## Trimble GPS Leads the Way

**By Kim Trimble** 

When Charles Trimble decided to start his own company in 1978 he had much more than nothing. There was a strong education

including a Masters Degree in Electrical Engineering from the California Institute of Technology. He had, and has, a dynamic drive to succeed. He had two of his colleagues from Hewlett Packard with him, and the unconditional support of his family. He also had the Loran C technology he had purchased for \$50,000 for his former employer Hewlett Packard. Loran C is a navigation system which uses radio signals from land



based transmitters to guide navigators along coastlines. With a product to sell and a staff to support it, and office space above the old Los Altos theatre in Silicon Valley, Trimble Navigation was off and running.

In 1982, Trimble Navigation was doing about one million dollars in business annually with the Loran C equipment. Charlie went hunting for another product to add to his company's catalog. Once again he found what he wanted from his former employer. A program for developing navigational equipment using the infant Global Positioning System had been cancelled by the company. GPS is a navigational system involving satellites and computers that can determine the latitude and longitude of a receiver on Earth by computing the time difference for signals from different satellites to reach the receiver. Charlie was able to purchase the rights to a Hewlett Packard GPS prototype.

The US military was also working on a GPS program as an exclusively military technology. In 1978 *NavStar*, the first, of 24 satellites was launched to support the system. Charlie wanted to put the new technology to use in the private sector as navigational and surveying tools along with the military applications. His first GPS products were of value to the hydrographic survey industry because of the precision of their measurements.

By 1982, Trimble Navigation had built the first commercial scientific research and geodetic survey equipment based on GPS. These were used by oil drilling companies on offshore platforms. Then mariners started using GPS for their navigational purposes.

The following few years saw massive growth in the GPS industry worldwide with Trimble Navigation at the front of the line. In 1989, Trimble acquired the Navigation Systems Division of TAU Corporation, then in 1990 Datacom Software Ltd. of New Zealand was added. In 1990, Trimble Navigation went public, offering stock on the NASDAQ. GPS became Trimble Navigations only product line at this time as well.

Trimble was one of the leading companies to integrate GPS technology with communications. Trimble's Inmarsat-C GPS system enables long-haul trucks and ships to keep in touch with home base, share forecasts about arrival times, and coordinate critically timed cargo handoffs. Trimble was the first company to incorporate GPS and cellular on one board. In 1998, Trimble's GPS was used in Seiko Epson's Location, the first combination PDA, wireless phone, personal navigator and digital camera.

When this industry began, the first GPS based survey receiver was the size of a refrigerator and had a price tag of around \$100,000, now of course they are hand held units with a cost as little as \$100.



Though Charlie is no longer directly involved with Trimble's everyday operation, he still consults. His main focus now is representing the GPS Industry in Washington DC where he works to protect the airwaves the GPS uses

from being overrun by other industries. Charlie's brother, Gordon, who serves as a state legislator for the State of Hawaii is currently in China teaching English at a women's college that was founded by their grandfather's aunt. But that's another story.

Trimble Navigation has provided an endowment supporting Asian studies and the construction of Trimble Hall on the campus of the University of Puget Sound in Tacoma Washington.

#### From the President

by Wally Turnbull

#### Let's bring in the young people!

There is an old Scottish proverb which says "too soon we get old and too late we get smart." That saying which points out so well the wisdom experience brings seems apropos to TCA.



As I speak to those engaged in genealogical research for their family trees I frequently hear the same complaint. "I started my research too late. Now, those with the information I need are gone."

Many of our members are senior citizens which is good because they bring the wisdom of their experience and they share with the younger clan members, their knowledge of the past. This is good but it would be even better if there were more young members to share with.

We need to get our young people interested in and knowledgeable about their heritage. It will be better for the future of the clan and it will also enrich their lives.

As we renew our membership in TCA for the next year, I ask each of our members to please consider sponsoring a young person as a TCA student member. The cost is only ten dollars per student membership yet the return on that small investment will surely be great.

