



EDITORIAL

One of the golden rules of public speaking is never start with an apology; I'm sure that the same applies to writing an editorial so I shall instead begin by welcoming you to the latest edition of the RSI Journal; I hope that you find much within these pages to interest you.

This is my first Journal as editor since taking over the reins from Tom Moncur. Tom devoted 10 years of his working life to being Secretary of the RSI and I am sure that you would want to join me in thanking him for his endeavours and wish him all the best for a long and happy retirement. That said, he is not planning to put his feet up just yet; as you will see from Page 55 he has volunteered to write a history of the Corps' 70 years in Germany from 1945 to 2015 and he needs your help!

And now for the apology! The gap since the last edition of the RSI Journal has been far too long; I need to do better in the future, and I will!

You will find in an article by Brigadier Mike Lithgow on Page 4 that we are exploring how we can most effectively support communication with and between RSI members in an era of multi-channel communications. Printed media, electronic media and social media abound and we need to focus our efforts where they deliver best effect. Have your say by contacting the RSI – by email, by letter, by phone or even via our LinkedIn Group! My contact details are below.

The contents page opposite shows the wide variety of articles in this issue: I am very grateful to all those who have found time to contribute. If anyone out there wants to make a contribution to the next issue then please do get in touch with me to discuss timings, content and format.

Happy reading, happy writing!

Best Wishes,

Nigel

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This issue's cover Colin Firth starring in the Railway Man, the film of Eric Lomax's autobiography of his time as a Japanese Prisoner of War and dealing with the aftermath of this trauma for the rest of his life.

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LOOSE ENDS

The story of the UK's work in **Afghanistan**

The MoD has teamed up with the Cabinet Office, the Department for International Development, Foreign & Commonwealth Office and the National Security Council to put together a joint online resource that gives a wider perspective of the UK's work in Afghanistan.

The publication, The UK's work in Afghanistan, gives a full account of our involvement in the country, starting from the events that led to the UK going to Afghanistan, and continues through to the present day, including the plans for the Armed Forces to return home.



An Afghan farmer stands with his children at his farm in Lashkar Gah [Picture: Crown copyright]

Using a combination of text, multimedia and visual sources, it explains how the UK government has worked with international partners to reduce terrorist threats and provide support to improve Afghanistan's development, healthcare and economic stability these past 13 vears.

The publication can be found on the GOV.UK website at:

https://www.gov.uk/government/ news/the-story-of-the-uks-work-inafghanistan





An Invitation from WCIT

Officers, serving or retired, who are heading to London on Tuesday 13 May 2014 to attend the Corps Dinner at the Savoy have been invited to the The Technologists' Hall, the home of the Worshipful Company of Information Technologists (WCIT), for a buffet lunch with wine.

The relationship between the Corps and WCIT stretches back more than 25 years. The Company very generously sponsor a number of prizes and awards for members of the Corps; including dinner! Places are limited, so if you the Top Student Prize on the Foreman are interest in attending then please

Course and the annual 'Through Award' for Operational Military Signalling. The most recent recipient of which was Cpl Christopher John of 16 Signal Regiment; he received the award from the Master of WCIT at one of their prestigious dinners in London last July.

The Livery Company is a thriving example of the modern livery movement at the heart of the City of London. Its work is wide and varied, centred on charity and furthering the information technology profession.

lunchtime session is an opportunity to learn about the history and aims of the livery movement in general and the work of the Company in particular; the services that they offer, and the benefits of membership.

The event starts at 12:30 for 13:00, and will be over by 14:30; giving you plenty of time to change before the of Signals (Information Systems) email andrew.parsons@ajpmi.co.uk.

The Army's University **Short Course Programme**

The aim of the Army's University Short Course Programme (USCP) is to meet the personal development and broader educational needs of Service personnel of all ranks. Courses are residential hosted by a number of different universities across the UK. All tuition, food and accommodation costs are paid for by the Army.

Courses provide a forum in which to discuss topics of relevance to Defence, and to improve and develop knowledge and expertise. Language courses and Regional Studies courses are particularly



relevant to Defence Engagement and Contingency tasks.

The USCP offers courses in Regional and Strategic Studies, Languages, Command, Leadership Management. Full details and the application form can be found on the Defence Intranet at:

Ministry of Defence | Army | Adjutant General | DG Pers | D Ed Cap | Qualifications

Take a look – you may find a course there that is just for you!



Defence Information 2014 Business Led -Information Enabled

UKCeB and Cranfield University are jointly hosting the Defence Information 2014 (DI14) Symposium at the Defence Academy, Shrivenham on 9/10 April.

The title for this year's event is 'Business Led – Information Enabled'. Keynote speakers include Brig Alan Hill (Army HQ), Air Cdre Mark Neal (MoD's Chief Technology Officer), Sir Brian Burridge (Finmeccanica and Chairman of the ADS Defence Sector Board) and Nigel Whitehead (BAE Systems and Chairman UKCeB).

Further details of the event can be found at:

www.symposiaatshrivenham.com

Are you looking for a good read?

The Defence Academy's website contains an area devoted to the Chief of the Defence Staff's Reading List. The list contains some 90+ books in six main categories - Strategy, Warfare, Context, Partners, People and Organisation. Each book has, as a minimum, a short review and some also have a short extract as well. A number of the titles have a cyber theme and a number are about command and leadership. It is well worth a browse! The list can be found at:

www.da.mod.uk/recommendedreading





RSI LinkedIn Group

Did you know that the RSI has its own reasonably certain that anyone in the group on LinkedIn? There are now more than 670 members of the group; serving and retired, regular and from signaller to major general. Why don't you join them?

The latest news about forthcoming RSI events is to be found on LinkedIn. It is a 'closed' group, where everyone checked, this means that you can be largest. Happy hunting!

group has a legitimate connection to the Corps.

reserve, officers and soldiers – ranging The RSI Group deliberately doesn't carry any postings about jobs; but if you are searching for a new job rather than news then there are also a number of other LinkedIn groups associated with the Corps - Royal Signals; Ex-Royal Corps of Signals and has to ask to join and their profile is Jimmy in Business are three of the



This year the Royal Signals Museum achieve accreditation with the Arts Council England. The Museum relies heavily on the funding it receives from the Ministry of Defence and a condition for receiving this support is that it meets the Arts Council standards.

In the past the Museum simply had to make sure that they look after everything it owns. Now they need to record everything they have, what it does or did, what condition it is in and where it is displayed or stored.

As the Museum has tens of thousands of objects in its collection, identifying and recording them is a huge task. Fortunately they have, once again, been saved by the efforts of their volunteers. Teams have

been sorting through everything we own, identifying items for disposal, photographing everything that remains and explaining the significance and history of everything that they want to keep.

