said Levèque, a former Teleglobe vice-president since 1998. “We have always been afraid of rusting assets, so instead of buying big ships that would have created big overhead, we leased them.”

ITG, whose workforce peaked at 60, hired laid-off and retired workers from Canadian firms with telecom know-how, including Bell Canada and Teleglobe.

“We brought all these older guys who were real craftsmen in the industry, whereas (big new companies building global telecom networks) were in a hiring boom, taking on these young guys,” Kennah said. “We did it at the same price or cheaper but with more experienced people.”

By 1999, ITG was nipping at giants like Global Crossing, Kennah said. “We popped up on the radar and that’s a dangerous thing for a small company. When the big guys decide to kill you, they can easily undercut you and drive you out of business.”

ITG needed a big brother to survive and to land fatter contracts.

Then General Dynamics, with $14 billion US in revenue and 57,000 employees, came knocking. Its mainstay, US defence spending, was lagging and it wanted to expand commercial activities. IT already had a fibre-optic installation division, but it focused on military contracts.

As part of the sale, Lèvesque, Kennagh and Graham stayed on to run ITG’s Canadian and British operations for up to five years. Two founders, Vince Portulese and Steve Silvano, retired.

At the time, a slew of ambitious companies flush with cash and dreams of limitless growth were fuelling an underwater building boom. ITG’s expertise was in demand. Revenue reached $96 million in 2001, a four-fold increase from 1999. Its client list was as industry Who’s Who: Alcatel, Tyco, SBC, China Telecom, MCI.

But by mid-2001, telecom’s descent began as investors realized there was too much fibre-optic capacity. Carriers started failing.

And General Dynamics, a make of nuclear submarines and the M1 Abrams tank, saw bigger opportunities elsewhere. With George W Bush in the White House, defence spending was on the upswing. “We became more and more a marginal operation,” Lèvesque said.

In its 2002 annual report, General Dynamics said it was exiting the cable-laying business “because of substantial overcapacity in the market and lack of contract backlog.” Citing a confidentiality agreement, ITG’s three owners, who each hold one-third of the company, would not reveal the buy-out and buy-back prices.

“We bought it back at a good price,” was all Graham, senior vice-president in charge of sales and marketing, would say.

Overcapacity is still a problem for the telecom industry but it is limited to high-traffic routes such as London-New York and San Francisco-Tokyo.
“There is overcapacity in the oceans but there are many opportunities in regional systems,” Graham noted, adding the telecom sector is beginning to show signs of life, with carriers taking advantage of the lull to boost capacity. Contractors like ITG are also sought after because telecom firms are reluctant to hire new workers.

ITG, which competes against either others in the global cable-laying business, including Alcatel, Tyco, and Fujitsu, signed two deals last month: a $750,000 contract with EastLink Cablesystems to link Cape Breton to mainland Nova Scotia, and a $3 million contract with Caribbean Crossings to install a Bahamas-Florida connection.

“I knew they had done quite a bit of work for the local phone company and their price was so much cheaper than the other (European) bidders,” said John Sheridan, EastLink’s fiberoptics planner.

ITG is bidding on several projects, including a $10 million contract to connect Îles de la Madeleine to Gaspé, and a $40 million (US) Alaska-Oregon link.

The firm is in a nice niche, said telecom analyst Iain Grant. There is a capacity glut on many transatlantic, Trans-Pacific, and Mediterranean routes, he noted. But there are “still many places that need to be connected and water is still a very good route to do that,” said Grant of the Seaboard Group. “There will be plenty of opportunities for them to keep busy.”
Nexans was the first to manufacture and install 384 fiber submarine cable. Nexans has qualified and installed their URC-1 cable family for fiber counts up to 384 fibers.