#### **Sharing and Caring**

Please remember Lee Turnbull of New Hampshire as he continues to recover from a heart attack.

Our thoughts go out to our Northeastern members affected by flooding and to our members in Florida hurt by hurricane Wilma. We continue to remember those recovering from Katrina and Rita.

Condolences and sympathy are extended to member Mavis Lockwood, Australia, who lost her beloved husband, Brownie, at age 73.

#### **BULLSEYE** - A Turnbull Clan Publication

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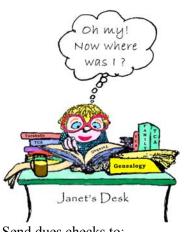
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#### **Turnbull Clan Association**

Officers: Wally Turnbull, President • Brian Turnbull, Vice-President Janet Turnbull Schwierking, Secretary • John G. Turnbull, Treasurer Trustees: Keith Turnbull, Lee Turnbull, Corey Turnbull, Bill Trimble, Sarah Turnbull Snow, Dana Hume Turnbull Hoyer, George B. Turnbull, Brian P. Turnbull, Mark A. Turnbull, Sandy Turnbull Founders: John Turnbull, Scotland • Dorothy Berk, USA

#### A Note from Janet



Send dues checks to:
Janet Schwierking
2020 Schuettig Rd.
Poteet, TX 78065 USA

Janet says "I am so proud of all of you out there. The membership response has been beyond my wildest hopes for this time of year. Thanks for all your prompt Thanks for the replies. continued support of TCA. I never knew how much vou disliked my little reminders, but your prompt response tells me just how much you don't want anymore of them!" As Janet has reminded us, it's that time of year to be thinking about next year's dues.

To renew online, fill in your name, renewal options (self \$20, spouse \$10, child \$10) and make sure we have your current email address. If your mailing address or other information has changed, please update that as well. Go to: http://www.turnbullclan.com/application/online\_application.html

Many of you long timers know Janet Schwierking well, and so you should. For you newcomers, you need to get to know Janet! Janet has tirelessly served as TCA secretary, Bullseye Editor, and Genealogist. And these are just the jobs that have titles. Janet has always been a willing worker and has helped out many times, above and beyond the call of duty.



Janet lives in Poteet, TX a little town about 30 miles south of San Antonio. Janet doesn't get to the big city much as she has her hands full in Poteet! Her day begins about 6:30 every morning, with husband Bly, tending to Babet the goat and working with the young horses they have. Sometime in the afternoon, after adding cooking and cleaning to the list, she takes a break and takes care of TCA duties, communicates with members and answers mail. By 4:00 in the afternoon it's back to do the evening feeding and watering for as she puts it "everyone" and then back to the house for supper and maybe a little crash time.

I would personally like to thank Janet for all of the hard work done as Bullseye Editor. I can truly appreciate all she has done and continues to do to help with story lines, membership records and genealogy! Thanks, Janet! - Betty



### **Ancrum Moor**

**Historical significance to Turnbulls:** Turnbulls provided the greatest number of combatants against the English in the famous Ancrum Moor battle of Feb. 17, 1545. The Scots, though less than half in number, defeated the English army, in a famous come from behind victory.

**Interesting facts:** Henry VIII was intent on owning the piece of land known as Scotland. After his proposal that his infant son be married to the infant daughter of James V of Scotland was refused by James V, he sent a force to invade Scotland and what was later called the "rough wooing" began. The Scots were only able to put up a feeble resistance and one by one the English won battles and pushed deeper and deeper into Scotland.

The English set up camp at Ancrum Moor in the Borders. Here, bolstered by their numerous victories, they were taken by surprise by the Scots who had rallied and gathered as many troops as possible. Nearly 800 Englishmen were killed and as many taken prisoner, bolstering the Scottish morale and giving them their first victory in five years.