The Museum Trustees and staff are immensely grateful for the vast amount of help they have received on this project from their small and enthusiastic group of volunteers and for all the other help they receive from them on a daily basis. Without the volunteers the Museum simply would not be

The Museum is always seeking to recruit new volunteers. Anyone interested in joining the volunteer team should call Dave Walker BEM on 01258 455748 to talk through the various options.



EDITOR'S NOTE

Michael Lithgow CBE joined the Royal Corps of Signals in 1977 having attended Welbeck College in 1975. He commanded a Parachute Signals troop, was second in command and subsequently Officer Commanding 264(SAS) Signal Squadron, Commanding Officer of 30th Signal Regiment and Commander Queen's Gurkha Signals before his final tour as Commander 2 (National Communications) Signal Brigade. During his career he was awarded an MBE for leading a research team designing counter-measures for IEDs, a CBE following his tour as DACOS and then ACOS J6 in PJHQ during the early years of operations in Iraq and Afghanistan and a Mention in Dispatches for his operational tour in the Balkans which culminated in the detention of indicted war criminals. Michael is a Fellow of the Institute of Engineering and Technology, Fellow of the British Computer Society, Chartered Engineer and Chartered IT Professional.

Upon leaving the Army Michael joined Gartner, a US based Research and Consultancy company that is listed on the NYSE and has revenues of \$1.6bn. He is currently a Managing Vice President Consulting, overseeing their business growth in UK, S Africa, Norway, Sweden, Denmark and Finland. He is also the Head of the Government and Security Consulting practice in Europe. Michael is Honorary Colonel of 63 (SAS) Signal Squadron, a Colonel Commandant of the Royal Corps of Signals and Chairman of the Royal Signals Institution.

On the first day that I joined 264(SAS) Signal Squadron as second in command I entered the office of CO 22 SAS determined that on day two I would commence training for selection. The CO kindly let me continue for some minutes outlining my plan of action before he gently interrupted, "I have plenty of people to leap through windows, what I need from you and the Squadron is to make sure they are the right windows." This was a sharp reminder that we in the Corps perform mission critical tasks every day of the year and make decisions that will directly influence the Armed Forces' ability to conduct its operations with maximum efficiency and effectiveness - whether this is in Helmand Province or the Somerset Levels. We carry this responsibility with us each day of our service as well as those that are part of the expanded community in Industry.

We have an AND not an OR task as a profession. We must be at the forefront of our profession with a deep understanding and the ability to predict the needs of the wide range of commanders and organisations we support. AND we must be able to operate at the front in the most demanding of environments. We are both Signallers AND soldiers. Having taking over the Chairmanship of the Royal Signals Institution I feel very privileged that I am part of a rich heritage that since 1953 has been the only professional body solely committed to fostering learning, development, debate and sharing of knowledge amongst in the Royal Corps of Signals and the wider community.

Since joining Gartner 7 years ago, I have worked with some very large and diverse organisations.

Common to every successful commercial enterprise is effective Information Systems (IS). Commercial success has become increasingly dependent upon IS with the definition of IS being much more widely interpreted beyond infrastructure, desktop services and core applications. Some of these organisations are truly huge — one has a global IT workforce in the region of 120,000 and an internal application development team of 20,000 spending \$2bn per year just on application development. Examining these organisations has reinforced a number of key criteria that we as a community need to demonstrate and these characteristics will form the agenda for my period as Chairman.

- Successful CIO teams have an instinctive feel for the business that they are supporting and where it is going. They are outward facing not inward looking. They are accepted by the Board and entrusted with defining how to enable business outcomes.
- These teams understand that technology is a vital but by itself not the only essential ingredient. They understand that they must also drive change in culture and behaviour of the business. This cannot be achieved if they do not have the confidence of the Board.
- Innovation is at the heart of success. Innovation may be about new technology but it equally applicable to using existing capability innovatively.
- They understand 'cost' and 'risk'. This should not be confused with programme 'cost' and 'risk' where there is an expectation that they are competent programme leaders. It is more about 'cost' and 'risk' relating to business outcomes.
- As a community they are open and receptive to new ideas, willing to learn, willing to collaborate and not afraid to question established practice.
- In the emerging environment of the 'internet of things' – the interconnected world – they comprehend that it is no longer possible to distinguish between OT¹ (Operational IT) and IT.
- Finally there is a need to 'protect' the business to enable it to operate successfully, securing its IP and 'assets' without inhibiting 'communication'. Ensuring that the business and customers have confidence in the organisation.

All of this is applicable to us — even if, for some, the 'dictionary' used may feel unfamiliar. Each of us at our own level is responsible for many or some of the functions that form part of the Office of the CIO — designing, acquiring, implementing, running and retiring live services ensuring coherence with the overall architecture to deliver operational impact.

The Royal Signals Institution is our professional body. It has changed throughout its existence as the role of Royal Signals itself has adapted to the new and ever increasing Defence needs. Royal Signals delivers impact on the battlefield and the 'boardroom' within the context of a joint environment and with the support of many third party suppliers without whom we would not be able to function. The Royal Signals Institution is not just concerned with 'technology'; it has equal interest in its exploitation, management, governance and impact on organisational design. It should also not be blind to the lessons of the past.

The Institution has an active calendar that encompasses workshops, seminars, presentations, networking events and the publications. An example of a 'deliverable' from the community is the article elsewhere in this issue summarising the workshop held last November to examine how we can improve and accelerate the integration of the Reserves.

The area that we do need to address is communicating with and between members of the Institution. There is no single solution but it will require a multi-channel approach. Traditionally we have used the Journal published twice per year as the formal means of sharing ideas, concepts and knowledge. As a number of you have remarked the 'twice per year' has reduced to 'once per year' and even this has been problematic. We do need both formal and informal communication but I would like to make it more dynamic, timely and inter-active. I am working with our new President, Major General Nick Pope, as well as the Secretary Nigel Harrison to examine how we can improve our accessibility and relevance. I will also use our Committee which has a cross section of members to look at options. By the end of April this year I will make available a 'white paper' with a suggested way ahead.

The Royal Signals Institution has a proud history; it has helped shape the professional development of Royal Signals, it has influenced change in the wider Army, it has adapted to the new needs of the Corps, Army and Defence and it has recognised that every individual, irrespective of who they are or where they serve, can make a valuable contribution.

I look forward to working and meeting many of you over the coming months.

Have Your Say

If you have views about the RSI Journal (i.e. style, frequency, format, size and contents) or indeed about alternative methods of communications then please send an email to the RSI Chairman via secretary@royalsignalsinstitution.co.uk or write to him c/o HQ Royal Signals, Griffin House, Blandford Camp, BLANDFORD FORUM, Dorset DT11 8RH.

¹ OT in defence would include sensors, telemetry systems, fire control.

