



Royal United Services Institute  
of Victoria Inc.

Promoting National Security and Defence

*A Constitutional Body of the Royal United Services Institute of Australia*

Patron: The Honourable Alex Chernov AO QC  
Governor of Victoria



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# RUSI VIC NEWSLETTER

Volume 11 Issue 2 – May 2012

Editor: Martin Holme

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## LUNCHTIME ADDRESS Defence Plaza – 661 Bourke Street

1200 – Auditorium One  
Thursday, 31 May 2012

**Jon Metrikas**

Manager – 'The Geelong Club'

## A glimpse at the Hermit Kingdom

a layman's assessment of economic and military capacity of North Korea

Jon is a member of the Geelong Branch of the Institute, a former member of the Army Reserve and a past manager of the Naval and Military Club.

He has been a regular traveller in our region, and offers some perceptive views formed during his recent visit to the Democratic Peoples' Republic of Korea.

**Time: 11.30      Tea/coffee**  
**1200              Address**

**Admission : Members and Guests : \$5.00**

For security reasons please advise the Office of your attendance and the names of your guests by email to martin.holme@defence.gov.au or phone 9282 5918 by 5pm Tuesday 27 March. These names are provided to Security to issue Access Passes. If your name is not on the list you will experience a delay in gaining access.

Remember to bring a photo ID with you.

## Cyberlinks

RUSI AUST (inc Victoria)	<a href="http://www.rusi.org.au">www.rusi.org.au</a>
RUSI Whitehall	<a href="http://www.rusi.org">www.rusi.org</a>
Dept of Defence	<a href="http://defence.gov.au">defence.gov.au</a>
Aust Strategic Policy Institute	<a href="http://www.aspi.org.au">www.aspi.org.au</a>
Australia Defence Association	<a href="http://www.ada.asn.au">www.ada.asn.au</a>
RAAF Assoc 'Williams Foundation	<a href="http://www.williamsfoundation.org.au">www.williamsfoundation.org.au</a>
Defence Reserves Association	<a href="http://www.dra.org.au">www.dra.org.au</a>
Defence Force Welfare Association	<a href="http://www.dfwa.org.au">www.dfwa.org.au</a>
Military History and Heritage Victoria	<a href="http://www.mhhv.org.au">www.mhhv.org.au</a>

## From The Secretary: Captain Martin Holme

There have been two excellent Lunchtime Addresses since the last Newsletter. Major General Jim Barry gave a forthright and hard hitting talk on ADF Reserves Capability, which drew some good questions. The April Address, given by Dr Ross McMullin, on 'The Remarkable Pompey Elliott' was both fascinating and entertaining. Those who made it to the Defence Plaza enjoyed an exceptional talk.

The May Address, advertised on the front cover of the Newsletter, to be given by Jon Metrikas, on experiences in North Korea, promises to be a most interesting occasion. Those who have heard Jon speak before on this subject predict a lively and entertaining Address – again it is at Defence Plaza in Bourke Street.

A review of Security issues at Victoria Barracks has resulted in a requirement that all future RUSI Lunchtime Addresses, be held at Defence Plaza. This is a pity as Members will no longer be able to drop into the Library, before or after these talks.

Please still try to visit the Library and Office. You will be made most welcome and there are some fascinating new books.

I ask you to note that the **June Lunchtime Address will be on Thursday 21 June at Defence Plaza and NOT on 28 June.**

### Future Program Dates

31 May Lunchtime Address – Defence Plaza

Speaker – Mr Jon Metrikas

"A glimpse at the Hermit Kingdom – a layman's assessment of the economic and military capacity of North Korea".

21 June Lunchtime Address – Defence Plaza

Speaker to be advised

26 July Lunchtime Address – Defence Plaza

Speaker to be advised

### New Members

Since our last issue we welcome the following new Member:

LTCOL J.H. Beaty OBE



### Geelong Branch News

The Branch continues to enjoy monthly Dinners at The Geelong Club, where the ambience is most suitable to the programme.

The next Dinner Meeting is to be held on Monday May 21, with the Guest Speaker Mr Robert Winther from the Heidelberg Repatriation Hospital. Dress is Lounge Suit.

On Monday June 18 the Branch will be conducting the 63rd Annual Dinner. This is a formal event with the Guest of Honour the President of RUSI Victoria, CMDR Warren Kemp RFD. Dress is Mess Dress, Black Tie or Lounge Suit with miniatures worn.

