

FRED MELLENERGH –WHO AM I?

If you are reading or have read one of my ESSAYS you may well be wondering, “WHO IS THIS GUY FRED”?

Does he have any credentials, and what are they? Is he an expert in something? Should I take any notice of what he says?

Well, I do have some credentials and I have a lot of diverse experience in a lot of things, but I don't consider myself an expert. In my life I have learned to learn. In fact, I just had my 85th birthday and I am still doing courses and learning. You might call me “a jack of all trades and a master of none, which is better than a master of one”.

However, I have done and achieved a lot of things in my life, and I am proud of those achievements. I have made considerable contributions to life, society, and I would like to continue to do that.

Please have a read of the 20 pages of text and you may get a glance of the type of person that I am.



I am sorry if it looks like I am bragging over my achievements. But why shouldn't I? I am proud of my achievements and a little bit of bragging does not hurt. I have been blessed that I am both handy and can master various trades, but I also have a good brain, as verified by the HR consultants. So, I should continue to put those skills to good use.

Fred Mellenbergh

*I hesitated to show my photo, but my son talked me into it.
(For better or for worse.)*

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INTRO.

I can give you a table of my work history, but I think it would be better if I tell it in a story manner. Let me present my activity history.

I am writing this now, at 85+ years old and I have been retired for 17 years. Now I can comfortably waste my time thinking, exploring, and writing. One never realizes just how busy our working life is, sharing life between job and family. There is never really enough time to do research or stop and think. Now that I am retired, I can design and ponder on all kind of things, some completely useless. I can design a revolutionary house, robust, cheap to build, using new technology and materials. In fact, almost a kit home, that any owner-builder can put together. I can write my auto biography, but who wants to read it? I may be pushing it that even my grandkids (aged in their 30's) will read it. Perhaps when they are retired themselves, they may become curious, like I did, but it was too late.

STUDIES.

I was born in the Netherlands in 1938 and was brought up in an engineering family. My father was an electrical engineer, my uncle and my younger brother mechanical engineers. I found out that several generations earlier more forefathers were Swedish. So, to continue, after high school I studied **chemical engineering**, just to be different. I had my bachelor in Amsterdam (The Netherlands) and did a Masters in Sydney. I did not take chemistry at high school, but I studied it from books before I entered Uni. Already, I was into biology (my top subject at high school) and astronomy. My father who did a tool making trade before his electrical engineering degree made me a telescope. I still remember looking at sputnik flying in the night sky. My younger year's hobbies were --- astronomy, biology (collecting and pinning insects), photography, electronics (modelled on my dad, who was a ham radio amateur and built all his equipment). I also learned how to use the lathe and milling machine. (I learned welding, plumbing and brick laying later in life.) (Just as a matter of interest I also got my "powder monkey" (explosives) license, when I was approaching 50yrs.)

Where do Chemical Engineers work? They design, manage and trouble shoot operations and processes for every-day products. They are more associated with factories rather than laboratories. If you buy it in liquid, powder, granules, tablets, chunks or in gas cylinders it usually had the input from a chemical engineer. Things like – medications - soaps and toilet preparations – fuel, petroleum & solvents – paints – plastics & rubbers - adhesives & sealants – cement – steels, aluminium & other metals – beer & wine etc - food products -- like packaged cereals & soups – dairy products – flour – sugar – fertilizers and germicides - and any other chemical substances.

I am now going to tell you my life story in brief (if I can fit it in "brief"?), because I have done a lot of things in my life. In Australia alone I have lived in some 24 different places in 62 years. I was/am a proverbial gypsy.

FIRST FOUR JOBS.

AIRFORCE.

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After University I had to do military service and I took a longer term and became an **aviation weather forecasting officer**. (rank of lieutenant). I finished top in my studies and served in the privileged command centre. This background will be of help when we look at global warming. I thoroughly enjoyed my time in the air force, even though there were some scary issues at the height of the cold war.

For example, each night shift, at about 7pm, I received a sealed envelope with a map of a part of Russia. I had to do a bombing type forecast for that area. The envelope was picked up at about 10pm and went to one of our 11 airfields, where US bomber were parked at the end of the runway, full of fuel and armed with nuclear bombs. Mind, in those days there was no instrument or GPS flying, the pilot had to be able to see the ground.

SHELL.