TEAM RSI

Since the last edition of the RSI Journal was published the senior leadership of the organisation, 'Team RSI', has had a complete makeover; **Brigadier (Retired) Michael Lithgow** has taken the helm as the new Chairman of the RSI from Major General Tim Inshaw, **Brigadier Tim Carmichael** has taken over from Brigadier Steve Vickery as Vice-Chairman, and **Lieutenant Colonel (Retired) Nigel Harrison** has taken over from Colonel Tom Moncur as Secretary of the Institution.

A profile of Brigadier Lithgow can be found on Page 4, accompanying a short article by him, giving his perspective on what he hopes to achieve during his tenure as Chairman. To complete the trio of profiles of 'Team RSI' here are biographies of Brigadier Carmichael (who has also written an article for this edition of the

RSI Journal about Regular/Reserve Integration) and Lieutenant Colonel Harrison.

We take this opportunity to thank Major General Inshaw, Brigadier Vickery and Colonel Moncur all the very best in their life after RSI. Major General Tim Inshaw has now retired from the Army but has not said farewell to the Corps; he takes over as Controller of Royal Signals Trustees Ltd and therefore guardianship of the Royal Signals Benevolent Fund in April. Meanwhile, Brigadier Steve Vickery has moved to the Defence Academy as Head of the Centre for Defence Acquisition and Technology; once again he is keeping in close contact with the wider Corps as Chairman of the Royal Signals Games Club. Finally, Tom Moncur has decided to retire for the third time! Good luck for the future to all three.



BRIG TIM CARMICHAEL VICE-CHAIRMAN, RSI

Brigadier Carmichael joined the Army in 1985. His early career included tours at Regimental Duty in the United Kingdom and Germany, an in-service degree at the Royal Military College of Science and operations in Northern Ireland and the Balkans.

After a short spell as a Squadron Commander in 3rd (United Kingdom) Division Headquarters and Signal Regiment, he gained a Master's Degree in Defence Technology and then attended the French Joint Services Command and Staff Course in Paris in 1998-2000. He subsequently served in the Ministry of Defence in the Capability Area before commanding 3rd Infantry Brigade Headquarters and Signal Squadron, based in Portadown in Northern Ireland.

In 2004, on promotion to Lieutenant Colonel, he was appointed Military Assistant to the Deputy Supreme Allied Commander Europe, responsible for assisting in the force generation of all NATO forces deployed on operations or held at readiness. He was also SHAPE's command group lead for its relationship with the European Union. This was followed in 2007 by a tour as Commanding Officer of 14th Signal Regiment (Electronic Warfare), delivering Electronic Warfare and Tactical Signals Intelligence support to operations in Iraq, Afghanistan and Kosovo.

On promotion to Colonel, he deployed as Commander Joint Force Communications and Information Systems in Afghanistan for the second half of 2010. In this post he delivered the United Kingdom's information and communications services throughout Theatre, enabling both coalition and national command and control and information exploitation.

He became Colonel Information Superiority in the General Staff in January 2011, acting as Brigadier Equipment Strategy (Army) for 6 months before becoming Colonel Army Policy. He took command of 1st Signal Brigade in August 2012 on promotion to Brigadier.

He is 45 and has been married to Kate since 1989; they have two children. He is a military parachutist, French interpreter, enthusiastic all-round sportsman and painfully unaccomplished guitarist.



LT COL (RETD) NIGEL HARRISON MBE SECRETARY, RSI

Nigel Harrison joined the Army in 1978 after three years at Sheffield University; studying computing at a time when universities were lucky to have a single mainframe computer! Following an initial tour in Germany he returned to UK as Regimental Signals Officer of 1st Bn Queens Own Highlanders which included a tour in the Falkland Islands in 1982. This was followed in 1983 by a tour in Beirut with 30th Signal Regiment as Force Signals Officer, British Forces Lebanon and subsequently in 1986 as Force Signals Officer, British Forces Belize.

After a tour in Cyprus as Adjutant, 9th Signal Regiment he returned to Blandford to complete a 27-month Telecommunications Engineering Management Course before being promoted to major and posted to MoD in 1989 as SO2 Satcom and Trunk Systems working for SOinC(A). He soon also became the desk officer for both the post-Cold War 'Options for Change' programme and also the engineering preparations for Op GRANBY, the first Gulf War; for which he was awarded the MBE.

Escape from the MoD in 1992 came in the form of a posting to 14th Signal Regiment (Electronic Warfare) to command the Army's armoured EW squadron. But he was 're-captured' in 1994 and returned to MoD as the acting SO1 EW in Defence Intelligence. This was followed by another tour in Blandford in the worlds of Force Development and 'Command & Control Warfare'.

A second posting to Cyprus and to 9th Signal Regiment beckoned in 1996 before he joined the British Defence Staff in Washington as the SO1 Intelligence & Electronic Warfare. Amongst the more unusual tasks during this tour was liaison with the White House, the FBI, NSA

and others about inter-governmental exercises on what was by then being called 'Information Warfare'.

In 1999 he assumed command of 38th Signal Regiment where he supported 2nd Signal Brigade in its National Communications role. The highlight of the tour was seeing the Regiment granted the Freedom of the City of Sheffield; the first military unit to be so honoured.

A tour in the Defence Communications Services Agency followed, initially as Head of In-Service Operations before being tasked to form the Project SYNERGY Team in early 2003 to commercialise the CIS provision in Southern Iraq, Baghdad and elsewhere in the Gulf during the early stages of Op TELIC.

After some 18 months of high-intensity programme and project management in UK and Iraq he found respite in the form of an opportunity to spend a year creating a unified DCSA organisation to support the Permanent Joint Operating Bases in Cyprus, Gibraltar, the Falklands, Ascension Island and the British Indian Ocean Territory. Multiple working visits to each location were required to finalise the arrangements for the new 600-strong support organisation.

MoD beckoned again in 2005 to head up the study into the Terms and Conditions of Service in Northern Ireland at the end of op BANNER. Coming up with a new package of allowances that was acceptable to the Army was the easy part; steering the recommendations through MoD and the Treasury was the challenge!

Reward for success came in the form of a move from the MoD's 6th Floor to the 4th Floor to become deputy head of the Network Enabled Capability Programme Office and an advisor to the Defence CIO on Information Management and Governance – including establishing the suite of Information Management courses at the Defence Academy.

Whitehall retained its grip on him to the last; his final tour in the Army was a three-year secondment from the MoD to the Cabinet Office to help establish the Government's Office of Cyber Security and work on delivery of the UK National Cyber Security Programme. During this tour he found himself working very closely with ministers and senior officials, drafting ministerial speeches, briefing industry and the media and even taking the minutes of 'COBRA' meetings; a long way from his first tour as a troop commander in Germany.

Since retiring from the Army in 2012 he has remained on the Board of Directors of Cyber Security Challenge (UK), a national initiative to help nurture cyber security talent which he helped found in 2010. Additionally he is a trustee of the AFCEA Academic Trust.