Both evenings commence at 1830 for Dinner at 1900, and the cost for each is \$35 per head with drinks available at Club prices.

Bookings are required to be made - contact Mrs Margaret Barnes 03 5243 9569.

### Donations to your Library Fund are Tax Deductible

Help to maintain the Institute's Library as the best collection in Victoria on defence and military related subjects by donating to your RUSI VIC Library Fund. The RUSI VIC Library Fund is a Deductible Gift Recipient (DGR) approved by the Australian Taxation Office, and monetary gifts to the Fund over \$2 are tax deductible by the donor.

Please make cheques to the 'RUSI VIC Inc Library Fund'. Receipts will be provided.

## From The President: Commander Warren Kemp



On St George's Day, 23 April, 2012, I made an official call on our new Vice Patron, Captain Katherine Richards, RAN, the commanding officer of HMAS Cerberus, accompanied by our Secretary, Captain Martin Holme. She received us warmly and was very interested to hear about RUSI Victoria and our activities, which vary to some extent from the other states, as she was previously a member of the United Services Institute of the ACT. I asked her to consider what assistance RUSI Victoria could offer to her and the Navy in Victoria and some possibilities were discussed, to which she is giving further consideration. In addition, she offered continuing support for our monthly address programme and closer links with the Cerberus library, which we have already started to take up by making contact with the library staff and inviting them to visit our extensive defence library. I believe that the outlook for closer ties with the Navy in this state is quite good.

Our lunchtime address on Thursday, 29 March was the last to be given at Victoria Barracks, as the security arrangements have been changed and we no longer have access to the Shedden Auditorium. Appropriately on this occasion, our distinguished member, Major General Jim Barry, AM, MBE, RFD, ED gave a most interesting and informative address on the future of the ADF Reserves: "Where to now", which should raise some useful discussion!

The lunchtime address on 26 April was held at the Defence Plaza Building, 661 Bourke Street, Melbourne, where future addresses will usually be given. On this occasion during Anzac week an eminent historian, Dr Ross McMullin gave a memorable address on "The Remarkable Pompey Elliott", with excerpts and some anecdotes to illustrate his fine biography. This was presented without the use of slides, but none were needed as he gave a great "word picture" that was complete in itself and kept the audience enthralled, so I thanked him as "the remarkable" Ross McMullin.

On 16 April I represented RUSI Victoria at a reception on board HMAS Warramunga at Station Pier, during the visit by this Anzac class frigate to Melbourne. Various aboriginal artefacts were on display and a highlight of the evening was the ceremonial "Beat Retreat" carried out by the Ship's Company, during which the lowering of the white ensign at sunset was accompanied by the

simultaneous lowering of the aboriginal flag. I was informed that this was the first occasion that this had been carried out and was in honour of the Waramangu tribe, after whom the ship had been named.

On 23 April I also represented RUSI Victoria, accompanied by my wife, Dorothy, at the annual RSL reception during Anzac week, on the invitation of Major General David McLachlan, AO, President of the Victorian Branch. This well-attended and very pleasant gathering was addressed by him and also by the Governor, the Honourable Alex Chernov, AC, QC and by the Premier of Victoria, the Honourable Ted Baillieu, MLA.

Also during Anzac week, Military History and Heritage Victoria held its inaugural conference and RUSI Victoria was represented by Vice President, Major General Mike O'Brien, CSC. One of our councillors, Colonel Marcus Fielding, is President of this new organization and we hope to have a long association together.

On Sunday, 29 April, I represented RUSI Victoria at the Anzac Day Service conducted by the Victorian Association of Jewish Ex-Servicemen and Women (VAJEX) at the Rose Hall, Mount Scopus Memorial College in Burwood. The congregation, including a number of RUSI members and visitors, witnessed an impressive ceremony and was addressed by an eminent Australian and former Judge, Professor Louis Waller, AO. In addition, a very interesting DVD regarding the former Governor General Sir Zelman Cowen was presented and a copy of this is now held in our library.