When discharging from the Airforce I did not have to search for a job, because I was offered a job at Shell. As part of the Uni studies, we had to do several stints of work with selected companies. At shell I was given the task of building electrical aids for students in a laboratory technique named polarography. They must have seen something in my nature to make them chase me and apparently it was my analytical problem solving that attracted their attention. I was to be trained as a **process trouble shooter**. But first things first, I received more training in chemical plant (refinery) **instrumentation, automation and control. This automation part has always been a special favourite of mine.** Whether it was a process, a packaging plant or a business system related automation. At shell I completed a design and constructed the prototype for an instrument to measure the traces of oil in refinery water effluent. This water came from the rivers and went back to the rivers. So, it could not be heavily contaminated with oil.

This is something I am very proud of in my work Career. Twice in my life I was head hunted for a job. The first one was Shell, because I did not apply, they approached me. It happened again in Australia, where I was offered a job, without applying. For a company to do that, they must have seen something in me. At that time, when they offered, I did not really see the significance, but I later in life you realise that the importance stands out.

I met my wife, Joan, in the air force and she worked at the same meteo as me. She was a sergeant plotting the weather maps that I analysed to predict the weather 1000th m into the sky. After both discharging, we got married. We lived in with a widowed lady, because housing was in short supply after Germany seriously bombed Rotterdam. The waiting list for

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independent rental was 5 years. Encouraged by our landlady, who had a son in Australia, the family (with my 6 months old son) migrated to Australia.

UNILEVER.

Within 2 weeks I got a job at Unilever (Lever brothers or Lever and Kitchen). I got the job as **process engineer, troubleshooting process problems, designing new plants and developing new or improved methods**. I also expanded my general knowledge into new areas, like time and motion study, quality control, production planning & stock control, **systems engineering (this is the science of optimising, decision making and things like queuing, another favourite area)**. Based on my experience at Shell I also became interested in predictive modelling, and I started to build my own analogue computer. I designed and put into operation Unilever Australia's first aerosol packaging plant; I dare say the first aerosol filling plant in Australia. One of the tasks I was assigned, was to check out the truth and reason for variations in the salt content in continental chicken soup. I did an extensive study and as a result we changed the mixing procedure. A while later I was invited to give a lecture on my findings at a conference of the Institute of Engineers Australia.

CONTINENTAL CARBON.

After some 5 years I changed jobs and became plant engineer at Continental Carbon in Kurnell a subsidiary of continental oil (USA) and after a year **became plant manager**. Here I learned line management, people management skills and planning skills. **I undertook studies for an MBA, covering new subjects like law, accounting, psychology, and management theory. I also produced a thesis and was awarded my master's degree in chemical engineering at Sydney University and was also entered into the Dutch register of professional engineers**. I also obtained membership of the American Institute of Chemical Engineers and the Royal Australian Chemical Institute.

I still remember that I persuaded the overseas bosses that I could do a major plant repair in 2 weeks, when they wanted me to do a much smaller task. But they gave me a go and I got it all done on time and they were pleased with me.

Although this job was a very good experience for me, I became a bit stale. I was always making the same product, admittedly various grades thereof. I missed the new ideas and inventive work.

FIFTH 20 YEAR JOB.

So, I changed jobs to K.I., a private company, with an owner with great drive and ideas. I started as **manufacturing manager** and progressed to **operations director** and eventually **part owner**. When I joined and for some 10 years the company was doing textile converting and coating, supplying the substantial Australian textile, clothing, curtain, etc industry with accessory products and my chemical background and understanding was very useful. After

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this time my work experience moved away from chemical engineering and more **into business management**. Again, I learned a lot about negotiating, purchasing, stock control, planning, financial budgeting and the team under my control ran into 80-90 people. However, when Whitlam changed the import tariffs, the Australian textile industry disappeared virtually overnight. With some foresight the company had already expanded its retail product range and became a substantial supplier of variety merchandise to the supermarkets. Packaging and distribution became a major function. I did substantial overseas buying and negotiating during this period.

Over the 20 or so odd years with this company I setup and reorganised factories and warehouses in Australia, New Zealand and Hong Kong. When the company obtained a substantial order with Kmart in the USA, (7 shipping containers worth) I was given the task to produce the stock and get the products directly into 2000 Kmart stores in the USA. We arranged an overseas bank account and with my chequebook in my pocket I was on my way to get the task done. In that period, I spend more time overseas than in Australia. Mind you I did not lose my managerial responsibility in Australia, but I had a very good, well-trained group of department heads working for me and they kept the “ship on course”.

