Massey University

Newsletter compiled by Michelle Campbell

May/June 2008



Message from the Head of Institute

Inside this months issue

Well it's nearly the end of semester 1. Some folks will be returning from sabbatical leave and others will be looking for a change of scenery at a conference. As I hinted a week or so back, conference funding is becoming more difficult but we shall try to continue to support good applications. However, the future clearly lies with more externally funded grants so please ferret these out and apply wherever possible. In that respect, it was great to have three of our four Marsden applications pass through the first stage. Congratulations to Mick Roberts, Ian Bond, and Carlo Laing (and Gaven Martin of course!). Our current bids amount to \$2.5 million but I'd like to see it top \$4m.

The main (ie different!) event since the last Newsletter was the IIMS Strategy Day at the Thomas Vaughan Centre. Colleagues who have participated in similar events (me included!) were naturally suspicious of the value of the day but the high turn out led to some valuable discussion, an awareness of the 'other' areas of IIMS, a sharing of views, and a sharper focus on some of the issues and challenges we face. Thanks to everyone who attended and made it a successful Day. Annette and I have produced a summary of the main points including the SWOT analyses and I'll be taking these to the IIMS Executive shortly before circulating them to everyone. I have also produced and received helpful feedback on an IIMS response to Defining Massey and forwarded it to Steve Maharey. The next step is to build a strategic plan to realise the key opportunities. Likelihood is it will include the PIPS (PBRF, Industry links, Postgraduate expansion and Short courses).

Several other events are worth a mention. These include Graduation, where we had a PhD success with Dr Amal Al-dujaily who was supervised by Hokyoung Ryu, Other PhD successes include Drs Weiwei Luo and Busaya Pimpachusat for whom Graeme Wake was the main supervisor.

Then there was the Albany Research Centre seminar at which four of our Centres made excellent presentations following a talk on innovation by Steve Maharey. Also on the horizon in June is a spate of schools visits and recruitment opportunities. Many thanks for those who have volunteered their time for these crucial events.

On the publicity front, we can learn a lot from Graeme Wake. Graeme is off on one of his regular whistle-stop tours shortly and we are exploiting his skills by getting Rosemary Stockdale to meet up with him in Thailand to try a bit of IIMS branding and international recruitment. Rosemary is combining this visit and others in Malaysia with a conference presentation. We have worked out a schedule with the International Office here at Albany to promote both Massey and IIMS. It will be interesting to see what we learn.

Finally, a couple of staffing changes. I know you will be as sorry as I am to hear that Yassar Patel is leaving us for higher things (more money!), and to join me in wishing him every success in his new job and thank him for the excellent support he has given us. It is also pleasing to note that we are hoping to confirm Colleen Van Es' position as a permanent rather than the temporary post that it has been up to now. I am sure everyone appreciates the stability we are currently enjoying with the excellent general staff support and it's a pleasure to record our thanks to Colleen for her presence in the 'front office' and her skill in understanding the Byzantine labyrinth of the financial system

	Message from the HoI	pg 1
	Little Barrier trip By Carlo Laing	pg 2
	Quotable Quotes & Did you know?	pg 3
	Interesting World Statistics	pg 4
	Astronomy News By Ljiljana Skuljan	pg 5 & 6
	Dates in History By Chris Scogings	pg 7 & 8
	Competition	pg 9
	Research at IIMS	pg 10
	2008 Sichuan Earth- quake By Tong Liu	pg 11 - 14
	Staff News - Mick Roberts	pg 15
١		

Something to ponder

A day without laughter is a day wasted

Charlie Chaplin



P

Little Barrier Trip

By Carlo Laing

Little Barrier Island (Hauturu) is a large pest-free island in the Hauraki Gulf, easily visible from Leigh. Few people visit as a permit is required for landing, but I was lucky enough to join a trip to the island in April. The first photo shows the island's boat house and the boulder beach upon which landings must be made. The second shows a wetapunga (or giant weta) on my father's sock. These are among the heaviest insects in the world, weighing as much as a thrush, and are only found on Little Barrier. The third photo shows a tuatara being held by the island's ranger. There are about 70 tuatara on the island, half of them free and half kept in a "tuatarium" for breeding. Despite their appearance they actually have soft skin.