For further information, contact:

**Telecom:**
Vegard Larsen
Tel: +47 22 63 76 47
E-mail: vegard-briggar.larsen@nexans.com

**Oil & Gas:**
Jon Seip
Tel: +47 22 63 88 25
E-mail: jon.seip@nexans.com

Nexans Norway AS
P.O Box 130 Økern,
N-0509, Oslo Norway
Tel: +47 22 63 88 20
Fax: +47 22 63 74 55

**US Contact:**
Les Valentine
Tel: +1 281 578 6900
Fax: +1 281 578 6991
E-mail: les.valentine@nexans.com

Global expert in cables and cabling systems
BREAKING WITH CONVENTION

A DIFFERENT WAY OF LAYING SUBMARINE CABLES
by Michael Jones

The Recent Past
For SMD, as the leading supplier of trenching equipment to the submarine telecoms industry, the last five years has seen staggering changes in level of production and pace of technology development. Some figures that illustrate the first point are that in its first 15 years SMD built 27 subsea systems for telecoms; in the past 5 years we have built an amazing 43 machines. These have included ploughs which could bury cable up to three times deeper than a standard plough for little increase in size. This plough, with the help of a unique jetting system, could go deeper and faster in sand, and with a similarly unique ripping system, could extend cable protection using a ploughing into rock. And these are to name but a few of our innovations in cable lay and burial over that period.

The Present Reality
At this moment, most of these ploughs and some of the ROV’s are laying idle. We don’t anticipate a recovery in this sector of the telecoms market until well into the second half of this decade. So, what is a telecoms supplier supposed to do in the meantime? Fortunately, as a relatively small company based around a core of innovative and flexible engineers, we have been able to seek and exploit other outlets for our talents. In applying our thinking to the renewable energy and military markets we have developed technology, which has potential for future application to submarine telecommunications and is the subject of this article.

Breaking with Convention
Traditional practice in the submarine cable industry is to lay the cable from a surface vessel and to either simultaneously or in a separate, later operation, bury the cable. When SMD were approached by Mayflower Energy, a newly established offshore wind farm installer, to build a vehicle for burying power cables, we devised a system, which brings together proven elements from more conventional equipment to create a uniquely capable machine. This has been done by carrying the spool of lay cable on the vehicle rather than the surface vessel.

The self-propelled tractor carrying the spool of cable is able to simultaneously lay and bury an entire interconnecting cable between adjacent wind turbines. Whilst it is performing this operation, its host vessel, the Mayflower jack-up vessel Resolution, can carry on with its primary task of installing the topside wind turbine.

The Detail
The Lay & Burial Tractor (LBT 1) is large by telecom construction vehicle standards, weighing in at almost 60 tonnes (132,000lbs)
when fully laden. Despite this, its large footprint enables the tractor to support and propel itself on the weakest soil anticipated at wind farm sites.

The cable is spooled onto a large reel mounted on top of the tractor and which can be easily removed for maintenance or loading new cable rapidly. The reel is also driven so that it can pick up and payout whilst on the seabed.

**Mayflower Energy’s 900kW LBT 1**

A combination of high power (900kW / 1200hp) and two different trenching tools, a chain cutter and a jet tool means that the vehicle can protect cable to 3m deep in a wide range of seabed conditions in a single pass. With a typical speed of 500m/hr (1640ft/hr), even in firm seabed, the aim is to launch, lay, bury, return and recover the vehicle in much less time than it will take to install the topsides. The tractor will also be able to perform post lay burial on any cable ends left exposed once the j-tube pull in is completed.

**Benefits**

The system brings a number of benefits to the quality and efficiency of the cable installation. A major advantage is the cost saving from being able to lay and bury the cable from the turbine construction vessel simultaneous to the topside installation. Even if the cable installation is done separately from the turbine construction, the vehicle can be deployed from a lower specification and hence cheaper vessel than would otherwise be needed to conventionally lay and bury cable.

Laying cable directly from the vehicle into the trench means there is less risk of damage to the cable. Damage can typically occur from the tensioning device on the ship or on the seabed if the burial device runs over the cable.

Laying cable directly from the vehicle into the trench means there is less risk of damage to the cable. Damage can typically occur from the tensioning device on the ship or on the seabed if the burial device runs over the cable.

A crucial part of laying cable to and from offshore structures is the j-tube pull-in. This is the part of the operation where the cable is pulled into the structure through a receiving bellmouth. Damage can often occur to the cable during this operation from pulling the cable over a rough seabed or exceeding its bend radius at the j-tube bellmouth. The cable can be pulled straight off the tractor mounted reel into the bellmouth at the first structure and then laid and buried directly away from it. At the second structure, the vehicle lays a loop of cable into a zone in front of the bellmouth from where it can be pulled into the j-tube. The tractor has the advantage of being able to lay much closer to the tower than a vessel and also has much greater control over the position of the loop. Also, during the pull-in the vehicle can be used to observe the operation and even manipulate the loop using its crane and a special tool.