When not working on RSI, AFCEA or Cyber Security Challenge business he is studying for an MSc in Information Security at Royal Holloway, University of London. He is a Fellow of the Chartered Management Institute, the Institute of Engineering and Technology and the British Computer Society.



EDITOR'S NOTE

Colonel Graham Norton was commissioned into the Corps in 1985 and with the exception of a tour in Blandford as an Instructor his early career was spent in Germany, in 20th Armoured Brigade Headquarters and Signal Squadron and 4th Armoured Division Headquarters and Signal Regiment.

He then served as an SO3 in the Defence Intelligence Staff, and briefly as an SO2 in HQ LAND prior to attending the first Joint Advanced Command and Staff Course. This was followed by a tour as SO2 ISTAR in MoD, before once again returning to Germany to command 4th Armoured Brigade Headquarters and Signal Squadron; a tour that included an operational deployment to Bosnia. In 2001 he joined HQ CENTCOM's OEF Headquarters as an SO1 before returning once more to Germany to command 7th Signal Regiment.

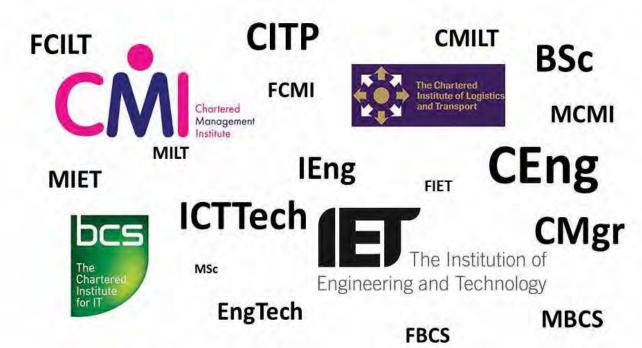
Post-command, he became the SO1 responsible for the development of army discipline policy before yet again returning to Germany, this time on promotion as ACOS G6 in the Allied Rapid Reaction Corps. This three year tour included an operational deployment to Afghanistan as the Commander of the UK's Joint Force CIS HQ. Most recently he completed a tour as the British Liaison Officer to the US Army Combined Arms Centre at Fort Leavenworth, Kansas. He is a lifelong, if somewhat sad, supporter of Leeds United Football Club.

I am frequently struck by how different the Army and the Corps looks from the one that started the recent campaigns. Most notably from a signalling perspective is the significantly increased complexity of our "core" and Corps business. From Infantry Support Teams upwards, signalling professionals are required to deliver the richness of information required by commanders, and across Defence the J6 world is less and less the purview of the gifted amateur.

As the Army moves towards its New Employment Model with an increased emphasis on key skills and qualifications, the ability to demonstrate recognised competencies will

become a matter of routine. The Corps is already well positioned to do this and we now have a framework to ensure that all of our Officers, Warrant Officers and Soldiers are able to gain relevant and transferable accreditation regardless of their technical background. For most this does not involve significant additional time or work, rather simply ensuring that the skills they already have are recognised.

The following update by David Barlow outlines the full breadth and scope of the offers currently available to the Corps, and I strongly encourage all those who can to embrace "An Opportunity for Professionalisation".



Professionalisation Update

EDITOR'S NOTE

David Barlow is the lead for Whole Life Development in Headquarters Royal Signals and consequently the focal point for accreditation and professional development for all serving officers and soldiers in the Corps.



He has regular dealings on the Corps' behalf with related professional institutions (such as the IET, BCS, CILT(UK) and CMI) and academic institutions (such as the University of Lincoln). He also oversees the administration of WCIT employment briefings, facilitates the Late Entry Commissioning Board and manages Adventure Training grants from Corps Funds.

In a previous life he served 22 years in the Fleet Air Arm as an engineer, predominantly on rotary wing aircraft but also on fixed wing aircraft. He completed his service as a Flight Maintainer which involves flying 'broken' aircraft to certify them as serviceable! David rose to the rank of Chief Petty Officer serving on numerous ships, air stations and was fortunate to visit the USSR, USA, Canada and the Caribbean, as well as several excursions in the Mediterranean and across the length and breadth of Europe.

David left the Royal Navy in 2002 and bounced through temporary jobs whilst providing nanny cover for his children before entering the civil service in 2004 with the RAC at Bovington. In 2008 he transferred to Blandford, initially with HQ SOinC(A) and then Headquarters Royal Signals in 2012.

My remit from the Corps Colonel is simple ... identify and exploit opportunities for the professionalism of Royal Signals officers and soldiers through the recognition of the training, skills, experience and competences that they accrue throughout their service career.

There are many benefits to developing formally recognised engineering professionals within the Corps, some of which are: identifying engineering competence to internationally recognised standards; confirming commitment to engineering development; investment in the individual as a responsible professional employer; recognition of engineering standards by those outside of the Corps; greater credibility when dealing with industry and better career opportunities when in competition with other services for key military appointments.

However, with the diverse educational backgrounds and the varied technical abilities of its personnel, the Corps is unlikely to be able to identify a single Professional Institution with which to 'accredit' all its personnel.

Career Streams

In broad terms, the Corps recognises four distinct career streams for its officers and soldiers: engineers, generalist ICS practitioners, logistics practitioners and non-technical leaders.

 Engineers. These personnel should aspire to Chartered Engineer status with the Institute of Engineering and Technology (IET). The IET is already a Professional Institution with strong links to the Army and the Corps. Corps Supervisors, TOTs and DE engineering officers (CISM graduates for example) should follow this route.

- Generalist ICS Practitioners. The majority of the Corps' personnel should aim for Chartered membership of the British Computer Society (BCS).
- Logistics Practitioners. These personnel should aspire to Chartered status with Chartered Institute Logistics & Transport (UK) (CILT(UK)).
- Non-technical Leaders. Those officers and warrant officers in this career stream should aim to achieve Chartered Manager status with the Chartered Management Institute (CMI).

Current Opportunities

Headquarters Royal Signals has identified four Professional Institutions that it believes offer the most comprehensive suite of opportunities for Professional Membership and Registration to all Royal Signals personnel and are seen as best practice within their own specialist field:

- Institute of Engineering & Technology (IET). In July 2011 the Corps entered into a Special Registration Agreement (SRA) with the IET which provides a guideline to Professional Registration at the Chartered Engineer (CEng), Incorporated Engineer (IEng), Information Communication Technology Technician (ICTTech) and Engineering Technician (EngTech) levels. This SRA is overseen by a small voluntary panel of serving officers and warrant officers who guide applicants through the registration process and assess applications on behalf of the IET. To date some sixty three officers and soldiers from the Corps have benefitted from the SRA; forty Chartered Engineers, twelve Incorporated Engineers and eleven ICT Technicians.
- British Computer Society (BCS). An initiative to offer Royal Signals officers and soldiers a dedicated route to professional membership & registration with the BCS is currently on hold due to a review of the assurance of the Institution by the Engineering Council (UK). Hopefully the way ahead will become clear in the coming months. In the meantime, officers and soldiers with recognised experience and qualifications should continue to apply direct to the BCS for membership (MBCS), fellowship (FBCS) and Chartered IT Professional (CITP) status.
- Chartered Institute Logistics & Transport (UK) (CILT(UK)). Headquarters Royal Signals is currently in advanced negotiation with the CILT(UK) to offer the opportunity of Professional Membership and Registration with the CILT(UK). It is likely that a Royal Signals Membership Election Panel will be formed having CILT(UK) and Corps members to oversee membership applications in a similar manner to the IET's SRA panel (see above). It is also likely that an Apprentice Affiliate grade will be approved. More information will be circulated as it becomes available.

