

## **Edward Tapanes**

September 2008

## BRIEF BIOGRAPHY

Mr. Edward Tapanes has over 20 years' experience in the development and practical application of fibre optic sensing and telecommunications technologies. He graduated with a Bachelors degree from the Royal Military College of Canada in 1988, in Honours Math and Physics, and with a Masters degree from the University of Toronto in 1990, in Aerospace Science and Engineering, with a major in fibre optic sensors. This institution is one of the world's leading organisations in the area of sensor application to "Smart Structures". While at the University of Toronto, Mr. Tapanes was involved in a feasibility study of the use of optical fibre sensors in composite military aircraft for the Canadian Air Force.

Between early 1991 and early 1994, while a research engineer at Monash University (Melbourne, Australia), Mr. Tapanes was appointed acting-Manager in the area of fibre optic sensors/systems research and development. Mr. Tapanes was responsible for setting-up and operating a fibre optics sensors laboratory at Monash University, and managed all activities, personnel and finances involved with the fibre optic sensor program.

In March 1994, Mr. Tapanes founded Future Fibre Technologies Pty. Ltd. (FFT), in Melbourne, Australia. FFT is a proprietary company, limited by shares, specialising in developing fibre optic sensor technology for the Security and Safety industries. The success of FFT's endeavours stems from an early appreciation that the confluence of three powerful technologies, viz. optical fibre communications, microcomputers and microelectronics, provided an opportunity for the development of sensing systems that are unique. FFT seized this opportunity to create a range of novel sensing devices, and their downstream products, for detecting and measuring movements and sounds of most kinds; acoustic and mechanical vibrations, strains, pressures and micro-strains.

Today, over 85% of FFT's revenue is derived from International markets with the primary focus being fibre optic based Security systems for Government, Military and Industrial applications. Over the past 10 years, Mr. Tapanes has been providing security solutions to various Military and Government agencies in the USA, Mexico, Australia, Singapore, China, Japan and several other countries in Europe and the Middle East. In addition, he has made significant contributions to major breakthroughs in fibre optic based security systems, in particular the development of long-range (35+ miles) detection systems, the ability to "locate" an intrusion event anywhere along the protected path and the development of sophisticated signal processing to eliminate environmental "noise", such as low flying aircraft, vehicular traffic, wind, rain/snow, etc, to significantly reduce potential "false alarms".

Amongst his many responsibilities as the Founder of FFT, Mr. Tapanes has spearheaded the company's impressive international growth and associated recognition as a leading developer of fibre optic based sensing systems. Through his leadership, the company has attracted an impressive list of corporate investors/board members and currently employs some of the best talent in photonic sensing in Australia. Mr. Tapanes continues to be a significant Shareholder in FFT.

In May 2006, Mr. Tapanes founded Tapanes Global Technology Pte. Ltd. (TGT), in Singapore, in order to offer his specialty skills and services globally in the field of fibre optic sensor technologies. The goal of TGT is to become a leader in the Asian region, servicing the fibre optic security industry.

Mr. Tapanes is the author of over 60 papers, 15 provisional patents, 10 international PCT patent applications and 5 granted international PCT patents. Mr. Tapanes has been invited to Chair sessions at several local and overseas conferences and seminars.