Now a little bit of other (psychological test results) background. At one time I was tested for a job at IBM and the report showed mental ability in the top 10% of executives, and personality factors superior. Originally, in order to get the job at K.I. I again had to be tested and assessed by a management consultant. This consultant later became an outside co-director in the company, and he told me his findings of my job assessment. He said” I was the kind of candidate that had a very broad knowledge covering diverse fields, with feet firmly planted on the ground (down to earth). I would be the type of person or mentor that would create good general managers”. However, on a personal note he said, “but don’t let your enthusiasm and ideas distract you from the main goals”. {Now at 85 years old and retired I can ignore that last piece of advice.} Taking that on board, I must say I have always delivered my huge number of projects on time and on target and I am proud of that achievement. When the marketing or sales gurus came up with a wild idea, it was up to me to turn it into reality, with my rational down to earth approach. Sometimes I had to reign in the over enthusiastic sales predictions to make sure that we could afford the projects and they would not send us broke.

During the time with K.I. I also honed my IT skills. I got a first-hand lesson in how it is possible to have an outside consultant, a so-called expert, bring you frightfully close to bankruptcy. We purchased hardware and software with their “guidance”. The software kept on failing and also could not cope with our debt collection and we were running out of funds. We held the consultant to account for the software failures. I persuaded the other board members to give me a go to fix this problem. We stopped paying for the software, asked for the source code in exchange for not taking legal action. Then with the money we saved I hired a team of 3 programmers. During the day I was struggling with the limping computer setup and at the night shift I guided the freelance programming team to fix the bugs. The lesson here was do not adjust the business to the software, but the other way around. After

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about 9 months we finished up with a much superior operating system. During the rescue process I became a **very proficient computer software developer and program writer as well.** This became my **second passion in life** and I am now still working on projects of that nature.

We started servicing the supermarkets with a range of variety merchandise, not being food products, to the supermarkets. Initially we had multiple vans in the major cities calling on the chains and also independents. The latter gradually disappeared from the market scene. Our female truck drivers tidied up the store stands and refilled it with the stock. This business grew and grew, so we changed the business model. We did away with the truck, but now the service merchandisers would call at the store, tidy the stand and write an order, which we would pack and deliver directly to the store, for the merchandiser to place on the rack 2 weeks later. The next expansion phase was our investment into 100 portable data entry terminals. It was my job, like the link pin, to implement all this new technology. Due to us managing our own software, we could easily adapt it to the data terminals. We eliminated a lot of the keyboard data entry work at our base. The merchandiser would now key in the order into their terminal in the store and at night they would transmit the orders to us. We now had some 300 merchandisers all around the country. This system worked so well, we now started selling this service to other suppliers to the supermarket chains. We finished up with an extra 15 or so clients for this service.

During the early period at K.I. we sold our first house at Gynea to a developer, and this enabled us to purchase 5 acres of bushland in Kentlyn, near the Georges River and we build our own house. The family (me, wife, and the two sons (10 & 12)) undertook the complete build ourselves as an owner builder. We put in all the carpentry, tiling, electrical, plumbing, (those two you could do yourself in those days). The only tasks I had to subcontract were pouring the slab (5 truckloads) (we did all the steelwork), the roofing sheets (I could not handle the 16meter sheets) and the connection of the air conditioner (for warrantee consistency). For years prior **I had been studying house building** from books, stopping at almost every partial building site we came across, to get ideas, supported by my engineering background. So, I was well prepared.

I must say I feel very blessed. I have a good brain and I am also very handy, just like my father. I can build most things. Probably not as fast as a seasoned tradesman, but with my professional engineering background, I am also able to introduce new methods, ideas and materials.

NEW PARTNESHIP – CHANGE OF LIFE.

BULAHDELA/GLOUCESTER.