 Chartered Management Institute (CMI). The CMI route to professional membership and registration is available to both technical and non technical personnel of all ranks. Membership and Registration level is dependent on rank and years of Service. The CMI offer an MoD-wide fast-track membership scheme, the details of which can be foundinthe 2008 DIN07-045 and on the CMI website.

Apprenticeships

The relevant Royal Signals apprenticeship programmes have already been mapped to Professional Registration with the IET at the ICTTech & EngTech levels. Headquarters Royal Signals are currently mapping the Logistics Operator Apprenticeship to Membership level of the CILT(UK).

Academic Qualifications

Gaining academic qualifications for military courses has been a well-trodden path for many years through the award of City & Guilds, NVQs, HNCs/HNDs and more recently a BSc for the Foreman of Signals course and an MSc for the Communications & Information Systems Management course.

In July 2013 a collaboration between the Corps and the University of Lincoln came to fruition with the launch of a BSc in Communications Management; a work-based distance learning programme for young officers who have completed their Troop Commanders Course. The degree recognises, through formal mapping, the efforts and attainments of the individual during their time at RMAS and at Blandford; the balance of the degree is then delivered to the YO through distance learning packages during their first couple of tours at Regimental Duty. Much of the cost of this degree to the individual is then absorbed by the MoD's Enhanced Learning Credits scheme.

In the last few months, eligibility for this new BSc in Communications Management has been extended to Yeoman of Signals and Yeoman of Signals (EW).

More Information

More information on these opportunities and the through life professional, career and educational options available to serving Royal Signals personnel can be found on the HQ Royal Signals Intranet site at: Ministry of Defence | Army | Adjutant General | DG Pers | D Pers Ops | Corps Cols | Col RSignals.

Alternatively you can contact David Barlow directly by email him at rsignalshq-wld-c2@ mod.uk. or by phone on 01258 482098.

The IET 'Special' Scheme

By Lt Col Laurence Fowkes CEng MIET

In 2011, the Corps formalised an arrangement for streamlined professional recognition with the IET; this is mentioned briefly on Page 10 in David Barlow's Professionalisation Update. Whilst some readers will already be aware of this Special Registration Agreement (SRA), after over two years in operation, this is a good opportunity for an update on why it remains important and what has been achieved.

A SRA is established in recognition of a credible engineering career of education/training, and practical experience. The Corps' career routes from Phase 2 training, including the ICT Apprenticeship, and Tp Commander Course upwards have been mapped and evidenced. This provides defined points in the career when an individual could be expected to be eligible to obtain the ICT Technician (ICT Tech), Incorporated Engineer (IEng) or Chartered Engineer (CEng) standards.

An SRA with the IET is important. The IET is the largest engineering institution in the World and its ICT Tech/IEng/CEng awards are highly regarded. Although the Engineering Council has a fixed standard for these awards, gaining them with the IET has significance in the military and wider industry.

Before the SRA scheme was established, the numbers of Corps members gaining IEng/CEng was in the region of 3-5 per year. Since 2011 the Corps has had over 60 successfully gain one of the standards, with only 2 failures. In 2013 the Corps had its first Foreman of Signals achieving the CEng award. The Corps serving population with CEng/IEng and ICT Tech is now healthy and continues to increase.

The Corps provides advice on suitability and the evidence necessary to gain professional recognition. This is carried out to a set battle rhythm of reviewing the applications and assessing suitability to ensure an application has the best chance of success.

It is finally worth mentioning that the Corps has a valuable role influencing policy between Defence and the Professional Engineering Institutions (PEI). Brigadier Steve Vickery sits on the Defence Steering Group and Lieutenant Colonel Laurence Fowkes is a member of the Defence Committee. These groups develop initiatives between the PEIs and Defence and manage the annual Churchill Medal award and annual PEI Defence Lecture.

FORECAST OF EVENTS

Thursday 20 March - RSI Blandford Lecture

Timings: 18:00 (for 18:45) – 20:30

Venue: Princess Mary Hall, Blandford Camp

Subject: "Secure Information Sharing

- Making Multi-Level Security a Reality"

Speaker: Mr Robin King, CEO Deep-Secure Ltd

Tuesday 1 April - First Tuesday Social

Timings: 18:00 – 21:00

Venue: Central London (notified upon booking)

Thursday 24 April – RSI Workshop (invitation only)

Timings: 09:30 (for 10:00) – 16:00 Venue: Lincoln's Inn, London

Subject: "Fitting the jigsaw pieces together better"

Thursday 12 June - RSI Blandford Lecture

Timings: 18:00 (for 18:45) – 20:30

Venue: Princess Mary Hall, Blandford Camp Subject: "Defence Core Network Services

Programme Update"

Speaker: Cdre Jamie Hay, Head ISS Programmes

Wednesday 25 June – Corps Week Dinner

Timings: 19:00 – 23:00

Venue: HQ Mess, Blandford Camp Guests: All Corps Conference attendees

Thursday 10 July – RSI London Seminar (& Reception)

Timings: 09:30 (for 10:00) – 17:00/20:00

Venue: HQS Wellington, London

Subject: tbc

Tuesday 2 September – First Tuesday Social

Timings: 18:00 – 21:00

Venue: Central London (notified upon booking)

Thursday 16 October - RSI Blandford Lecture

Timings: 18:00 (for 18:45) – 20:30

Venue: Princess Mary Hall, Blandford Camp

Subject: tbc

Thursday 20 November - RSI London Lecture & Dinner

Timings: 18:45 (for 19:30) – 23:00 Venue: IoD, 116 Pall Mall, London

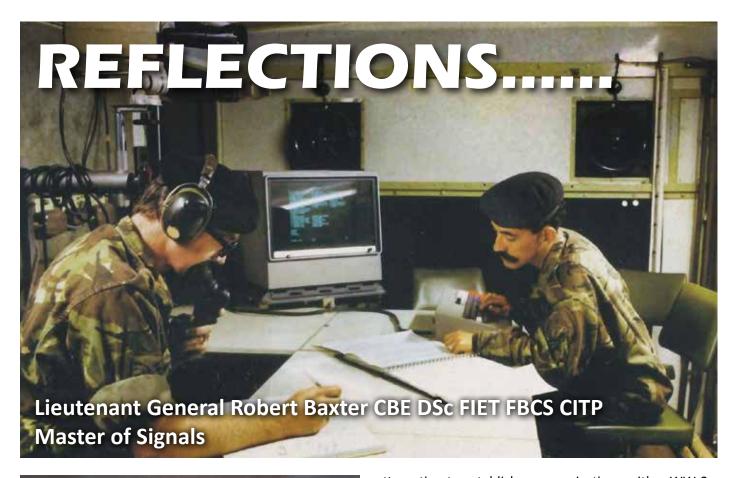
Speaker: tbc

Tuesday 2 December - First Tuesday Social

Timings: 18:00 – 21:00

Venue: Central London (notified upon booking)