The idea of placing the lay cable on a subsea vehicle is by no means a new one. Indeed, for the past three years SMD has been developing a plough for military application, which carries a pack of small diameter cable for direct lay into a trench created by a passive narrow share. The plough has many of the features that have made SMD ploughs so successful such as passive power.
steering and a lifting drawbar. It also has other innovations such as a tow umbilical, which means there is only one cable in the water column, and an onboard inspection class ROV in a garage for carrying out various surveillance and intervention duties.

**Telecom Applications**

An obvious use for vehicles, which can lay and bury cable, is in lightweight, repeater less cable. Controlling the catenary of lightweight cable is notoriously difficult in areas of strong currents and usually the cable is laid directly into the burial device leading to high residual tensions. Also, lightweight cable cannot provide stability to the plough during launch in the same way an armoured cable does and even with the help of positioning thrusters it can sometimes spin. The result of this is a tangled towrope, umbilical and lay cable! All of these problems could be overcome, together with the same benefits as for the wind farm application of improved efficiency and quality of installation, by placing the lay cable on the burial vehicle.

This technology is immediately applicable for use in the offshore oil and gas industry and where fibre optic communication between platforms and subsea structures is becoming more widespread. There will be limitations in range to around 30km, but as the technology in subsea fibre optic connectors improves, longer runs will be more practically possible. The technique also raises the possibility of being able to replace damaged lengths of cable without need to recover the cable to the surface.

From contract commencement in early March 2003, the Mayflower LBT system was scheduled for completion in late August. To meet the customer requirements, the project team have managed to pull delivery forward by an incredible four weeks from start to finish. SMD will also be providing a full operating team through our sister company Bywell Subsea to assist with the first job on the North Hoyle Development in the Irish Sea.

SMD are planning an open day in the first week of August for visitors to come and see the LBT1. This will be a unique opportunity to not only see the system, but also to meet the team that designed and built it.

Michael Jones has ten years experience as a Design Engineer, Project Manager and Sales & Marketing Manager in subsea cable and pipeline burial equipment at SMD. He has a Bachelor of Engineering from the University of Nottingham and is a Chartered Engineer. He worked for British Petroleum before joining SMD in 1992.
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Hibernia Atlantic is the new name for what was 360atlantic, originally owned by 360Networks. Once 360Networks filed for Chapter 11 they decided to sell off 360atlantic and Columbia Ventures Corporation bought the system for $18M.

Columbia Ventures Corporation are a commodities company based in Vancouver, WA. They own an aluminium smelter in Iceland, a fibre company in Spokane, WA as well as various other interests. Ken Peterson is the head of the company and when asked why he bought Hibernia Atlantic he quoted “I bought it because I thought that the price was right”

The system has not changed in design since it was installed by Tyco some two and a half years ago. It is a four fibre pair ring connecting Ireland, UK, Canada and the USA.

There are some unique features about the system as follows:

- The only direct connection between the continental United States and Ireland.
- The landing point in Southport in the United Kingdom is diverse from the usual Cornwall landings resulting in a shorter backhaul into London.
- The landing point in Boston, MA is diverse from the usual New Jersey landings.

As the trans-Atlantic route is shorter than some others this gives an improved latency time.

The system has been operational from the day the system was completely handed over to the new owners, however buying a “distressed asset” will always have it’s challenges and the purchase of Hibernia Atlantic was no exception. The number of permits, wayleaves, leases, crossing agreements, and contracts that were required to be novated, assigned or transferred seemed to grow on a daily basis.

However once all these had been completed the job of advertising the system as “open for business” got underway.

There was a dual opening ceremony in Dublin, Ireland and Boston, MA a review of which follows.

History was made at the recent simultaneous Trans-Atlantic seminars that launched both the Hibernia Atlantic International Exchange Centres in Dublin and Boston. Using the Hibernia Network itself clearly demonstrated that this submarine system is fully operational. It also highlighted the potential value derived from using such a low cost, high speed and high capacity network.

The entire seminar content was relayed from Dublin to Boston using a combination of the Spectel voice and Data conferencing bridge technology and the latest video conferencing offerings from Tandberg. This demonstration in itself highlighted the potential that now economically exists for the dramatic improvement of corporate communications, to the point that highly effective collaborative working environments are created with their US
counterparts. This is of particular importance for those Irish subsidiaries seeking to expand their Irish operations by trying to attract even more critical tasks within their corporation. The Trans Atlantic connectivity options now available from Hibernia Atlantic provide the executives of these operations with a major competitive advantage when competing with other corporate locations.