In 1984-85 my first marriage ended in a divorce. After 24 years of marriage my wife, Joan, wanted to return to Europe. After being alone for a year and joining a dating agency for a few months, I eventually joined up with my computer department supervisor, Mary. Mary and I both resigned from K.I. and as new partners, we ventured into a new life. My children were

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now adults, the eldest was married. We both sold our houses, split the money with our original partners and purchased a 700-acre rural property **to develop into a family holiday resort**. Naturally we did our homework, studied, and visited other resorts and prepared budgets. We designed the plans and had those all approved.

We used our own funds to purchase the land and create the infrastructure, and the bank was going to fund the buildings. We lived on the property in a caravan supported by 5 sheds, and I must say this was some of the best time of my life. We took our two German Shephard dogs for walks into the rain forest, it was absolutely inspiring. We had koalas, dingos, bower birds and more (including leaches and ticks) on the property. Just being a part of the natural environment and preserving it was magic.

CRUISETIME.

However, to quote a famous saying from Robert Burns “the best-laid plans of men and mice often go awry”. (meaning “No matter how carefully a project is planned, something may still go wrong”) Well that certainly happened here. When interest rates swept to 20-24 percent, the bank pulled the plug on the finance. They said it became too risky and perhaps that was true. But we finished up with a partially finished project of infrastructure, but no buildings. So, we subdivided the land and sold some of the land and bought two **30m cruisers and started a timeshare selling the project**. We sold shares in a company that owned the cruisers and that allowed the shareholder a week’s use per share. There was no problem selling the shares, but it became a great problem arranging finance. Because by now with the interest at a more acceptable level, people were rejected due to bad credit history (a legacy of the high interest rates). So, we had to stop new sales, but we carried on managing the bookings and use of the cruisers for about 7 more years, when the boats were eventually sold and customers (co shareholders) were paid back their capital.

In the meantime, we got involved in some smaller projects to keep some bread on the table. We had a business distributing bulk packs of baby nappies direct to mothers. We also did small marketing projects. One of these was the proposal to put a full-scale model space shuttle at darling harbour as an educational theatre for school classes. This was to be supported and promoted by a bank to encourage children to save early in life. An interesting and worthwhile project, but bureaucracy got in the way and spoiled it.

BACK TO KI.

Eventually we returned to Sydney, and I re-joined K.I. as a **management consultant** to reduce the very diversified business into something smaller and more manageable. The then board terminated the financial controller and general manager, and I was tasked with fixing the company. I closed down some of the operations and sold some others. Then it was a matter of tidying up the rest. The project was to take about 2-3 years but finished up taking 7 years. In the process we re-developed the original factory site and sold it as smaller factory units. Making a company smaller was an unusual project and not always that easy. It is much

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simpler to expand, but what do you do with half a factory or excess people. Very challenging and interesting! {A different take on management}

FENCING MANUFACTURER.

My (second) wife, Mary, and I have worked together for 40 years and we have been life partners for 33. We worked well together, complementing each other with our individual skills. While back in Sydney my wife and I took over a fencing contracting business that was badly managed and on the brink of going broke. In fact, the previous owner lost his house in the process. We turned it into a success. But we figured it would be more attractive to become a **fencing material wholesaler/manufacturer**. So, we came across another ailing business just down the road and we bought that. This became an even bigger success. Both of us are highly organised and my wife with her people skills made a great contribution dealing with the predominantly male (trade) customer base. We ran the wholesale business for 13 years, but, from a strategic point of view, we stopped installing, so we would not compete with our customers. The wholesaling of fencing was a low margin high volume industry. A lot of competitors were struggling with bad debts and stock losses. **We managed to become certainly the largest fencing distributor in New South Wales, if not in all Australia.** One of the key issues was very efficient stock control, which was assisted by software I designed to fit the business (not the other way around as mentioned before!). Eventually we sold the business in 2006. At that stage we operated 3 factories/warehouses with 30 employees. But unfortunately, under the new owners, the business lost its glory and status. Those new owners, coming from the corporate world, just did not understand our customer base. We were then nudging 70 years in age and we retired.

BUILDING AT CLARENCE.

During the running of the business, we also embarked on a **building project in the Blue Mountains**, in Clarence not far from Lithgow. Again, we did the build as owner builder introducing a new concept with poly styrene insulation under the slab as was used in cold stores. (the current waffle pad slabs were not yet in vogue). **We received a compliment from the council building inspector for a well-built well-managed project.** My wife did an excellent job with the interior design, and it was a beautiful (show piece) home. This was to become our retirement home, but we changed our minds. So, when the time came it took no time to sell the house and even make a respectable profit. So, we went back to Sydney and it lived in 3 more houses.