For more details of any of these events contact the RSI Secretary via secretary@royalsignalsinstitution.co.uk





As I rapidly approach my 'sell-by date' as Master of Signals, I thought that I might indulge myself and reflect on what lessons I might draw from almost half a century involved with 'signalling' in some form or other. I have taken the liberty of including time in the Combined Cadet Force

attempting to establish communications with a WW 2 - era 19 Set and an exotic array of antennae. These early formative years were reinforced at Sandhurst by always seeming to end up carrying the radio and spare batteries when not in a command appointment – I did appreciate that the radio operator at least had a clue as to what was going on and the radio was marginally lighter than the Carl Gustav recoilless rifle – Size, Weight and Power were issues then and sadly remain a challenge today. As in any exercise in reflection and lessons learned there are the ever present dangers of 'rose tinted spectacles' and selective use of fact to justify something after the event. Be warned!

THE COLD WAR

An early posting to 4th Guards Armoured Brigade, other than early morning riding lessons for the disbandment parade (I was deemed fit only to show guests to their seats in the end) led to an encounter with the trials for the Wavell Command and Control Information System. With the assurance (and ignorance) of youth, I took it for granted that there would be no difficulty in taking mid-70s commercial Information Technology and putting it into an Armoured Fighting Vehicle. The hard drive was mounted in a Landrover and everything connected together with what was probably a 16kbs voice channel. The object of the exercise was to automate situational awareness in the 1st British Corps operational area. The Division Commander was Sir Frank Kitson and to the best of my recollection the trial, as it was, was judged a great success.

Let us fast forward a decade to the mid-80s when I encountered Wavell again as the Brigade Major (Chief of Staff) of 33 Armoured Brigade. Wavell and Ptarmigan



were 'rolled out' at the same time with a strong Lt Col-led team – remember that this change largely impacted in a major way on R SIGNALS units. A major joined the staff for all the routine work up exercises including data base preparation to help us get the most out of the applications. As a slight aside the word applications might be seen as an exaggeration but there was situational awareness, logistic states, SITREPS, INTREPS, LOCSTATS, task organisation, orders formats, and even an early form of 'chat', most linked to a database that was in broad terms replicated across the Corps area.

As part of the Corps Reserve it was handy when planning the endless variety of contingencies to know what real estate was occupied without pestering other HQ that were worrying about the contact battle. There was support at the highest level with the Corps Commander using the Headquarters grid references on the replicated database for his visits and heaven help the Brigade or Division Commander who was not where it was recorded on Wavell. Some HQs, and I like to think that 33 Brigade was one of them, got on with it – there was at least something in it for us – but others found the chore of data entry just that – the keyboard made an excellent mat for your coffee mug and strengthened the muscles of ones' fingers.

It sounds like it all worked out rather well, but by the time I was commanding the Iron Division Signal Regiment in the early-90s, Wavell vehicles were being placed in light care and preservation and shortly thereafter declared obsolete. Why did this story, which started well in the mid-70s, end with a whimper? The processor units and bubble memory were unreliable, someone, possibly with a misguided sense of standardisation and re-use, specified the same equipment as intended for the ill-fated Nimrod Airborne Early Warning variant and MILSPEC ruled, hence a keyboard and a plasma screen that were challenging for the eyesight. Not only that but we had a classic 10-year procurement process and, as seems to be

traditional with CIS equipment and vehicles, there was an issue with the Wavell tracked armoured processor vehicle which weighed in some 25% heavier than the other variants and looked as though it was perpetually attempting a 'wheelie'. Remember the decade previously the processor vehicle was a long wheel base Landover?!

Whilst Wavell was having its troubles, technology had inevitably moved on in the form of the GRID lap top computer with a fairly normal keyboard and basic office automation. Long and wordy operation orders became the order of the day sent point to point from HQ to HQ. Situational awareness declined, a trend reinforced by the use of Ptarmigan Single Channel Radio Access (SCRA). I always suspected that it was much less embarrassing to engage in a one to one 'telephone' conversation rather than the more 'public' arena of the radio net. An EMCON policy that allowed the use of Ptarmigan including SCRA but shut down radio nets did not help. It has to be admitted that conference calls provided some mitigation at brigade level and above but not so satisfactory from brigade to battle group.



What had been lost in this process was the ability of applications to access or view a common set of underlying data and of course the ability to visualise a situation that was simply not there! The real pity is that we 'binned' Wavell rather than evolving it as the concept was probably the right one. Perhaps a better answer might have been a greater use of commercially available technology, as was the case for the 70s version, and software to visualise the underlying data. The end result was that most of the British Army languished in the digital dark ages for a decade or more.

WIDE HORIZON AND 'HARDENING AND REDUCING'

Concurrent to the story I have just related were a series of key trials. The first of which, WIDE HORIZON, aimed to remove the brigade level of command and form larger units. The technology of the time did not

help with secure C42/C45 providing the command nets and with trunk communications, BRUIN, operating just down to Division level now that brigades had been removed. Getting any performance out of the C42/C45 was something of an art form, not least getting the encryption to work which relied on a pin and punched card system. In due course the trial was deemed not to have worked and the Task Force introduced to bridge the gap between units and division. It must be said that this did have the effect of shifting a squadron sized unit of over 200 to a very hard working troop of around 80. As time went on brigades came back into vogue and the troops grew to rather more substantial squadrons supporting more substantial staffs.



Following on from this came 'Hardening and Reducing' which removed remoted radio villages and comfortable box bodied staff complexes, replacing them with 430 series tracked armoured vehicles where the staff, signallers and radios were all collocated. A key feature was that the vehicles were standardised and could readily be reconfigured and connected together. It was in this sort of HQ that I spent my time as a Chief of Staff. We were able to move at least a couple of times a day or operate at the short halt and assuming the Signal Squadron was doing its job not only could the Commander remain in touch with the situation when on the move but so could I together with key staff. As an aside the maligned Wavell was a real boon enabling change of command.

