Figure 1 The evolution of AAG Holdings

About Us

I am a scientist researching the computer systems that a lone geologist would use. I have no employees except my parents and an old girlfriend (Helen did the pages on Greece), who helped out for free.

At times carrying on this way is not too much fun but I am not really a lone scientist as I have had a lot of support from suppliers, fellow society members, research supervisors, clients and co-workers which has kept me going and I wanted to write about them just as much as about me. Anyhow I find their stories a lot more interesting than mine.

In late 2000 A.A.G. Holdings merged with Volante Systems to form the Volante Group Limited a company listed on the Australian Stock Exchange (VGL). Then in late 2003, Volante Group Limited merged with Ipex, a Canberra based company, followed in May 2006, when Volante Group Limited was taken off the official ASX list after Commander Communications Limited (www.commander.com.au) acquired a majority shareholding. In July 2008, Commander were put into receivership, and this ended a geo-computing group that survived for over 10 years. This is that story

The geo-computing heritage of the Volante Group and *Computers in Geology*

The staff at Affinity IT Recruitment and I worked together from September 1996 to June 2008 (when I was traded along with the other contractors to Peoplebank). At that time I realised I could not compete technically with the multi-discipline teams of the international service companies and I was looking for an ally to help with PC computer maintenance and component compatibility issues. Wayne Digance arranged a meeting with Chris Hall, at that time the company was Applied Micro Systems, and we found we had common history and the same strategy in mind. We have been allies ever since. I have prepared a history of the Volante Group in which I figure, but as they came first by a year or so and have been a lot more successful than I, I will lead with their history and so the chronology of the sections presented is:

- Applied Micro Systems
- ASSCO
- Grant Jacquier - Computer Geologist
- Computers in Geology
- A.A.G.Holdings

Applied Micro Systems

Applied Micro Systems was established by Allan Brackin (b.1956). The following is an extract from *The Australian* "Computers News" features:

> *When Brackin finished university in 1980, he worked as a barman and played semi-professional rugby league in Brisbane. "My life at that stage was about playing football - I had no plans to go into business," he says. But at the age of 26, Brackin damaged his knee and could no longer play. He landed a job selling surveying instruments - a natural fit, as he had studied surveying at the Queensland University of Technology. Brackin was a good salesman, and within two years he had founded a company with another surveying graduate. At that stage, he took his first big risk and borrowed $40,000 to fund his start as a businessman. "the early days were like all startups," he recalls. "I remember my partner and I driving through the night to replace faulty equipment for clients."*

Other facts about AMS are:

- Founded as a separate business to sell computers to surveyors and subsequently sold the surveying instrument business.
- Started with $40,000 and three partners and was profitable within two months.
- Started with NEC and HP products.
- Offices in Perth and Melbourne by 1988. Sydney launched in 1992.
- Bought ASSCO in 1993 and continued to trade as Applied Micro Systems.

Grant Jacquier - Computer Geologist

I have been working as a contract computer geologist since January 1991, with my first contract at the Leigh Creek Coalfield. This was based on eight years experience in the mining industry which included:

- Working as a geologist on coal, hydrological and geotechnical projects.
- Geophysical well logging in coal, uranium, industrial minerals, petroleum, metals, hydrological and geotechnical environments.
- Design, installation and operation of geotechnical instruments.
- Teaching at secondary, tertiary and further education level.
- Sample preparation and testing in civil and analytical laboratories.

During my field experience, I became frustrated by the inability of computer professionals to build good integrated geological office systems. I was sure I could do better, so I returned to university to get a grounding in computer science. Now, I give the service I wanted as a geologist, it is an improvement on that given by corporate information services or general computer vendors and I still get to be a geologist every now and again. Projects completed are:

- Development of an integrated structural data collection system using, handheld data loggers, IBM compatibles, Unix workstations and a VAX mainframe.
- Telephone "Hot Line" for troubleshooting geological computer systems.
- Hydrogeological data collection and analysis using a Lotus 123 based Groundwater Database package.
- Investigation and review of fault detection using infra-red scanners.
- Initiation of quality programmes (ISO 9001, Five Star)
- Investigation, review, and specification of an integrated mine supervisory control and data acquisition (SCADA) system for an open cut coalfield including an advance warning slope management system based on telemetry.
- Design and implementation of a distributed wireline log database.

The business began in 1992 using the newsletter "Computers in Geology" and "Grant's Geological Toolkit" to promote my consulting activities. After three years of trying to be a consultant and only 1 year of work in total I was looking to break the feast-famine cycle and approached the South Australian Small Business Bureau for assistance. They provided me with the manual "How to become a successful consultant in your own field" 3rd edition by R. B. Tonge. There is a chapter on marketing and the newsletter idea seemed to match my problems and budget.