So, what do you think? I have covered a lot of ground in my life and gained more and more knowledge in more and more diverse fields. It looks like I could not make up my mind what to do. It is like “a jack of all trades, a master of none”.

Almost all my life, in the business environment, I have been the standby trouble shooter. Apparently, I have the ability to analyse the situation, recognise patterns, relate various

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events and observations and come up with a diagnoses and create a solution. It might not always be the perfect solution, but a solution that would allow us to move forward. Whether it was an equipment, process, business partner disagreement, people dispute or government stalemate, send Fred to sort it out. I even gave all the farewell and retirement speeches to departing employees.

Never mind, I enjoyed my working life experiences and each and every project taught me something of benefit. And projects it was, I have undertaken hundreds of them, some small, some large.

CHOICES IN LIFE.

You may well think why choose this or that. Most things I or we have done came as an unexpected opportunity. Often you see these situations and then it leads to making a rapid decision and jump on board. Mind you we would have done our homework beforehand and knew where we were going. Without that you will be flying blind and that is dangerous. That is how we built our house in the mountains and how we got into the fencing wholesale business. Our last house we purchased in the following way. We were looking for a single level 4-bedroom home with a spacious garage. We found one advertised and it had its first viewing on a Wednesday night and was up for auction. We made an offer on Thursday, which was rejected. Then we asked at what price would they sell and cancel the auction. The price was well within our prediction. So by Friday of that same week, we had a deal and signed the contracts, no more auctions. We would be in that house for about 7 years and as I will explain later, we considered ourselves extremely lucky that we forced this deal and bought this house. It suited our needs to a “T”.

RETIREMENT.

So here we are retired, busy as anything, and I am still doing projects around the home, writing computer applications, designing a revolutionary new house, collecting insects and thus teaching some of my younger grandkids about biodiversity. We have great grandkids now.

I am from time to time purchasing DVD courses, marketed by the great teaching company, presented by specialist

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university professors in a wide variety of subjects. I can list some of them here:

elements of jazz, masters of war, several on higher mathematics, critical decisions making, secrets of self-control, history of the philosopher Voltaire, the 5 world religions, life in the universe, sustainable living, playing chess, non-fiction writing, essay writing, robotics, thermodynamics, ecology and more. (by 2023 the number is about 80 of them)

All this keeps my brain active, and I am having a ball. When I was young (like high school age) I was like a sponge (soaking up knowledge) and that has not changed much, still soaking!

I am a typical representative of the “STEM” group. (Stem stands for Science, Technology, Engineering, Mathematics.) This is a group of professions that cover one or all of the fields mentioned in brackets. Often the fields overlap, and the members of these professions would all need to be familiar with all the above.

I started writing essays. One of them is “Is mankind standing on the edge of the abyss”? This essay explains the principles of the major sciences in a simple manner, so a layman can get a grasp of how things work or what causes what. However, what is the use of science without practical applications in real life. So, we have applied science and technology (the T in STEM).

The definition of Technology is: “The science of craft, techniques, skills or methods used in production of goods or services”. The distinction between science, engineering, mathematics and technology is not always clear and some of the techniques above are not based on science or even mathematics per se.

So, when I started writing this essay, I had to see where it leads. It is funny, in the writing courses that I studied, it is explained that very often you design a concept and rough outline of the essay. Then as you progress you find that you are being taken into another direction.

This is very similar to the following. I may be writing a program and I am stuck on a problem and I cannot get my mind around it. Then I explain the problem to Mary, who is not a scientist. She listens patiently and confirms that she understands that I have a problem. BUT YET during the explanation process I am organising my mind to make the

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explanation clearer to her, and suddenly I see a possible solution to my problem. Therefore, stepping back and explaining what you are doing to someone else, even those not familiar with the field, creates clarity and often opens a new direction. You have actually explained it to yourself and organised things in a more logical manner. That is one reason that I am writing some essays now. It will help me as much as it might help you, my readers.

I also like to explore the bigger picture and see if seemingly unrelated events are actually related. Then proceed to explain this to someone else. When you are retired you have the luxury to spend time on that.

LIFE TAKES A TURN.