The island's boat house and the boulder beach upon which landings must be made.



A wetapunga (or giant weta)



Tuatara being held by the island's ranger



Quotable Quotes

Not all those who wonder are lost.
- Anonymous

"If we knew what it was we were doing, it would not be called research, would it?"
- Albert Einstein

Everything should be made as simple as possible, but not simpler.
- Albert Einstein

The more you know, the less you need to show.
- Anonymous

You can't be truly rude until you understand good manners.
- Rita Mae Brown

Imagination is more important than knowledge.
- Albert Einstein

Education's purpose is to replace an empty mind with an open one.
- Malcolm S. Forbes

Did you Know?

One billion bicycles



There are about a billion bicycles in the world, twice as many as motorcars. Almost 400 million bicycles are in China.

Although Leonardo da Vinci drew some rough sketches of a contraption that looked like a bicycle, the Frenchman De Sivrac built the first bicycle-type vehicle in 1690. It was referred to as a hobbyhorse. However, it did not have pedals. Those were added in 1840 by a Scottish blacksmith, Kirkpatrick Macmillan, who is credited with inventing the real bicycle.

On a penny-farthing bicycle, one pedal gave the wheel one turn. A lot of pedalling was needed to get around! With the advent of gears, bicycles could move as fast as cars.

Air-filled tyres were used on bicycles before they were used on motorcars.

The bicycle as we know it today - with two wheels of the same size - looks almost exactly the same as one from 1900.

The first five-seat bicycle, the quindem, was built in 1940.

The world speed record on a bicycle is held by John Howard, Olympic Cyclist and Ironman triathlon winner from the US. In 1985 he reached 245,08 km/h (152.2 mph), cycling in the slipstream of a specially designed car.



Interesting World Statistics

The most common causes of accidental death

Deaths per year

Motor vehicle crashes	43,200
Falls	() 14,900 ()
Poisoning*	8,600
Drowning	4,000
Fires and burns	3,700
Suffocation	3,300
Firearms	1,500
Poisoning by gases	700
Medical & Surgical**	() 500
Machinery	() 350
*) Poisoning by solids ar	nd liquids

**) Medical & Surgical Complications and Misadventures

Source: www.watchmojo.com according to SoYouWanna.com
Photo: © bilderbox.com © grafikdienst.com

TOP TEN

Most Intelligent Breeds of Dogs

Brightest Dogs

Understanding of New Commands: Less than 5 repetitions

- 1. Border Collie
- 2. Poodle
- German Shepherd
- 4. Golden Retriever
- Golden Retriever
- 5. Doberman Pinscher
- Shetland Sheepdog
 Labrador Retriever
- 8. Papillon
- 9. Rottweiler
- 10. Australian Cattle Dog

Source: The Intelligence of Dogs Stanley Coren
Photo: pixelquelle.de © grafikdienst.com

TOP TEN

European Castles



Frankenstein Castle
 Mont Saint Michel

o. Mont Saint Mich

4. Glamis Castle

Lincoln Castle
 Neuschwanstein Castle

7. Chambord Castle

8. Brodick Castle

9. Prague Castle

10. Castelo de Sao Jorge

Source: www.watchmojo.com according to Travel Channel Photo: © bilderbox.com © grafikdienst.com

TOP TEN

Countries with the most airports

According to 2001 stats

- 1. United States (14,695 airports)
- 2. Brasil (3,365 airports)
- 3. Russia (2,743 airports)
- Mexico (1,852 airports)
- 5. Canada (1,419 airports)
- 6. Argentina (1,369 airports)
- Bolivia (1,109 airports)
- 8. Colombia (1,066 airports)
- 9. Paraguay (899 airports)
- 10. South Africa (740 airports)