Yours Aye  
Warren



## Military History and Heritage Victoria Inc. Conference

### *In the Shadow of War – Australia 1942*

#### **kicks off the inaugural Military History and Heritage Week 2012**

A highly successful inaugural biennial MHHV conference *In the Shadow of War – Australia 1942* kicked off Military History and Heritage Week 2012. Held at the Grand Hyatt in Collins Street, Melbourne, the conference was themed on the 70th anniversary of the existential threat to Australia in 1942. Its offering of the best historian subject experts in Australia was led by Professor David Horner's key note presentation '1942: A Pivotal Year'. Other highlights of the conference included the first-hand account of the loss of HMAS Canberra in August 1942 by veteran Mackenzie Gregory and a special guest speaker from the National Institute Defense Studies in Japan.

Presentations were delivered on the social, political and strategic setting as well as details of the air, land and sea campaigns, several based on the latest research from Japanese archives. These were given by well-known individual authors and historians including from the Australian War Memorial, Australian National University, Melbourne University, and Monash University to name a few. Two books by historians from the AWM were also launched by Cambridge University Press during the conference. Conference proceedings are expected to be published by Cambridge University Press later this year.

Military History and Heritage Victoria Inc. President Colonel Marcus Fielding was pleased with the high level of support for and participation in the conference. He noted that a significant number of organisations had organised special events and activities as part of Military History and Heritage Week 2012, and said he was looking forward to an even greater level of support in 2013.



L to R: Colonel Marcus Fielding (President MHHV Inc.), Major General (Retd) Jim Barry (Patron MHHV Inc), Professor David Horner (Keynote Speaker), Lieutenant General (Retd) Mark Evans, and Mr Andrew Kilsby (Executive Officer MHHV Inc.).



**MILITARY HISTORY AND  
HERITAGE VICTORIA INC.**

## Thinking Globally – Nuclear Weapons and Climate Change

Former Prime Minister Kevin Rudd at Copenhagen pronounced Climate Change (global warming) to be 'the greatest moral challenge of our time'. In Australia, continued government action to mitigate carbon dioxide emissions thought responsible for global warming has led to the 'carbon tax' on industries identified as big emitters and will be introduced mid-year. Some economic difficulties attend the tax, as there is no agreement on a 'carbon' price by the main emitting countries: the US and China. Placing global warming into perspective, humanity could face several other existential threats including pandemics, the eruption of a super volcano, collision with a large asteroid, and a nuclear war.

On Australia Day we were reminded of the realities of nuclear non-proliferation and disarmament by former Prime Minister Malcolm Fraser as spokesman for the 'Australians for a Nuclear Convention' group, who called for Australia to show leadership in outlawing nuclear weapons. Unlike the threat from global warming, the danger posed by the continued existence of nuclear weapons is immediate and requires urgent attention.

This article gives a brief update on nuclear disarmament and non-proliferation and compares some of the threads that link the threat to humanity posed by global warming with the threat from nuclear weapons.



### Cold War Issues

The world's nuclear arsenals peaked at about 70,000 warheads in 1986, the majority being held by the Soviet Union and the United States. This was the late Cold War era of Mutually Assured Destruction, in which nuclear weapons and their delivery systems had greatly enhanced accuracy and invulnerability but were hugely expensive. It's no wonder that in the 1964 black

comedy *Dr Strangelove*, the Russians had given up the nuclear arms race and opted for the much cheaper 'doomsday machine'.

Several incidents and equipment failures did occur during the Cold War period, and it was only by luck and good judgement that a major exchange of nuclear weapons between the United States and the Soviet Union was avoided.

Studies have shown that a full scale nuclear war between the Soviet Union and the United States would have been extremely destructive to all life on Earth. As well as untold destruction of cities and the spread of radiation over large areas of the earth's surface, a *nuclear winter* lasting many years would be caused by filling the upper atmosphere with clouds of ash obscuring the sun.

Nuclear disarmament discussions between the US and Soviet Union started in 1985 under President Ronald Reagan and General Secretary Mikhail Gorbachev, and resulted in a series of disarmament and non-proliferation treaties. President Reagan's personal mission was to achieve a 'world free of nuclear weapons'. The partial dismantling of the Soviet and US nuclear arsenals, and the security of the nuclear warhead materials was achieved with a high level of cooperation.

### World Nuclear Arsenals (2010)

While overall nuclear weapon numbers have been reduced to about 22,000 today, the danger to global survival is still present. Approximate stockpile numbers in 2010 were Russia (12,000), US (9,000), France (300), China (240), UK (180), Israel (80), Pakistan (70-90), India (60-80), North Korea (< 10). Russia and the US have approximately 4,600 and 2,600 operational warheads respectively. These numbers are still far in excess of what might reasonably be required for deterrence.