Life was pleasant and comfortable. Both Mary and I had our hobbies, we were engaging with grandkids and great grandkids.

All our kids, both my sons Erik and Ron and Mary's 2 sons Mark and Adam and her daughter Leanne were all married and had kids. Mary's daughter married young, so her kids now have great grandkids for us, but her sons married later in life. We now have a situation where we have great grandkids older than some of the grandkids.

One of Mary's daughter-in-laws is a minister at the local Baptist church. So, Mary wanted to support her kids and joined the church, even though she was not sure if she was a believer or not. But she became a very active fundraiser. I was very much in support of that activity, because one of their programs was support of mothers in domestic abuse situations. To me that is a huge problem in society. A problem with difficult and limited solutions. The ex-police commissioner, who is also a member of the church is also very active in this. He maintains that this problem is on the increase all over the world. There are many theories about why, but we cannot pin it down. And effective solutions are even further away. But anyway, the church is trying their best to help those in need.

Mary also attended craft groups of the church, like scrap booking and later card making. At the same time, I took the opportunity to play table tennis with some of the other men, while Mary was at craft.

THEN ONE DAY.

When Mary came home from church, with her sister, she suddenly dropped all the work she was carrying. So now to the doctor, then the hospital for examinations. This took a while, but the diagnosis was that she had a plasmacytoma (a localised cancerous growth) in her left upper arm. The specialists decided she needed a shoulder replacement plus some radiation.

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WORSE NEWS.

However, that turned out not to be the case. The growth was actually the start of multiple myeloma, a terminal bone cancer. This was confirmed after having her, now reverse shoulder operation. (She got the ball attached to the shoulder and the cup to the arm. They also had to remove the deltoid muscle, which meant that she could of her own accord only move her arm up from 90 degeed (hanging down) to 60 degrees hanging down. Yet the shoulder joint allowed her to lift the left arm above her head, with the assistance of the right arm.

Anyway, we came under care of a specialist oncologist for this disease. He was a very nice kind man. At the early visit we asked, what is Mary's life prognosis and he replied about 3 months. But with some medication programs it could be 3, maybe 5, and some people get 10 more years, but eventually the cancer will win.

The medication program was quite complex, and Mary was very happy to let me manage it. I found it incredible, when you read the 3 pages of possible side effects, you realised that every possible kind of discomfort and problem was on the list. It was just a matter of which ones would attack you. Part of the diseases problem was that the cancer would crowd the bone marrow and the body could not make enough white blood cells, red blood cells or platelets.

This meant that Mary was classed as septic. Any temperature over 38 degrees, would mean an immediate trip to the hospital (and we made quite a few) and she would be fast tracked through emergency, for antibiotics. Mary had to have 24/7 supervision. If I had to go shopping one of her sisters or a friend would have to mind her. Also, I made a rule for the kids and visitors, no kissing or hugging plus use hand sanitizer when you enter.

Even with the medication and the multiple side effects things would slowly progress for the worse over time. My life was also parked, and it became a full time carer for Mary. It became a juggler of medication (painkillers vs laxatives), attending to sudden violent cramps, caring for the skin bruises and bleeds. After about 3 years, possibly due to the opioids she was also diagnosed with dementia.

I found the dementia harder to manage than the multiple myeloma. It is the unpredictability of the events that surprises you. For example, at one time she came from the clothes room into the bedroom, and she asked if that was her bed. All I could do is reply YES. But it flabbergasted me. I wondered how dreadful that someone could be that confused. I will never forget that event.

It was in December and Mary got another PET scan (a radioactive scan) and the specialist said that the second level of medication was no longer working. The cancer was fairly well spread through the bones. The third level of medication was available but one of the side effects was a high chance on getting a stroke. So, Mary refused to go on that medication, and I don't blame her. Who wants to have cancer, dementia and stroke on their disease list. By now Mary was getting a weekly blood transfusion, which I had to sign of for, due to her dementia. The specialist said if she requires 2 a week, the transfusions are not helping. Mary

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also became aggressive and at one time she lunged at me, and I fell over. In February 2018 she was admitted to Calvary hospital, to give us a break from each other. Now she would get instructions from someone else for a week and that might calm her down. Yet 10 days after her admission on February 25th2018, Mary died in her sleep. That is what Mary always wished for. No agony just don't wake up. She was 78 years old, and I would be 80 in 2018 and she had a good life, and we had a great partnership.