Source: www.watchmojo.com according to Aneki.com Photo: © bilderbox.com © grafikdienst.com

The Highest Household Size

Persons per Household



Source: www.watchmojo.com according to World Bank Photo: © bilderbox.com © grafikdienst.com

Countries with the Highest Suicide Rates

Number per 100,000 inhabitants per year

	7
Lithuania	42.0
Russia	37.4 (
Belarus	35.0
Latvia	34.3 ()
Estonia	33.2
Hungary	32.1
Slovenia	30.9
Ukraine	29.4
Kazakhstan	28.7
Finland	24.3 ()

Source: www.watchmojo.com according to BBC Photo: © bilderbox.com © grafikdienst.com



Astronomy News

By Ljiljana Skuljan

From Galileo To Future Monster Telescopes Era of Great Refractors

The first optical telescopes, used by Galileo, were called refractors. They had an arrangement of two lenses in order to gather more light and focus the gathered light to build an image. This image is formed due to refraction (bending of light) which is the reason that these telescopes are called refractors or refracting telescopes (Figure 1).

First refractors were very long and very difficult to handle. During the 1680's in England, Newton built a small but powerful telescope that used a mirror, instead of lens, to collect, reflect and focus incoming light in an image. In spite of the fact that Newton's reflecting telescopes were more practical their first thin copper mirrors were not so good in collecting light. At that time refractors provided the sharpest view of the sky and still remained the most popular telescopes.

At the beginning of 18th century discoveries about light and the way glass lenses work led to innovations that solved two main problems of refractors. Astronomers understood that glass would separate, or disperse, white light into a rainbow of colors. In refracting telescopes, this effect created a problem called chromatic aberration, circles of colour surrounding bright objects. Chromatic aberration occurs because lenses bend different colours of light by different amounts. Red light bends the least and violet light bends the most, creating a focal point for each colour.

Astronomers also realized that some kinds of glass bend light more than others. They found that the combination of two lenses of different shapes and substances can make chromatic aberration disappear: the way one lens splits the colours of light is cancelled out by the way the other lens combines them.

In the late 1700s and early 1800s, Swiss and German opticians invented new techniques by adding some chemicals into the glass. They were able to create large pieces of glass that contained fewer flaws and refracted light uniformly.

Now that it had become possible to create larger glass lenses free from chromatic aberration, the new refractors began to grow again in popularity and size. As the diameter of the primary lens increased, refractors again expanded in length to accommodate this larger lens. The bigger the lens, the more light it could collect, and the fainter the object the better the telescope could see.

In the early 1800s photography was discovered opening up a new era for telescopes. Refractors were the first telescopes to use these new technologies: photography and celestial tracking. In 1840, an English-American chemist and photographer, John William Draper, focused the Moon's image on a light-sensitive photographic plate. After an exposure of 20 minutes, he had taken the first-ever photograph of the Moon. The first telescope to make photographic images of the Moon was the Harvard 38cm refractor built in 1847 (Figure 2).

Yet by the end of the 1800s, the refractors had reached their peak. The lenses had reached about 1m in diameter and could grow no more. Building the bigger lenses introduced many imperfections such as bubbles, making them unusable in telescopes. In addition larger lenses had to be so thick that they absorbed much of the light they were collecting. That meant the image was no brighter than the one produced by the smaller mirrors of reflecting telescopes, and those mirrors were both less expensive and easier to build than glass lenses.

The largest refractor ever constructed was French: an instrument had lenses of 1.25 m in diameter. It was on display at the 1900 Paris exposition. Due to the extreme focal length it was stationary.

However it turned out that the telescope was not suitable for scientific use. When the year-long exposition was over, its builders were unable to sell it. It was ultimately broken up for scrap. The lenses are still stored away at the Paris Observatory

Astronomers stopped building large refractors in the 1890s. But before then and for some time afterward, refractors were the most popular instruments around. By the mid-1800s, 40 of 48 British observatories used refractors. Even today, the Yerkes Observatory continues to use its large refractor for astronomical studies (Figure 3).