The standardisation came into its own during the First Gulf War when the then Major Tim Inshaw's armoured brigade signal squadron was able to re role relatively painlessly as a division alternate HQ. I think that the lesson to draw here is not what was done but rather how it was done. The work fell to a divisional HQ and signal regiment led by no other than the then Lt Col Sam Cowan (who as Brig Sam Cowan, effectively Comd 1st Signal Brigade, led the introduction into service of Ptarmigan and Wavell 2). Experimentation, and concept development, most especially in command and control, should be given to real formations and units and not remain the preserve of staff officers in higher HQs, scientists and ad hoc groupings put together from the RAAT. This view was further reinforced by my time as Director General Doctrine and Development.

NORTHERN IRELAND

At the time it did not seem fashionable to go to Northern Ireland from Germany on a resident tour; no skiing, tax free cars and the like. Or perhaps it was that those who had experienced NI knew the secret of what a challenging and interesting tour it was and had no intent of sharing that secret. In the end I managed to enjoy 3 years in the Province. Once again there was plenty of opportunity to innovate enabled by a notably responsive bit of the procurement organisation, effectively UORs on tap. Communications and lifesaving EW support were provided by R SIGNALS down to the lowest level and there were a number of IS systems to establish pattern of life. Heliborne television enabled commanders to literally get a bird's eye view, remember this was the mid to late 70s, and CCTV, ground sensors and thermal imaging were starting to be deployed. In the end I would argue that the C4ISR and grip on the EM spectrum provided by the Corps was every bit as sophisticated as in Helmand now. Drawing lessons is not easy and replicating NI in Helmand is not the answer. The real lessons are that the approach was evolutionary; there was tight coupling between the operational commander, training and a responsive acquisition organisation. Innovation was encouraged and capabilities were evolved with short procurement timelines.

AIRMOBILITY

It is probably foolish to identify a favourite posting but command of 24 Airmobile Brigade HQ and Signal Squadron during its conversion to airmobility rates highly. I was blessed with a very supportive Brigade Commander, George Kennedy and his staff, an incredibly tolerant and again supportive CO of 2 Div HQ and Sig Regt, John Griffin, and above all some great people in the Squadron who were up for anything. The essence of the anything was to squeeze the maximum command and control capability into the minimum lift – a challenge well known to any airborne signaller. The tricky bit was that the airmobile brigade had to work alongside its Ptarmigan equipped neighbours.



After some desultory attempts at flying around the 4-tonne truck (2 vehicles required) based Ptarmigan access node it quickly became evident that this was not an act of war even if the staff could be prevailed upon to allocate the lift. The answer was to ask some hard questions about what was essential and the end result was a Ptarmigan access node in a ¾ tonne FFR Landrover (the radio relay) and trailer - the rest, courtesy of a newly trained SSgt FofS Lifton and his happy band of technicians. One could not pretend that it was the most user friendly setup and it would not have been capable of operation by 95 percentile humanity. A certain ruggedness was required as Corporal Higgins, well known to Corps football players might testify - but it worked. With teleprinters and fax machines installed in the other HQ FFRs the full Ptarmigan access node capability was available.

Radio silence was very much in vogue and sensible for a formation whose unofficial motto was drive, fly, dig, die. Making full use of line was highly desirable but how to do so with few vehicles and a short time to prepare defensive positions. A little research in the Museum archives revealed that helicopters had been used to lay line in Malaya. The Army Air Corps rose to the challenge and soon linemen were strapped into the side doors of Lynx which flew sideways (to avoid unpleasant encounters between cable and tail rotors) at around 40 knots. Preparing the dispenser packs of D10 was carried out punctiliously for obvious reasons. I only wish that fibre optic cable had been available in quantity. The lesson I drew from this experience was the capacity of our people to innovate when given the freedom and essential support (for example the Landrovers were properly certified for stability etc.) How about a 'do it yourself' approach to FALCON under armour?

THE BALKANS

It is an honour to command an R SIGNALS unit or formation on operations and luck coincided my command of 1st Signal Brigade with the peace enforcement operation in KOSOVO. I was also fortunate, if that is the right word, before posting to command, to take over the procurement of some key CIS for the Brigade in Abbey Wood.

As ever with CIS procurement there were difficulties; at around 6 weeks before departure key aspects of the bespoke software were not working and the



prime contractor (who shall remain nameless) was not inspiring confidence. I was looking forward to a series of 'no coffee' interviews with the Corps Commander, Mike Jackson, as to why we would be a paper-based Corps HQ working to the automated subordinate HQs of other nations and of course upwards to NATO HQs.



In the end I took the decision to go 'do it yourself', harnessing the hardware and commercial software. There were of course dire warnings about commercial liability and the like but explaining to the Corps Commander not to worry and that we would be receiving liquidated damages would have been pathetic. Thanks to the Systems Support.Organisation in Blandford (now 15 Signal Regiment) and the outstanding hard work of members of the Corps we did not embarrass ourselves when we deployed in February 1999 and were able to deliver 'reach back' and even support the AMF(L) when it deployed to Albania but without its planned communicators. I am pleased to note that the 'do it yourself' approach continued within 1st Signal Brigade resulting in what we now know as MAGPIE - as those involved with MAGPIE know well there are limits to the 'do it yourself' approach.

CYBER, EW, SIGINT ET AL

I have no intent of getting hung up on definitions or arguing about unhelpful boundaries. Cyber etc. is an intimate part of what the Corps does. As a troop commander I remember the impact 14 Signal Regiment had on the 1st British Corps – pretty much everything was done on radio silence! It was a little unfair having native English speakers intercepting the clear nets of native English speakers but it certainly made us all careful and forced us all to think through how to operate under strict EMCON. As a BM one thought through very carefully how you avoided losing control of the Brigade in the course of a long road move, how would we fair now? In Northern Ireland as we took those first faltering steps in Electronic Counter Measures it became clear to me that the Electromagnetic Spectrum was very much our battle space. Our involvement in EW and SIGINT has served the Corps well as there is nothing like a little poaching to produce an excellent gamekeeper! The founders of the

Corps chose the right motto Swift and Sure, ever since the G3 staff handed off cryptography to us a key part of the work of the Corps has been making sure that the right information gets to the right person or organisation and no one else. Defensive cyber is core business for the Corps, the object is the same even if the means are very different.

THE PURGATORY OF THE STAFF ALLEVIATED WITH A BREAK AT THE ROYAL MILITARY COLLEGE OF SCIENCE

The practice of alternating command and staff appointments is a great one; ensuring that people are refreshed and reminded of the practical world and how to lead people. However, all good things come to an end as higher up the 'ladder' you run out of real command appointments so staff tours predominate. These next reflections overlap command of 1st Signal Brigade and cover a range of posts from Colonel, editing Army doctrine on command and writing on future force structures and then at Abbey Wood; Brigadier, as Director Information Strategy and Plans, establishing what is now the Chief Information Officer organisation and helping to sell the idea of a homogeneous defence information infrastructure; Major General as Commandant Royal Military College of Science (converting it to the Defence College of Management and Technology), Director General of Doctrine and Development breaking it up and then establishing what is now Director General Logistic Support and Equipment as BOWMAN and DII started to roll out; finally as a Lieutenant General, Deputy Chief of Defence Staff Health and Master of Signals.