The first newsletter was titled 11AGC and discussed the geological computing highlights of the 11th Australian Geological Convention in Ballarat. Further editions were more theme oriented and for a while was the authority on Australian geological field computing. By 1998 I put the newsletter on hold and supported the newsletter of the Australian Geoscience Information Association's "The Great Australian Byte" with the publishing of the article "Enigmatic, long and skinny tables increase comprehensiveness in the ELASTIC data model for an electronic field notebook" plus smaller articles there and in the Geological Society of Australia's newsletter "The Australian Geologist". Concurrently, with the newsletter, a glossary of computing terms was being compiled. This was driven by client requests and formed the basis of "Grant's Geological Toolkit" a nebulous collection of small programs and data resources. This remains a disk give away but my intention is eventually to include some images and sell it.

Either the newsletter was effective or my luck changed and in May 1991 I began a long series of consecutive contracts with Santos Limited. Initially, my business targeted field computing and data collection but it began to drift towards more general computing issues and then computing management. In 1997, major service companies like Schlumberger Geoquest, Landmark Graphics, Western Digital and PGS were setting up data management branches in Australia. Though on a one to one basis I was just as good, probably better, these data management groups had whole corporations to call on for support. The days of being a privateer were over and I worked with AAG Technological Services to provide geo-computing consulting through the professional services arm of Applied Micro Systems (AMS). AMS was a general systems integrator but was encountering similar problems to myself with large internationals like EDS moving into South Australia and was looking for niche markets. The joint venture concept was successful, with other specialist contractors joining up, and we doubled in size every year, as well as changing names to Netbridge Communications, Netbridge People and now Affinity Contracting & Search. In that time AAG Technology Services had become the 17th largest IT company in Australia, the 79th largest private company and Affinity the most successful division.

'Computers in Geology'

On February 9 1996, the name "Computers in Geology" was registered as a company name. Principally to protect the masthead of the newsletter, this action also marks the change in character of the company from a marketing tool of a consultant into a separate entity for research and developing new ideas in software for geologists. During late 1995 and 1996 one day a week was spent on experimenting with software development tools making small programs that could expand the "Toolkit" to a marketable item. A change of direction came about with the publishing of the Autumn 1996 Computers in Geology. This was a precursor to a geo-mechanics conference held in July 1996 that clearly identified that there were significant weaknesses in available field software. After discussion, I realised that no developer or client was about to rectify the situation. The research and development of an electronic note book became the primary purpose of *Computers in Geology*. The first prototype was released at the conference in "Grant's Geological Toolkit" form. The second, Bilby version 2, was purely research and never was released. The next version started in November of 1996 with the intent of commercial application but the marketing analysis, conducted a year or so later, showed there was not sufficient demand for the product and the project was dropped as a major development push. The "Computers in Geology" business name was surrendered in 2015, but lives on in the web-site.

I was too small a business to be effective, and this left me aimless and unsure of how to proceed. Most geo-computing software developers now employed software engineering groups and were much larger concerns. At that time, even successful ones were amalgamating: like Petroleum Technology Mincom and Paradigm Geophysics; or expanding into several fields like Maptek Pty Ltd. To add to that frustration, at about the same time I was trying to firm up my ideas into a paper for the Australian Journal of Earth Science, for which the editor Tony Cockbain had given me an ultimatum to write or stop complaining about the content in that journal. I found that I couldn't really bring the framework of what I was doing daily into such a logical form. Peter Dahlhous at the University of Ballarat was very kind and called on his colleagues. Joe Leach and the staff at the Department of Geomatics, the University of Melbourne, found a National Heritage grant for me, and in late 2000 I began a research Masters with some of my ideas. Showing enormous patience, they tolerated my rough and ready manner and guided me towards more telling people how to do the work (the Grimoire of Geological Computing) rather than giving them the tools to do it, and focussing my attention on broadband technology (Geoscience Gateway) that was providing benefits to small groups of remote or independent workers, such as the Broadview Freemasons Centre used here. I never completed a suitable thesis, but this gave me the path to the developments you see listed on Web Site Features.

A.A.G.Holdings

A.A.G. holdings was an amalgamation of Applied Micro Systems and ASSCO. The development of the divisions of this group are shown in figure 1. More information was given on the Volante home pages (www.volante.com.au) but the salient facts to geo-computing were:

- Formed in 1994. Planned to go public in 1999 but eventually merged in 2000 with ,with Volante which was already listed, but by that time the group was called AAG Technologies.
- In 1997 revenues were $208 million an increase of 16%. This returned a profit increased by 27% for that year
- In 1997 it was the 22nd fastest growing private Australian company. AAG is the only IT company to remain on that list for the previous five years.

- In 1997 it had 220 permanent staff and up to 75 contractors . I was one of those contractors see [Figure 1](#) to see where I first went along with the grand scheme.
- Prion distribution technology spun off in 1994 to distribute brand name products to resellers. Expected 1998 revenue was $110 million.
- AMS continued as a corporate reseller of major brands such as HP, Compaq, Toshiba and Digital. It is a profitable and mature business with national representation and revenues of $85 million (1997).
- **NETBRIDGE** was formed in mid-1996 for system integration.
- **NETBRIDGE** PEOPLE was formed in late-1996 as a sub-unit of **NETBRIDGE** to provide contractors and recruitment.
- Quadriga was formed in 1997 as a IT consultancy for strategy to medium to large sized organisations. It attracted several experienced consultants from larger firms who brought their clients with them.

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See page 1.