LIVING ALONE.

Although all my other activities, hobbies and projects stopped, certainly for the last 2 years of Mary's illness, I had some time to think. What was I going to do? I certainly was not looking for another relationship. I really did not want to experience to lose a partner for the third time in my life. I therefore thought, if I was going to be alone, I might as well be truly alone and see if I could handle that. Mind you I have always been independent and to some extent a loner. I never had a large number of friends, and my partner was my buddy.

At first, I thought about buying a rural property in the hinterland of Port Macquarie or even Coffs Harbour. But all my kids and step kids told me that was a bad idea. Then Erik offered me the opportunity to do whatever I wanted on his weekend getaway property in Sofala, NSW, 50km north of Bathurst. He had 60 acres of land, so plenty of room. So, I agreed that this was a better solution, and I took up his offer.

My original thought was to build and live in my prototype robust house. But to build something on someone else's land is not smart, particularly when dividing my estate when I die. Then I investigated the use of shipping containers. They are (were) plentiful, cheap and portable. So, then I created the idea to build my container city. There is no power, water or phone connection on the property, so an ideal opportunity to create an off-grid project.

MY CONTAINER CITY.

I proceeded with the development and building with the following criteria:

- The project had to be removable or portable.
- It had to be off grid for all its services.
- It had to be bush fire safe, rain, storm, and wind safe and I wanted to feel safe there by myself.
- I had to do the built as a one-man band. Now if I could do this by myself as an 80-year-old, then any younger man with a partner can do this also.
- Because I already had a lot of tools that needed to be housed in proper workshops, I had to allocate substantial space to workshops of all types.
- I wanted to see if I could live sustainably and from time to time, I gave thought to the question, "what else can I do without?"
- I had already built houses before, so I had a lot of hand tools for the task. But I was worried about my strength and moving and lifting things. So, I designed and bought a

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specially equipped truck. It was a tip truck, a tabletop and has a crane installed. I also built racks myself, so I can carry standard 8m length of steel.

- Also, on a rural property one must often do minor tasks like digging or drilling holes or trenches, level spots, move or spread soil or fill or gravel. So, I purchased a small Hitachi excavator. To get a contractor to come and do a little job for you in this quiet remote area would be a problem and you could wait for 2 to 3 months.

As the project progressed, I came up with the idea, to invite like minded people, who would like to tackle something like that themselves, to attend workshops or lectures to learn and see what can be done and at what cost.

CONTAINERS

So, what do I have now:

- I have 10 containers.
 - Two containers side by side is my home.
 - I have a steel store/welding shop and adjoining a general metal workshop. (2 containers)
 - I have a dedicated timber workshop. (even though I am building as much as possible from steel), (fire proof) you still need a surprising amount of wood work. This workshop also has a small area for paint, solvents, glues and fibreglass work.
 - The next container is my electrical workshop. Apart from electric work, I also dabble in electronics as a hobby. But that allows me to make small extra devices in the building work. A small section of this container houses the switch board, batteries and inverters to generate my own power. (Solar panels are installed a bit further up the hill.)
 - Then there is a container with shared use. One section is a small plumbing workshop/store. A second section is my laundry. A third section (about half the container) is my exercise area, where at present I have a table tennis table with a ball launcher, so I can play by myself and remain fit and alert.
 - The next is my chemical laboratory. Here I work on my insect collection. Then there are facilities to do bacterial studies. Things like sterilisation, incubation and a microscope with camera attached. The reason for this is to check the water treatment process. I collect my grey water from shower, and washing machine and process this with chlorine, ozone and with regular air bubbling through. By the way all my water also passes through 2 sets of four filters, (one for fresh potable water and one for the grey reused water) that are using progressively finer filtration media. The third thing in the lab is a research project in hydroponics cultivation. The problem is most cultivators throw their nutrient solution away after 2 weeks, thus contaminating the environment. I want to recycle the nutrient, by topping up, what the plant has taken out. I also like the idea of CO₂ enrichment of the air inside a hothouse.
 - Then there is a storage container for my memorabilia, accounts, books, office needs etc.

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- The last container is a 20foot container, which stores the uglies. Translating this, we find cement mixer, compactor, augers, scaffolding, wheel barrow, etc.