(To be continued....)

See pictures on pg 6



Figure 1. Schematic diagram of a refractor.



Figure 2. The Harvard 38 cm refractor, first telescope to make photographic images of the Moon and the bright star, Vega.

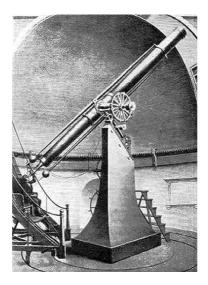


Figure 3. The largest existing refractor in the world built in 1897 at the Yerkes observatory (US). Albert Einstein stands in front of the telescope with observatory staff in 1921.

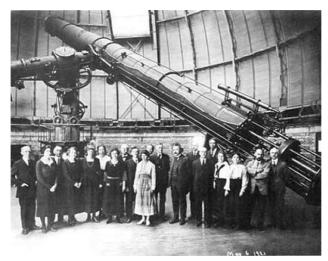


Figure 4. Belgrade Observatory 65cm refractor which I used for research during my work at the Belgrade Observatory in 1993



Dates in History

By Chris Scogings

The Destruction of the 'Kop' (May 1994)

Many of the large football venues in England used to have a terrace – a steeply sloping bank, often with railway sleepers laid across it to stand on. Here the most ardent and vocal fans would stand for the duration of the match, packed tightly together. The terraces were very popular with young working men as the tickets were much cheaper than anywhere else in the ground. In 1906 a newspaper editor in Liverpool wrote about the newly constructed terrace at the local Anfield stadium: "This huge wall of earth has been termed 'Spion Kop' and no doubt this apt name will always be used to refer to this spot." For many years the supporters on the Kop (with a capacity of 30,000) helped make Anfield famous for its atmosphere and were known as "Kopites". Many other football clubs also called their main terrace "Spion Kop" or "The Kop" and these names are still in use today. After the Hillsborough disaster in 1989 when 96 fans were crushed to death on a terrace, the Kop at Anfield was demolished in May 1994 and replaced with a new all-seater stand. The new stand (with a capacity of 12,409 and certainly less atmosphere) is still known as the Spion Kop stand. But why was Spion Kop an apt name for a "huge wall of earth"?

The Battle of Spion Kop (23rd - 24th January 1900)

In December 1899, the Boer forces surrounded the city of Ladysmith (in Natal, South Africa) and defeated the British at the Battle of Colenso. By January 1900 the British had been reinforced and were ready to advance again. The Boer lines ran along a series of hills, with the highest (1,400 feet) and most prominent being Spion Kop ("look-out hill"). During the night of 23rd January, about 1,000 men of the Lancashire Fusiliers climbed Spion Kop, drove off the Boer sentries and established a position at the top. Most Boer Generals, renowned for their caution, would have declared a British victory and retreated. But the General in charge of Spion Kop was Louis Botha (later the first prime minister of South Africa) who reacted with lightning speed. By gambling that the British would not simultaneously attack at other points, Botha thinned his lines and, within hours, produced an assault force of about 400 men (mainly from the Pretoria, Carolina and German Commandos) who stormed the hill soon after day break and forced the British back from the summit edge. At the same time, Botha brought his few Creusot and Krupp artillery pieces into action from the surrounding hills where they had a clear view of Spion Kop, but were hidden from the British guns in the plain below.

As the African midsummer heat intensified, the British soldiers found themselves on a relatively small, flat hilltop with Boer riflemen hiding among the boulders in front of them and artillery shells exploding amongst them at regular intervals. Soldiers tried to dig trenches but could only scratch the hard, rocky ground. Others piled stones in front of them to provide cover. John Atkins, a journalist in the front line with the troops, wrote "I shall always have it in my memory, that acre of massacre, that complete shambles at the top."