**Sights to see:** The actual Moor where the battle took place is located at the side of the A68 road about 2 miles north of the village of Ancrum. Also of interest nearby is Lilliard's Grave. A young Scots woman's, Maiden Lilliard, lover had been killed in the fighting at Ancrum Moor. She was so devastated that she took up a sword and plunged into the battle and struck down the leaders of the English forces, Sir Ralph Evers and Sir Brian Latoun. Her body was found next to theirs with tufts of her hair in their hands.



Ancrum Moor, about 2 miles north of Ancrum on the A68

The Ancrum Village Green contains a large carved stone cross. The Green was once a marketplace in a failed attempt to turn the village into a center for trade and commerce.



The Ancrum Village Green

The original church was originally built in the 18<sup>th</sup> century. It is outside the present village and very little remains of the building. The Ancrum cemeteries contain over 30 Turnbull names.



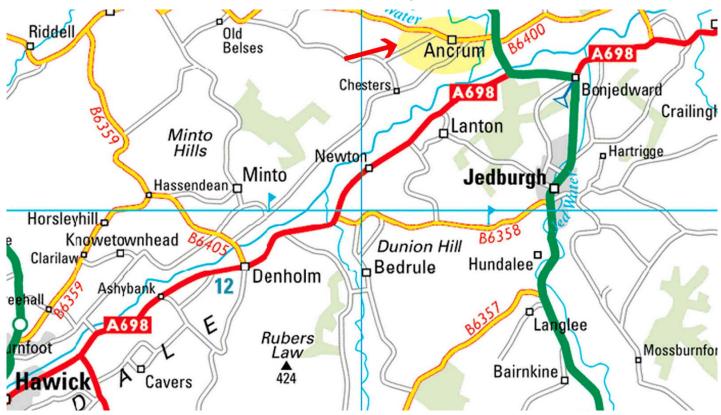
Remains of the original parish church. The graveyard contains Turnbull headstones.

Other details include the fact that Ancrum lies on the St. Cuthbert's Way walking trail. Also, the first organic gardening demonstration in Scotland is located in Ancrum. The gardens are located in the Borders Organic Gardeners at Woodside. For more information visit their website at <a href="https://www.ancrum.bordernet.co.uk">www.ancrum.bordernet.co.uk</a> /organizations/15.html.

And for a bit of trivia: A. Turnbull is the 2<sup>nd</sup> place recipient of the Ancrum Best Kept Gardens Award for 2005. Congratulations!

**Getting there:** The train station in Berwick Upon Tweed is 34 miles to the Northeast. Local bus service is available from Galashiels and Edinburgh to and from Ancrum. Edinburgh is 46 miles to the north/northwest. London is 343 miles to the south.

Approaching from the north, take the A68 toward Jedburgh. About four miles before Jedburgh, turn west (right) onto the B6400. From the south (Newcastle) take the A1 north to A68 North. Pass through Jedburgh and go about 4 miles, turning west (left) onto the B6400.



#### Places to stay:

#### In Ancrum:

The Cross Keys Inn, The Green, Tel: 01835 830344,

E-Mail: info@ancrumcrosskeys.co.uk

Harden Vale, 1 Harden Vale Tel: 0835830280

E-Mail: hardentis@ancrumcraig.co.uk

#### In Jedburgh:

Spread Eagle Hotel, 20 High St., Tel: 01835862870 Glen Bank House Hotel, Castlegate, Tel: 01835 862258 Jedforest Hotel, near Jedburgh, Tel: 01835 840222

The Spinney, a 4\* B&B Langlee, by Jedburgh

#### Tel: 01835 863525

In Hawick:

Mansfield House Hotel, Weensland Road, Tel: 01450 373988 The Coppice Borthwickbrae, Tel: 01450 880332

Ellistrin Bed & Breakfast, 6 Fenwick Park, Tel: 01450 374216 Elm House Hotel, 17 North Bridge Street, Tel: 01450 372866 Wiltonburn Farm, 0845 644 8315