A senior executive of the Nortel Products Group presented the developing market trends for Optical level services. They highlighted the strong emergence of both LAN interconnect and storage networking over exceptionally long distances. Nortel presented both the requirements and growth statistics of these markets and they endorsed the Hibernia Atlantic service offering developed for these increasingly important corporate markets. To illustrate the unique capabilities and characteristics of the Hibernia Atlantic system 2 global information technology leaders combined to demonstrate the value to corporations of mirroring their entire IT operations across the Atlantic.

EMC, the dominant market leader in remotely mirrored storage systems, with an 80% market share and CNT the likewise 800lb gorilla of Remote Data Storage Networking Technologies, constructed a mirrored IT production environment in both Hibernia Atlantic Centres simultaneously – 2 places at once.

Alasdair Wilkie is Marine Manager for Hibernia Atlantic. He is a qualified engineer, with a B.Sc. in Electrical and Electronic Engineering, having spent the past eighteen years in the submarine cable industry, firstly with STC Submarine Systems (now Alcatel Submarine Networks), then Cable & Wireless Marine, then International Telecom and most recently as the Technical Director of Flute Ltd. His work has ranged from terminal equipment design, terminal station design, and system design through to the installation and commissioning of systems.
A global guide to the latest known locations of the world’s cableships, as at JULY 2003.

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My dear friend,

No need to say that I have appreciated your reactions to my last letter. Very kind of you. Hope it is sincere from you, not just politeness. My intention is to stimulate debate not to look for consensus!

The world situation has recently changed, and is still changing in an incredible manner! For the American people and rightly so September 11 has drastically changed their perception of the world.

In Europe it is the collapse of the Berlin wall which played the similar role. China and India represents one third of the world population. It should be no surprise that everything is destabilized, that it has suddenly became more difficult to understand each other. The 21st century is here!

This will impact enormously the submarine cable business. The past models and methods are gone. We cannot just wait for a restart of it, as if it the present period was a temporary pause; we will need to reinvent something completely new. The business will only restart through a huge effort of imagination, creativity.

At the heart of this effort lie the following questions: What type of global network infrastructure does the world need? What is the role of such an infrastructure? Being connected to an efficient global network is it the privilege of rich and developed countries, or is it a development tool accessible to everyone?

Oxygen project was an attempt in such a direction. At this moment, we have empty cable in the Atlantic, and several countries are still waiting for their first fibre optic connection.

An infrastructure is not just a product. A submarine cable is like a bridge on a river, it is a tool of public and general interest. Deciding where to build it, which technology to use, which design, all these decisions need to be taken in a somewhat planned and collective manner.

Where are those issues thought through, analysed? I am somewhat amazed and concerned not to see any initiative being taken during the present recession!

We had initiated years ago in Europe, under the name of Europtic, informal meetings between the main Telcos and the suppliers. These meetings were events of non-committing exchanges of views, on technology trends and business evolutions. Such informal structure exists in every business. Why not here? A dialog between the capacity owners and the suppliers is indispensable!

My friend, the business is frozen, but so are the managers around! They need a wake-up call. Is there a pilot in this plane?
FORTHCOMING CONFERENCES AND EXHIBITIONS

24-27 August 2003  
13th International Symposium on Unmanned Untethered Submersible Technology,  
University of New Hampshire, USA. www.ausi.org/uust/uust.html

26-29 August 2003  
Offshore Comunications Conference and Exhibition 2003, Houston, Texas, USA. www.offshorecoms.com

2-5 September 2003  
Offshore Europe 2003, Aberdeen, Scotland, www.offshore-europe.co.uk/

9-12 September 2003  

22-26 September 2003  

24-26 September 2003  

7-8 October 2003  
4th India Telecom Conference, Mumbai, India. www.indianteleconference.com

12-18 October 2003  

24-26 November 2003  
Hydro 2003: 4th Australasian Hydrographic Symposium,  

17-19 February  

11-14 January 2004  

16-19 March 2004  

28 March - 1 April 2004  
SubOptic 2004, Principality of Monaco, www.suboptic.biz