### Threats to Humanity

A full scale nuclear war is not inevitable. Possession of nuclear weapons for deterrence does not mean that they will be used, although it is a reasonable assumption that if the existence of a state is in jeopardy the weapons would be used as a last resort.

For those not directly targeted in a nuclear war, or in the direct path of radioactive fallout, the main threat to humanity comes from associated climate change. This is the 'nuclear winter' effect whereby smoke particles or soot, (carbon) are carried high into the stratosphere and obscure the sun, resulting in cooling, crop failures, and the degradation of solar power generation.

Depending on the size and number of weapons used as well as the specific targets hit, a nuclear conflict could seriously impact the global climate system, producing a period of dramatic global cooling. Recent studies show that even limited regional nuclear exchanges could have climate effects similar to, but not as severe as the Cold War 'nuclear winter'. Computer models of a regional nuclear war in which each participant uses 50 Hiroshima size (15kiloton) nuclear weapons against the other's cities, say India – Pakistan, can produce an average global surface cooling of 1.25 degrees centigrade, lasting for decades. This cooling would have major implications for global food production. The outcome would be similar to the 1815 eruption of Mt Tambora, Sumbawa, Indonesia, which caused 1816 to be known as 'the Year without a Summer', and left countries in the Northern Hemisphere suffering from devastating famine and epidemic outbreaks – one of the worst natural disasters in recorded history.

In the global warming scenario there are tipping points after which major and irreversible shifts in global climate systems occur. While these points are unlikely to be reached during this century, significant climate shifts and sea level rises are anticipated that will cause agricultural failures, and flooding of low lying coastal areas that will affect millions of people. Food shortages, water scarcity and famine are likely causes of civil unrest and instability that could be the trigger for a limited nuclear war.

Global warming mitigation strategies are aimed at replacing fossil fuels by energy sources that do not emit carbon-dioxide - renewable energy sources and nuclear power.

#### Non-Proliferation and Disarmament

The probability of a limited or full-scale nuclear exchange increases with the number of weapons available and the number of entities possessing them. Initiation could be by a deliberate act of war by a state, by accident, by deliberate malfeasance of rogue military commanders, or by a terrorist or criminal organisation.

The main danger from the terrorist use of a nuclear weapon against a nuclear state may not be the initial detonation, but escalation following a hasty nuclear response.

Because of their devastating power, even a limited exchange of nuclear weapons, as well as potentially killing millions of people, will cripple or at least seriously derail the world economy for months or years, indirectly affecting the lives of large proportion of the world's population. In our globalised, integrated and interconnected world, the price of economic efficiency and prosperity is vulnerability to shocks that interrupt global supply chains which often do not have strong redundancy.

Spectacular economic growth of developing countries under globalization has been dependent on freedom of

trade, easy communication, transport and access to markets, as well as trust between participants. There is a high degree of interdependence and disruption of any part of the arrangement is likely to cause an economic loss to everyone, not just those directly involved.

President Obama has committed himself to the elimination of nuclear weapons, but like some other national leaders, he is constrained by conservative domestic political support and military/industrial vested interests that are reluctant to depart from the status quo. Here are some extracts from his acclaimed Prague speech of April 2009 – 'A World without Nuclear Weapons'

'Now, one of those issues that I'll focus on today is fundamental to the security of our nations and to the peace of the world -- that's the future of nuclear weapons in the 21st century.' .....

'So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons. I'm not naive. This goal will not be reached quickly -- perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, "Yes, we can." ' .....

While this speech was predominantly about nuclear disarmament, climate change was not forgotten with a pledge for the US to take global leadership in ending the world's dependence upon fossil fuels.

President Obama has recognised nuclear proliferation and nuclear terrorism as the greatest threats to global security. In the two years since the Prague speech there has been positive movement on most aspects of the disarmament program, but no publicly announced decommissioning of additional warheads.

The most recently publicised of these efforts has been international talks to secure nuclear material, and diplomatic activity aimed at limiting the development of nuclear weapons and their delivery systems by North Korea, and preventing the acquisition of nuclear weapons by Iran. Beyond diplomatic action and trade sanctions there is also a possibility of a military strike by Israel against Iran's uranium enrichment facilities.

