

Stewart Julian Wallace (1954–2022)

Contributor to Global Telecommunications and Life

Enn Vinnal

Former Telstra Research Labs Engineer.

Currently Wireless Frequency Studio.

Abstract: Stewart Wallace made many contributions in his life, most notably to the development of the APT700 frequency band, the Asia Pacific Telecommunity 700 MHz spectrum, now used on mobile phones in many parts of the world. He was also an admired bagpiper, invited to play at Royal Edinburgh Military Tattoos, ANZAC commemorations and as a solo piper. Through the diversity of his upbringing, education, varied life experiences, and openness to new challenges, together with passion for each of these while also being a good listener and communicator, Stewart Wallace achieved an enviable balance of humanity and global success, doing what he loved best.

Keywords: Obituary, ITU-R Study Group 5, APT700 (3GPP Band 28), Royal Edinburgh Military Tattoo

Early Life and Education

Stewart Wallace had many interests and considerable talents, but there were some constant themes exhibited throughout his life. On one hand, he was an immensely likeable person with a fair mindset and, on another, he also had an independent adventurous streak. This tribute, or perhaps reminiscence, aims to relate some of these characteristics.

Stewart was born in 1954 and brought up in Kergunyah, a small town in the Kiewa Valley in country Victoria, Australia. He grew up on his family's agistment property. For those historically minded, he was a direct descendant of the extended Wallace family associated with Wallace's Hut in alpine Victoria, built by three Irish brothers in 1889, one of whom was Stewart Wallace, Stewart's great grandfather. By all accounts his farm life was idyllic.

His formal education began in earnest when he became a boarder at Scotch College in Melbourne. There he was drawn to one of the interests that was to continue at various other

stages of his life. That was playing the bag pipes. He completed his secondary education at Scotch, finishing in the Class of 1971. He then went on to study Applied Science, majoring in Electronics Engineering, at the University of Melbourne, graduating in 1977. Later, he gained a Master of Engineering degree at RMIT University in 2002.

Life and Career Diversity

Having grown up in rural Victoria close to the snowfields, he became an accomplished skier, a second lifelong interest. After university he made a wonderful career choice: to become a full-time ski instructor. One could say he had the best of both worlds, working in Australia in the Southern winter and in the ski resorts of Europe in the Northern one. He remained an avid skier for the rest of his life.

He returned to the technical sphere in 1986, joining NEC, which sent him to Japan to work on high-speed microwave strip-line interconnects between memory and CPUs in the high performance mainframe computers that were being developed at this time. Japan made a lasting impression on him in a number of ways. One was its food, but he also developed a fascination for martial arts. While searching for an opportunity to learn about this, a Japanese colleague referred him to a particular Buddhist temple which was the home of fighting monks. There he learnt karate in what might seem a rather unusual way, by living the monastic lifestyle, spartan and meditative. Stewart was a vivid storyteller and one episode relates to early morning rises, having a bowl of soup for breakfast, and then being handed a bowl of water and a very small brush and given the task of scrubbing clean the wooden patio and temple stairs. That experience instilled in him a mental stamina that could be observed by those looking closely enough. Karate remained a lifelong passion and he was very proud of the level he reached.

He married Trinidad Campino Talavera in 1990 after first meeting her in Australia, during a brief trip from Chile to visit her sister in Melbourne. It must have been love at first sight because, a few days after she had returned home to Chile, he proposed to her over the phone. He later travelled to Chile to formally ask permission from her family to marry. Their daughter Alison was born in 1996 and she followed in his footsteps to become an avid skier and Pipe Major of the Presbyterian Ladies' College Pipes and Drums band. He was very proud of each of her achievements as her life progressed through university and beyond.

After returning from Japan, he joined The Ambidji Group when it was formed in 1991. This firm specialises in the development of infrastructure supporting the air transport industry. There, Stewart worked on the design specifications and implementation of land-air telecommunications for Hong Kong and Kuala Lumpur airports, as well as other projects in

South East Asia. He told vivid stories about his experiences on those projects, both from engineering and personal perspectives.