A competent leader would have used the British superiority in numbers (20,000 to 8,000) to attack the flanks to relieve the pressure on the hilltop in the centre but most of the troops sat idly in the plain without orders. The British steadily reinforced the hilltop position until they had over 2,000 men in a place that barely offered cover to 1,000. During the afternoon a column of uniformed men was seen climbing the hill and the Boers, assuming they were yet more British reinforcements, increased their fire. But the men in the column were neither British nor reinforcements. They were all Indians who had volunteered to join the forces of the British Empire. Undeterred when told that only men of European descent could carry arms, they asked to serve as stretcher bearers. They were led by an enthusiastic young man called Mohandas Ghandi (known later to the world as Mahatma Ghandi). His experiences as a stretcher bearer in the Boer War made Ghandi reaffirm his vow to never resort to violence. One journalist reported "I saw Mr. Ghandi and his men on many battlefields during the war. When succour was to be rendered they were there."

The carnage continued all day with many British soldiers being shot in the head as they peered over their parapets and others being blown to pieces by artillery shells that shattered into lethal fragments on the rocks. Several hundred soldiers, many badly wounded and suffering sunstroke, surrendered to the Boers. As night fell, the shattered survivors, with little ammunition and no water, retreated down the steep hillside in pitch darkness and in silence apart from the ongoing cries of the wounded. At this point one man appeared who may have saved the day for the British as he was probably the only person with a firm overall impression of the battlefield. Winston Churchill had been an army officer but had resigned to become a war correspondent as it was a more lucrative career. Having already been captured by the Boers and then escaped, he had gained a notoriety that gave him the freedom to roam around the battlefield at will. During the day, he had visited every part of the British position, including the hill top and had realised that a strong push on the flanks would win the day. He had remonstrated with senior officers who had angrily brushed the young upstart aside. Now he attempted to persuade the retreating troops to go back up the hill but it was not to be. General Sir Redvers Buller (dubbed Sir Reverse Buller by the British media) ordered a general retreat.

Now he attempted to persuade the retreating troops to go back up the hill but it was not to be. General Sir Redvers Buller (dubbed Sir Reverse Buller by the British media) ordered a general retreat.

Now he attempted to persuade the retreating troops to go back up the hill but it was not to be. General Sir Redvers Buller (dubbed Sir Reverse Buller by the British media) ordered a general retreat.

Here are numerous battles throughout history when both sides claimed victory. Spion Kop was one of the few where both sides claimed defeat.

The Boers had been unable to dislodge their enemies all day, were equally exhausted and were also short of water and ammunition. In addition, they were well aware of how vulnerable their thin lines were on the flanks. During the night, unaware of the British movements, they too vacated the hill. But early the next morning, two inquisitive Boer soldiers climbed Spion Kop again to find it occupied only by the dead and wounded. The British lost 322 dead, 563 wounded and 300 missing. The Boers lost 58 dead (mainly from the Carolina commando as they stormed the hill at the start of the battle) and 140 wounded. It was the last and greatest Boer victory of the war.

"Goodbye Dolly I must leave you, though it breaks my heart to go,

Something tells me I am needed at the front to fight the foe,

See – the soldier boys are marching and I can no longer stay,

Hark – I hear the bugle calling, goodbye Dolly Gray."

Chorus of "Goodbye Dolly Gray" - the most popular song in Britain during the Boer War.

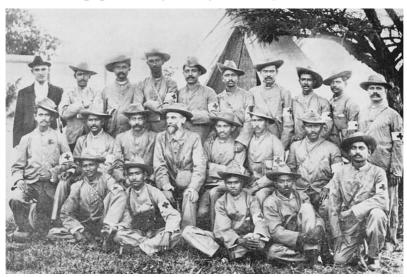
"My Sarie Marais is so ver van my hart, [My Sarie Marais is so far from my heart]

Maar ek hoop om haar weer te sien. [but I hope to see her again]

Sy het in die wyk van die Mooirivier gewoon, [she lived near the Mooi river]

Nog voor die oorlog het begin." [before the war began]

First verse of "Sarie Marais" – a popular song among the Boer forces



Members of the Indian Ambulance Corps during the Boer War.