#### Nuclear Power

Nuclear power provides energy security for countries not well endowed with alternative energy sources, and is also normally a prerequisite for a state to develop nuclear weapons.

There are currently about 440 reactors operating in 30 countries. The top four countries with numbers of reactors by far are: US (104), France (58), Japan (55) and Russia (32). Sixty new reactors are under construction and 150 are planned. Enthusiastic builders of new reactors are China, India and South Korea. Germany (17) and Switzerland (5) are phasing out their reactors following the 2011 Fukushima nuclear disaster, and maybe joined by Japan.

The overall number of reactors maybe in slow decline as the world's reactor fleet is ageing quickly and not enough new units are coming online.

The Olkiluoto project in Finland managed by AREVA, a French Multinational and the largest builder of nuclear reactors operating in the world, is four years behind schedule and 90 per cent over budget. Olkiluoto 3 was supposed to be the first "third generation" reactor which would pave the way for a new wave of identical reactors - safe, affordable, and delivered on time - across Europe. The delays and cost overruns have had knock-on effects in other countries.

In 2010, for the first time, total installed nuclear power capacity in the world (375 gigawatts) fell behind aggregate installed capacity (381 GW) of three specific renewables : wind turbines (193GW), bio-mass/waste-to-energy plants (65 GW), and solar power (43 GW).

Nuclear Power is a link between nuclear weapons and global warming. Some environmentalists who were vehemently opposed to nuclear power because of nuclear weapons and waste storage considerations, have now embraced it as a 'clean' energy source with no carbon-dioxide emissions. Future 'fourth generation' reactors include several alternative new technology nuclear energy systems which offer significant advances in sustainability, safety, reliability, economy, proliferation resistance and physical protection. While nuclear power is not based on a renewable resource, and uranium supplies are finite, there are plentiful reserves of thorium, which is the preferred fuel for some fourth generation reactors. Fourth generation reactor technologies are also more efficient and produce less highly radioactive nuclear waste.

There are as yet no full-size fourth generation reactors, as there are no carbon capture and storage/geosequestration installations operating on a commercial scale.

#### Trust

Nuclear Disarmament/Non-Proliferation depends on the willingness, leadership and trust of the countries with the big arsenals: the US and Russia. Similarly, constraining carbon dioxide emissions depends upon the willingness and leadership of the big emitters, the US and China.

The cap and trade, 'carbon' market beloved by economists, requires willingness and a high degree of trust to operate, and carries a twin burden of bureaucratic oversight and moral hazard – it can be very profitable to cheat. Trade in carbon permits offers boundless opportunities to brokers, bankers and criminals, including corrupt officials and states.

Both nuclear disarmament and an efficient and effective international carbon trading market require the trust of all participants. That trust is evidently insufficient at this time in both policy areas.

#### Australian Policy

Australia does not have or propose nuclear power generation, nuclear powered vessels, storage of high level nuclear waste, or nuclear weapons, although it is a leading miner and exporter of uranium.

Australia supports nuclear non-proliferation, and nuclear disarmament, with the proviso that whilst US nuclear umbrella exists, Australia is happy to reside under it. Under the leadership of Kevin Rudd, Australia made significant efforts to promote nuclear non-proliferation and nuclear disarmament by the sponsoring of the International Commission on Nuclear Non-Proliferation and Disarmament co-chaired by the former foreign ministers of Australia and Japan.

Nuclear power may become attractive in the future, especially if carbon pricing regimes result in fossil fuel fired power stations becoming uneconomic. Australia also has remote and geologically stable sites suitable for the secure storage for nuclear waste, should there be the political will to use them.

On climate change, an Australian 'carbon tax' leading to a cap and trade system to limit carbon-dioxide emissions becomes operational from 1 July 2012. Australia needs to be careful that attempts at mitigation, involving the management of carbon dioxide emission pricing, does not significantly weaken the international competitiveness of its economy and thereby reduce its ability to adapt and assist neighbouring countries.

As a minor emitter, but a major coal exporter, Australia needs to focus on adapting to global warming, including adapting to the decline in income from coal exports..

#### Conclusion

A war anywhere in the world involving nuclear weapons, like any other major disruption in world trade, communications and financial transactions is likely to have negative economic effects on Australia. Australia's commitment to nuclear disarmament and non-proliferation needs to be sustained.