Whisky also emerged as a lifelong interest. Stewart became a connoisseur of single malt, where a wee dram was a must each evening. He also developed an interest in brewing beer. Then there is the story about him finishing bottling a batch of beer, allowing it to properly settle, then packing forty or so bottles into the back of the family car and driving to spend Christmas holidays with the family down the coast. It was a very hot day and, shortly after departing with a boot full of luggage and home-bottled beer, the bottle caps begun to pop due to the heat; bottles exploded, beer started gushing, and the boot and its ceiling were awash with beer and broken glass. Stewart never revealed whether the car was sold afterwards; however, it most likely smelt like a public bar for a long while.



Figure 1. Attending ITU-R Study Group 5,¹ Geneva 2017

In 1999 he joined Telstra, specialising in regulatory aspects of international radio spectrum. He was an ideal person for the role, being technically astute and a congenial mixer, with a typical Australian straightforward and open manner. He was also a good negotiator, finding ways through the byzantine spectrum regulatory environment. In Geneva, he attended many meetings of the International Telecommunication Union (ITU), which examined and specified the technical and regulatory rules for allocation of spectrum to new services. In this, he was well supported by Telstra and, in particular, by Mike Wright. Mike was head of Networks and an astute and progressive innovator. Working together and with other Telstra colleagues, they developed and promoted what became known as the APT700 band, the Asia-Pacific Telecommunity ([“APT Radiocommunication Program”, 2023](#)) 700 MHz spectrum ([“4G LTE Band 28”](#)), which we all use now in our mobile phones. Mike and Stewart also promoted the

use of radio spectrum for high-altitude platforms to allow delivery of cellular services to areas experiencing disruption of normal services during fires or floods, for example. The effort to acquire spectrum for these high-altitude platforms is only now reaching finality at the ITU World Radiocommunication Conference commencing in November this year ([WRC-23, 2023](#)).

Bringing Diverse Interests Together



Figure 2. Proudly dressed for one of the many Pipes and Drums competitions in which he participated

He returned to playing the bagpipes in 2008 and these became an important part of his life. He was one of the first members of Old Scotch Pipes and Drums Band and also played with the Royal Victoria Regiment. He took his bagpipes with him on trips to ITU meetings in Geneva. He had two: an electronic chanter connected to earpieces, which he played during flights, and the main pipes on which he practiced on early mornings before ITU work. On one occasion, on the shore of Lake Geneva, he was approached by a police officer who had been sent to silence the ‘caterwauling’ after a nearby resident had complained about an early morning racket. In 2015, Stewart played as the lone piper in one of the Last Post ceremonies under the Menin Gate in Bruges, Belgium. He was invited to play in the Edinburgh Tattoo in 2018 as a part of the Royal Victoria Regiment, an experience he was very proud of. In 2022, he was again part of the Edinburgh Tattoo, this time playing with the Royal Edinburgh Military Tattoo house-band.ⁱⁱ

And again there is a story worth the telling. One day, on the road journey back to London after the 2018 Tattoo, a fellow piper and Stewart came up with the idea of parading up and down

the main street of the local town with Stewart playing the pipes and his companion following behind with a hat collecting donations. Stewart remarked they were never short of beer-money.

Stewart retired from Telstra in 2018 but continued with all of his interests. He played the pipes in ANZAC day parades, in the Last Post Services at the Shrine of Remembrance, and at the East Malvern Returned & Services League (RSL). He started tutoring young people wanting to be pipers, at the East Malvern RSL. He also added a new item to his list of hobbies — he bought a Harley-Davidson motorbike. It was a magnificent machine driven sedately, even stylishly, by Stewart, though he pointed out, one too heavy to lift upright by just one person if it lay on its side. But, on the one or two occasions that this happened there was never any shortage of aficionados willing to help get it upright again.

Throughout the last thirteen years of his life, Stewart successfully undertook cancer treatment and was in remission until a few months before the Edinburgh Tattoo in 2022. Cancer was ultimately the cause of his passing. He will be fondly remembered through his many contributions and through the stories about him. He had a unique combination of talents and an open and accepting personality, which he applied to both technology development and human friendships. Stewart is survived by his wife Trinidad and daughter Ali.

Acknowledgements

This Tribute was written with contributions from Stewart's wife Trinidad and former Telstra engineer John Costa.

References

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Endnotes

ⁱ For further information on Study Group 5, see “Study Group 5 (SG-5)” (2023).

ⁱⁱ For details of the Royal Edinburgh Military Tattoo, see <https://www.edintattoo.co.uk/>