Standing: H. Kitchen, L. Panday, R. Panday, J. Royeppen, R.K. Khan, L. Gabriel, M.K. Kotharee, E. Peters, D. Vinden, V. Madanjit. Middle Row: W. Jonathan, V. Lawrence, M.H. Nazar, Dr. L.P. Booth, M.K. Gandhi, P.K. Naidoo, M. Royeppen. Front Row: S. Shadrach, "Professor" Dhundee, S.D. Moodley, A. David, A.A. Gandhi



General Louis Botha



Boers at Spion Kop



Just for a laugh



Road signs are becoming much more accurate.

Competition

Please send your answers to Robert McKibbin

R.Mckibbin@massey.ac.nz

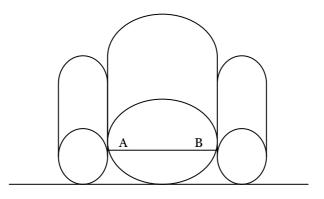
First correct answers will receive a prize

1. Determine all pairs (x, y) of reals, which satisfy the system of equations

$$x^3 + 1 - xy^2 - y^2 = 0,$$

$$y^3 + 1 - x^2y - x^2 = 0$$
.

2. **The three attached barrels.** Three big cylindrical barrels, lying on the ground, are attached by a steel cable at their contact points. A and B, such that they stay fixed in place. Knowing that the two smaller ones each have a radius of 4 meters and the biggest one has a radius of 9 meters, what is the length of the steel cable?





Research at IIMS



IIMS research outputs reported from Mar/Apr.

Journal article

Sarrafzadeh, A., Alexander, S., Dadgostar, F., Fan, C., & Bigdeli, A. (2008). How do you know that I don't understand? A look at the future of intelligent tutoring systems. Journal of Computers in Human Behavior, 24, 1342-1363.

Stockdale, R., & Stoney, S. (2007). Generating a gender balance: Making introductory information systems courses a positive experience. Australasian Journal of Information Systems, 15(1), 25-39.

Tsoularis, A. (2008). A mathematical model for predation on Batesian mimics. Journal of Biological Systems, 16, 165-174.

Journal editorial

Cowpertwait, P., Wake, G., Anderson, R.D., Edwards, H., & Shayle, Searle. (2007). Statistics and applied probability: A tribute to Jeffrey J. Hunter. *Journal of Applied Mathematics and Decision Sciences*. Volume 2007, 4 pages, Hindawi Publishing Corporation. DOI: 10.1155/2007/57619.

Book - Chapter

Stockdale, R., & Lin, C. (2008). Evaluation of the effectiveness of small and medium sized businesses web sites in a business to business context. In Muños, C., & Moraga, M., & Piattini, M. (Eds.) Handbook of Research on Web Information Systems Quality, pp 71-85, Information Science Reference, Hersey: New York, ISBN 978-159904-847-5.

Oral Presentation - Conference contribution.

Laing, C. (2008). A low-dimensional description of a heterogeneous network of coupled oscillators. *ANZIAM*, February 3-7, New South Wales, Australia.

Full paper in published proceedings

Malhotra, R., & Stockdale, R. (2008). Online communities for people with diabetes: A New Zealand perspective. *Proceedings of the 7th International Conference on Applications and Principles of Information Science*, (pp 368-371), January 28-30, Massey University, Auckland, New Zealand.

Messom, C., Sarrafzadeh, A., Gerdelan, A., Johnson, M. & Shanbehzadeh, J. (2007). Operating system virtualization to support E-learning with affective intelligent tutoring systems. *Proceedings of the 4th International Conference on Innovations in Information Technology (Innovations '07)*, (pp. 143-147). November 19-20, Dubai, UAE: Institute of Electrical and Electronics Engineers (IEEE)

Sarrafzadeh, A., Shanbehzadeh, J., Messom, C., Hosseini, H.G., & Johnson, M. (2007). Taking affect into account: Advances in Affect Sensitive E-Learning. In T. Bastiaens & S. Carliner (Eds.), *Proceedings of the World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education* (pp.6516-6523). October 15-19, Quebec, Canada: Association for the Advancement of Computing in Education (AACE).