If global warming is perceived as being serious and the world needs to fast-track the elimination of carbon-dioxide emissions, Australia may revisit nuclear power and the storage of high level waste in remote localities as an important contribution to world energy management.

The 21<sup>st</sup> Century has many uncertainties. As well as nuclear 'events', and climate change there are population growth, human impact and possible pandemics, as well as Rumsfeldian unknowns. To best handle these contingencies our society needs to be resilient, adaptable and have a strong economy.

**Mike Rawlinson**

## Library Notes

THE last few months have produced a healthy group of donations from our members. Major General Rosenberg has donated a rare First World War history of the Honourable Artillery Company and the history of the Daw Park Repatriation Hospital, SA. Marcus Fielding has given us a large group of useful volumes, and a significant batch of documents has arrived from the RUSI of Australia. This latter group included a good collection of RAN and RAAF lists to complement those we already have. I would also like to thank Donald Edwards for his initiative in asking if he could purchase a recent title that we were seeking for the library: it's great way to make a donation. Perhaps it will inspire others to follow his lead.

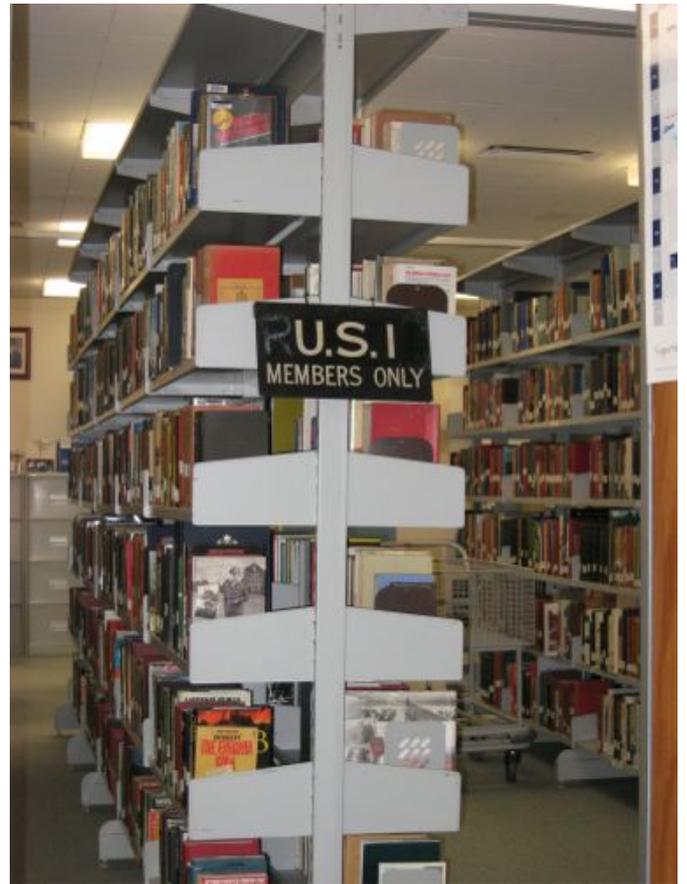
RUSI of NSW has most generously offered to host the listing of our library holdings on their internet site. (You can see it in action at <http://rusi.slimlib.com.au:81/>.) It would allow our members (and theirs) and indeed the wider public to see the combined holdings of our libraries, to use them for research and desirably to join our ranks. I hope we can bring this to fruition in the near future.

It is most likely that our holdings will move to new premises in the next month or so as part of an accommodation re-arrangement in the Barracks. It is planned that we'll move to the premises occupied by the Defence Library Service next door to us. It is hoped that this will improve our stage, accessibility and general working arrangements.

### Check Your Bookshelves

Do you have any RUSI Library Books that you have forgotten to return? Let's have them back so that others can read them.

Do you have any of your own books on defence and military related subjects that you would like others to read? Why not donate them to the RUSI Library? They will be gratefully accepted, well cared for, and made accessible for members and scholars. All donations will be acknowledged in the Newsletter.



## And the RUSI Needs YOU!

If you have e-mail and can help with any of the following tasks:

Please contact Martin Holme on 92825918

- Book Reviews
- Sub-editing the RUSI VIC Newsletter