Nearby Attractions: Jedburgh Woolen Mill, Jedforest Deer and Farm Park, The Capon Tree, Hudson's Unconformity, Harmony Garden, Mertoun Gardens, Bowhill House & Country Park, Mellerstain House, Ruberslaw, Bedrule, Minto Golf Club, Minto Parish Church, Hawick Tower Museum, Leydon Monument in Denholm, Drumlanrig Castle and Queensbury Estate, Hawick Museum and Scott Gallery

#### Places to eat:

The Cross Keys Inn, The Green, Ancrum The Pheasant Lounge Bar, 61 High St, Jedburgh Old Cross Keys Inn, Denholm The Castlegate, 26 Castlegate, Jedburgh Simply Scottish, 8 High Street, Jedburgh The Chefs Grill, 31 High Street, Jedburgh

The Wayfarer, High Street, Jedburgh

**Nearby Historical Sights:** Melrose Abbey, Kelso Abbey, Dryburgh Abbey, Abbotsford House, Smailholm Tower, Kelso Hermitage Castle, Fulton Tower, Jedburgh Abbey, Mary Queen of Scots house, Jedburgh Castle and Jail with museum, Century Cannongate Bridge

**Related websites:** http://www.ancrumcrosskeys.co.uk/

http://www.scot-borders.co.uk/

http://www.electricscotland.com

http://www.ancrum.bordernet.co.uk/facilities/

http://www.aboutscotland.com/jed/ancrumcraig.html

http://www.aboutscotland.com/tour/langied.html

http://www.milford.co.uk/scotland/accom/r-l-2062.html

http://www.st-cuthberts-way.co.uk/

http://www.grantham.karoo.net/paul/graves/lilliard.htm

http://www.tiscover.co.uk/hardenvale

http://www.carlberry.co.uk/rfnshowl.asp?L1=ANC005

http://www.borderreivers.co.uk/Battles/Ancrum%20Battle/ancrum.

htm

#### **UPCOMING GAMES & EVENTS**

For a complete list of games in your area log onto http://www.turnbullclan.com/main/coming\_events.htm

#### **USA Games – Attend one in your area!**

Nov. 4-6 Foothills Highland Games, Hendersonville, NC

**Nov. 5-6** Austin Celtic Festival, Austin, TX

Tucson Celtic Festival & Highland Games, Tucson, AZ

Nov. 6 Ocala Scottish Games and Irish Feis

Nov. 11-13 Salado Scottish Clan Gathering and Highland

Games, Salado, TX

Nov. 19 El Paso Celtic Festival & Games, El Paso, TX

Nov. 19-20 Eugene Celtic Heritage Festival, Eugene, OR

### **NEW ZEALAND Games – Attend one in your area! Nov. 19** Auckland Highland Games, Auckland

#### **AUSTRALIAN Games – Attend one in your area!**

**Nov. 11-13** Beechworth Celtic Festival, Beechworth, Victoria **Nov. 25-Dec. 4** Sydney Scottish Week, Sydney



Recognizing Armistice/Veterans Day

TCA thanks those who serve their countries, past and present, allowing us the freedom and ability to celebrate our heritage together

## Cousins Find Each Other Through TCA



Decedents of John C. Turnbull gather for reunion in San Juan Capistrano, CA, many meeting for the first time.

Member Betty Lange of Solano Beach, CA. discovered that she and other TCA members were related when she found a reference to John C. Turnbull through the TCA website. She and fellow member Wallace Turnbull of Lynchburg, VA, found that they had a common denominator in John C. Turnbull.



Left, Wallace and Betty enjoy getting to know one another at the family reunion in San Juan Capistrano, CA

John was Wallace's grandfather and the brother to Betty's grandmother, Ann Jane Turnbull.

When the Wayne Turnbull family of California, Wallace's first cousin, planned a family reunion, Betty Lange was, of course, included.

About 30 family members met in San Juan Capistrano for a reunion luncheon.