Poster - Conference contribution.

Jones, B. (2008). Experiences fitting Gaussian graphical models to microarray data using the lasso. High Dimensional Statistics in Biology Workshop, March 31-April 4, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK.

Laing, C. (2008). A low-dimensional description of a heterogeneous network of coupled oscillators. Workshop on Multi-scale modelling of the respiratory system, February 19-22, University of Auckland, Auckland, NZ.

Oral presentations

Laing, C. (2008). Dimension reduction in complex models. College of Sciences Seminar Series, March 6, Massey University, NZ.



2008 Sichuan Earthquake

By Tong Liu

Sichuan, my home province, located in southwest China, is one of the most inaccessible provinces of China. The area of 485,000 kilometres (187,000 miles) lies in the Sichuan basin and is surrounded by the Himalayas to the west, Qinling range to the north, and mountainous areas of Yunnan to the south. While it is remote, Sichuan Province has some of the most beautiful scenery and provides home for many different ethnic groups including Tibetans, Yi, Miao, Qiang, Naxi and Han Chinese. Sichuan People are happy and hardworking.

There are many UNESCO World Heritage Sites in Sichuan.



Sichuan Giant Panda Sanctuaries



Huang Long is noted for its coloured terrace ponds





Juizhaigou Valley, with over 100 lakes connected by streams and numerous waterfalls,

This is a place of native beauty, a unique part of the world.

At 14:28 May 12, 2008, a terrible earthquake, measuring 8 on the Richter magnitude scale, struck Sichuan province. Its impact shattered more than ten provinces of China. Over 10 million people within 44 counties and cities in the Sichuan province suffered directly from this disaster.

I wake up each morning and immediately head for my laptop to get the latest news on the earthquake. Quite a few times I fell asleep holding my laptop. Every day the numbers are increasing.

By May 18, 2008, a total of 32,477 were confirmed killed, 220,109 injured

By May 19, 2008, a total of 34,073 were confirmed killed, 245,108 injured

By May 22, 2008, a total of 55,239 were confirmed killed, 281,066 injured

By May 27, 2008, a total of 67,600 were confirmed killed, 350,817 injured

By May 27, 2008, a total of 83,988 were rescued, 7,005,020 are homeless.

By May 25, 2008, 5498 children become orphans.

AIR Worldwide, a catastrophe risk modelling firm says that, China's economy will suffer from an economic loss of over 140 billion RMB.

Rescue

The first Chinese military rescue team headed for the disaster area within 14 minutes after the earthquake. 113,080 Chinese soldiers helped with rescue operations in disaster areas. Aircraft and helicopters had made 1,069 flights, and 92 military trains as well as about 110,000 military vehicles, cranes, rubber boats, portable communication devices and power generators were used in the operations, according to National Defence Ministry spokesman Hu Changming. Heavy tools could not be transported because roads were too damaged. Many rescues had to be carried out by hand. The soldiers had pulled 21,566 people both dead and alive from the debris, treated 34,051 injured people and transferred 205,370 people to safety. Seven soldiers died in the earthquake, they were buried when the massive quake happened.

Wen JiaBao, Prime Minister of China, flew to Sichuan, visited victims and set up the national earthquake aid and relief centre at the disaster area on the same day when the earthquake happened.

Tens of thousands of volunteers join the rescue operation. Many Chinese citizens overseas flew back to China to help. TV and Film Stars rushed to earthquake area to help with the quake relief. There are still thousands of people waiting to sign up to be volunteers.

Donations

After the earthquake, thousands of people wanted to help the earthquake victims. How to help and donate money for earthquake victims was the hottest topic in Chinese media after the earthquake. Almost all the Chinese would ask "Have you donated?" when they met each other after the earthquake.

In Auckland, People waited in long queues to donate money to earthquake victims at the Chinese consulate. Chinese consulate in Auckland decided to open over the weekend after the earthquake to accommodate many people who want to donate money to the victims.