INFRASTRUCTURE

- With respect to the infrastructure, we have 4 things.
 - Electricity, comprises of solar panels, inverters, batteries and switchboard. Each container has its own circuit and this is independently monitored for amperage and usage. I have expanded this with a small (3kW) wind turbine to compensate for rainy days. There are also 2 standby generators, again to be used when the weather does not provide energy.
 - Water. I have 2 tank farms and 10 pumps. This system was again built for flexibility and also processing and purifying the water. On the hill top there are three tanks and below the container city 6 tanks. I do not discharge the toilet water, because I have a incinerating toilet, where everything gets burned to a very small amount of ash. There are also 3 collecting tanks next to some of the containers. The system runs itself, but still, I have to transfer water from tank to tank at times. I store about 49000 litres, which in theory lasts me 2 years. There are also bush fibre brigade connections in 2 locations.
 - Telephone and internet. There is a technical, scientific hitch with the containers. That is, they act like a faraday cell. No electromagnetic energy into or out of the containers. So, I cannot use my phone inside. But, I have a parabolic antenna looking at the 4G telephone tower some 12km away. It takes the signal and feeds it to the inside of the container via a cable. Then inside the container there is device with antenna that retransmits the signal inside, so my phone can receive it. With the internet, I have an antenna device (square disk) on the roof that talks to Elon musk's satellites and cables in an NBN type service. I also have a Foxtel disk for entertainment.
 - I have 6 4k HD security cameras mounted around my container city, that also have night vision and are connected to a recorder and a screen. I can monitor what is happening or enjoy looking and listening to the animals in the neighbourhood. I do not have any windows in any of the containers. In this manner the cameras fulfill that function. In fact, it is a lot better and more secure than having windows. From my recliners seat, I can see in any direction and in day or night. My screen size is 42 inch with multiple inputs and capability to see outputs from a number of sources. This screen can see my computer, my Foxtel, my DVD player, my security cameras, either individually or any combination in split screens. A great solution.

SHARING

As you can see my life is quite comfortable and I tell you, a very low cost to build. My home (double containers) plus one storage container with all things included (like fridge, microwave & other kitchen appliances, proper bathroom, computer, internet service) cost

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well below \$90,000 (but excluding the infrastructure for electricity and water). And that gives me a home, but not the land. But one can rent that, which is what I am doing.

When you think about it, that is very worthwhile for a lot of people. It offers great possibilities, so I am keen to share that.

I do not want to become rich at this stage of my life, but I am financially comfortable.

However, I do want to live a little longer, so as long as things pay for my living costs, then I am happy.

ESSAYS

The other thing that keeps me busy is to do research and write essays and, in that way, also share my knowledge. What is the point to lose all that knowledge I have gathered, which disappears when I die. I really should make an effort to share that.

HYDROPONICS

The other thing I had on my agenda was to build a fully sealed hot house, possibly with CO₂ enrichment and hydroponics nutrients. What I am trying to achieve is to grow plants on steroids in such a way that I get continuous crops, but at a very steady delivery rate. The aim is to be able to feed a small community with a steady flow of particularly vegetables.

My son is exploring breeding rabbits for meat production. Together we will be one step closer to self-sustainability.

But at this point in time there are factors, which make me put this on the back burner for a while. It is a pity, because the laboratory would have played an important role with that. But when things become clearer, we could continue with the projects.

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Oh, well, let's hang the expense. I will put in some pictures from my life.



Left one of our cruisers being lifted from the truck into the water (1988). Right living rough on the 700 acres property managing the water tanks (1986).



Frame for my first building project (1974). Right a view into the valley near Bulahdelah, with one of the slab areas visible in the front (1986).



Early welding shop (2000). And right the last home we built (1995)

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One of the first welding shops around 1999, but had to be enlarged to four times its size. To the right the reactor area in the factory where I was plant manager. (1968)



Two diversions, when we lived in the Blue Mountains, we started a shop selling photos of the mountain's scenery (a hobby of mine) at echo point in Katoomba. (1999) Right we refurbished a coffee shop for our daughter to manage in (1996) Raymond Terrace.



Our camp when we lived on the property we developed near Bulahdelah. Right my neighbour was helping pouring concrete in piers for cabins. (1986)



Some building work shots at Clarence (1996)