Also, celebrated at the luncheon was the 90<sup>th</sup> birthday of Mildred Turnbull, widow of John Turnbull, brother to Wayne.



Mildred admires 90th birthday



Wallace at gravesite of grandfather, John C. Turnbull, Inglewood Park Cemetery

Many memories were made this weekend, from reuniting with old cousins to meeting new ones. But one memory not soon to be forgotten is finding the grave of John C. Turnbull.

Family members were delighted to find that the gravesite was in the nearby Inglewood Park Cemetery in Inglewood, CA.

# Restoration of Clipper Bus is Dream Come True

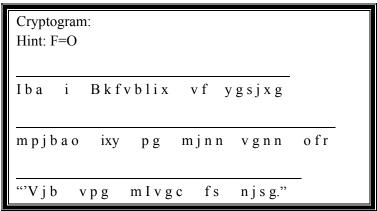
Ken Turnbull of Mount Gambier, Australia, is known as the million mile man. In the early 1950's at the age of 24, he started driving for Ansett Roadways, taking passengers to Hamilton and Melbourne. He drove a Flxible Clipper bus. Says Ken, "It was the only bus that could keep the timetable. All the others were too slow." By the way, Flxible is not a misspelling. When Ansett went to register the company there was already a company registered as Flexible so they took out the "e" and spelled it Flxible instead.



Ken Turnbull proudly poses in front of his restored Clipper Bus.

Ken loved his job so much that he bought the bus in 1974 with a dream of restoring it. The bus gathered dust and remained a dream for 26 years while Ken ran his business of eight refrigerator trucks and a fleet of buses. In 1993, he sold his business and went into semi-retirement, driving part time as a heavy vehicle driver instructor.

Ken remained with Ansett for 20 years and drove "unit 24" for 10 years. Unit 24 was the only clipper bus of 132 that was not manufactured in Australia. It is the only American made clipper, shipped to Australia from America by Sir Reginald Ansett in 1947. Ken says that the clipper bus was about three years old when he first saw it. His first impression was that it was beautiful. He had no idea that years later he would track it down and buy it.





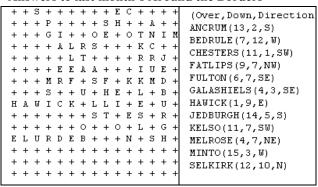
Fully restored Unit 24, ready for Sunday drives

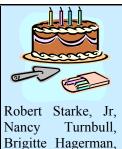
The restoration project took over 4 years. Ken says that whatever parts they couldn't find, they made. With the restoration complete last year, Ken and his wife, Joan, drove the bus to Melbourne. They joined up with 10 other Flxible Clipper Club members on Australia Day. Together, they drove to Sydney to commemorate 50 years since Ansett Pioneer ran its first express service from Melbourne to Sydney. So nicely is the bus restored, that one woman tried to flag it down on their way to Sydney. While all the other restored clippers have been converted into motor homes, Ken is very proud of the fact that his in the only complete clipper in the country.

The bus was considered ahead of its time when it was built, with its bright blue duco and extravagant chrome fittings. Unit 24 has been restored to perfect condition, complete with the original luggage racks, seats and an Ansett Roadways litter bag at the front. In spite of no power steering, Ken enjoys his time at the wheel, saying "I still love driving, that's what I've done all my life." Ken is now planning a string of "Sunday drives."

Thanks to member Dawn Day for contributing this story and to The Border Watch and reporter Frank Morello.

#### Answers to last month's Around the Borders





Anthony Turnbull,

#### Happy Birthday to

Dana Turnbull, Phyllis Paxton, Joan Sevier Sjostrom, William Bozman, Dale Hilding, Mark Turnbull, Carol Kugler, Robert Owen Turnbull, Leslie Bannister, Mary Kay Hilding, Donna Brown, Thomas Turnbull Brown, E. Virginia Trimble, Barbara Turnbull, Dawn Day