At Massey University, a finance lecturer at Palmerston North and a PhD student of Engineering at Albany who is the President of Massey University Chinese Students' Association organized the donation for the earthquake victims. \$25,000 was raised for the Sichuan earthquake victim at Massey University.

I posted a message on the Internet to encourage people to organise donation for the earthquake victims at their companies or organizations immediately after the earthquake. My relatives who work for Google and Microsoft told me that Google donated \$2 million and Microsoft staff at Redmond have raised more than \$70,000 and Bill Gate's foundation has donated \$2 million to help assist in relief and rebuilding efforts.

Jackie Chan donated 10 million Yuan. Jet Li and his one foundation have raised 58.8 million Yuan for quake victims.

The Chinese government has already announced a 70 billion Yuan (\$10 billion) fund for reconstruction. The government has also told state banks to forgive debts owed by survivors of the quake who lack insurance.

Massey University Reflective Service

The Massey University Chinese Students' Association (Albany) together with Ricky Waters, campus Chaplain, held a reflective service in support of the earthquake victims in China on the evening of May 21st. Among many Chinese students, Andrea Davies, Barry McDonald, Gabrielle Graham and other staff attended the ceremony. We lit candles and placed them in the shape of a heart to mourn for victims of the Sichuan earthquake. We made paper cranes which will be sent back to China as a symbol for carrying prayers for those victims.







Millions mourn earthquake victims

At 14:28 on May 19, sirens and horns wailed in China; millions of people around the world fell silent in grief to mourn the victims of the deadly earthquake in Sichuan Province.

Yao Ming, the Houston Rockets' NBA Star, led the crowd in a moment of silence for China's victims before the Coca-Cola 600 game.

Based on the traditional Chinese funeral arrangements, the remembrance was part of a three-day national period of mourning for those who died in the earthquake.

TVs, newspapers, websites in China and overseas Chinese media were wearing black and white from May 19 - 21. The ongoing Olympic torch relay was paused for three days to honour the memory of those that lost their lives in the terrible earthquake.

I was appalled by the devastation and loss of life caused by the earthquake. I don't know a word deep enough to express my sorrow. I cried every time I saw the news, I cry every time I think about Sichuan, I went to sleep with tear in my eyes and wake up with tear in my eyes. I am writing this with my tears running down my face.

We are all brothers and sisters in the one same family of human earthlings. My thoughts and heart is with all the victims, their families and friends.

May those that have passed beyond, Find their way to heaven with ease.

May those that still suffer, Find hope and courage they need to survive.

May those who have been left behind, Find healing and comfort for mind and body.

May those who have gone to give aid and assistance Find the strength they need to rescue victims.

The Saddest Scenes







A family's lost a loved one







The mother was dead when this baby was found. Her body was distorted, covered by the rubbles of the collapsed building. She was kneeling with her two hands on the ground to support her bent upper body, as if trying to protect something underneath.

After strenuous effort, rescuers made their way through the ruins and reached her. They found a 3-4 month old baby underneath the mother. He was asleep, and covered in a small quilt. He suffered no injuries due to his mother's protection.

When a doctor checked the baby, he also found a cell phone wrapped within the quilt. There was a message on the cell phone screen that was written by his mother when she was alive: "My Dear, if you can survive please remember, I love you!".







Left: Jet Li, a movie star, is carrying supplies provided by his one foundation. Jet Li and his one foundation have raised 58.8 million Yuan for quake victims.

> Right: Jackie Chan, donated 10 million Yuan, comforts an injured earthquake survivor in a hospital in Sichuan Province's Deyang County







Left: 102 giant pandas at Baishuijiang National Nature Reserve in Gansu have gone missing since earthquake happened

Staff News

On April 12 2008 Mick Roberts' daughter Corinne Roberts married Tom Renshaw at Plantation Island, Fiji. Lyndell (Mick's partner) made the dress (and the pattern), and Tamsin Roberts (far right) was a bridesmaid. About 40 people attended. About 0.1% of the photos are attached.