In many ways I became an onlooker, agitator and supporter from the side-lines as the Corps and Defence at large struggled with the exploitation of information technology to enhance military capability and run the business of Defence more efficiently. And of course the later part of the period encompassed two wars. What has been achieved in terms of CIS support to operations in Afghanistan in the last few years is immensely impressive and as Master I am very proud of our men and women who have done so much to deliver that success, but could we have done better, faster and will we be able to (at least partially) replicate that achievement on contingent short notice operations?

Our 'customers' have come to expect the so called rich information services and there is, in my view no reason why they cannot be delivered with the proviso that the following observations are addressed:

 Defence puts in place strong, knowledgeable and empowered leadership to drive activity across all lines of development in the 'information space'.
 During the Second World War the US despaired of the British predilection to run things by committee and largely that is what we have tried to do with Defence CIS. We may have had strong leadership, we may have had knowledgeable leadership but we have not for at least the last decade had strong, knowledgeable and empowered leadership.

- Produce a clear, single and authoritative view of what is to be achieved. This means that there is a single enduring strategy and flowing from that a series of plans that address applications, computing infrastructure and networks as a whole with of course the supporting lines of development, most especially training and education. We certainly produced a strategy in 2000 which is largely unchanged to this day – perhaps more attractively presented but without those supporting plans. We have toyed with architectures and authorities that have no authority and we have enjoyed [sic] application enthusiasts who have forged on with little regard for the impact on other applications or indeed the underlying infrastructures. We do have a command doctrine but have we clearly set out the supporting mission threads or processes and the related security architecture that enables multinational and multiagency interworking.
- Perform useful experimentation that leads to results. I shudder to think of the tens of millions of pounds that have been expended on research, demonstrations and the like that have produced very little. Industry has been persuaded to participate in JWIDS, CWIDS etc. that have led nowhere. We should not be surprised - command and control is a very complex mix of technology, anthropology and psychology. It is a large collaborative group activity with multiple variables. The 'experiment' has to be taken to real staffs with real commanders. I am somewhat exaggerating for effect here as obviously things like EMC can be explored without staffs but in the final analysis 'information effect' is delivered through the interaction of large groups of people with applications. There is going to be a degree of trial and error, more a Darwinian process, a process of evolution. This brings me to my last point – acquisition.
 - Develop an acquisition and approvals process that enables the evolutionary approach and still demonstrates value for money. Defence acquisition has been the subject of many attempts at reform; the Downey Cycle, Smart Acquisition and now Bernard Grey whose report articulated the problem colourfully - "Agile enemies such as the Taliban are unlikely to wait for our sclerotic acquisition system to catch up." Warren Chin provides a fuller and longer term analysis in his book British Weapons Acquisition Policy - the Futility of Reform; the title says it all. Over the years there has been a great deal talked about a suitable approach to acquire information services. I believe that the latest fad is called agile acquisition. In my experience the only approaches that have delivered success to date are either where it has been possible to use a catalogue, ie MAGPIE, in the Special Projects area or in the systems delivered in Afghanistan through UORs.

FINAL THOUGHTS

I think that it is fair and correct to end on a positive note. Defence has formed the JFC with responsibility for C4ISR and appointed a 3* CIO with DISS reporting to her — it behoves all of us who regard ourselves as CIS professionals to rally round her and ensure she succeeds. And not that I am prejudiced, but in the Corps we have some great young men and women who have a very strong track record of 'can do' and innovation when given half a chance. Of course to innovate you need to have knowledge, or at the very least enough knowledge to understand the expert. One thing I have learnt is that acquiring this knowledge requires sustained effort — 19 Set to IP cryptography is a bit of a

leap. As we CONNECT, PROTECT, DETECT and DISRUPT we support the military almost uniquely at all levels from the strategic to the tactical; we provide close support to Special Forces; work closely with other government departments; and, engage internationally: this gives us an invaluable breadth and depth of experience. Finally, there is one thing I hope and trust that the Corps will never lose and that is our very particular mix of the soldier and the technical expert and the collaborative way we approach tasks together.

Certa Cito



Farewell to the President

On Tuesday 4th February some 40 members of the RSI braved the tube strike and the bad weather to attend one of the regular 'First Tuesday' gatherings in Whitehall in order to bid farewell to Lt Gen Robert Baxter CBE, the outgoing President of RSI.

The photograph shows the RSI Chairman, Brigadier Mike Lithgow, presenting the Master with a pair of silver 'Bravo Zulu' cufflinks. Bravo Zulu being the maritime signal flag code for 'Well Done'.

The next 'First Tuesday' event being sponsored by the RSI is on Tuesday 1st April. Members of the Worshipful Company of Information Technologists have been invited to join us. For more information, contact the RSI Secretary on secretary@royalsignalsinstitution.co.uk or go to the RSI LinkedIn Group.







Bravo Zulu Cuff Links

306 Thames Street Newport . Rhode Island . USA www.StyleNewport.com





ROYAL SIGNALS HONOURS AND AWARDS

There are a number of ways in which the remarkable deeds and truly outstanding abilities of Royal Signals officers and soldiers can be recognised:

The State Honours process (for New Year Honours, Queen's Birthday Honours and Operational Honours Lists),

The Corps' own annual awards process (for Princess Mary Medal, RSI Silver Medal, Master of Signals Award and the Medal for Adventurous Endeavour),

An annual process of nomination for awards from external bodies and

A rolling process of nominations and awards for the Master of Signals Commendation.

Sadly, but almost inevitably, the timeline for each of the honours and awards processes is different. The State Honours process is well documented elsewhere; this article gives the key details of the remaining three awards processes.

Royal Signals Annual Awards. The Corps own annual awards process culminates in an awards ceremony at the Royal Signals Institution (RSI) London Lecture and Dinner each November where typically six to eight individuals are recognised through the award of the Princess Mary Medal, the RSI Silver Medal, the Master of Signals Award and the RSI Medal for Adventurous Endeavour. The selection of worthy individuals is made by the RSI Awards Committee on the basis of citations submitted by the chain of command covering the previous year (April to March). The details of each of these awards are as follows:

Princess Mary Medal. This is the highest RSI Award and may only be presented to serving or recently retired members of the Corps who are full members of the Institution. It must be regarded as a rare honour given to mark an individual achievement, contribution or service of the highest order that is considered to have enhanced greatly the performance, reputation or status of the Royal Corps of Signals, or a prolonged period of dedicated service. Up to one medal may be awarded in any year.

RSI Silver Medal. This is an award to mark the attainment of an outstanding individual professional achievement in the Corps. This award may also be made to an individual for conduct or achievement in an operational theatre, where such conduct does not match the standard of the Princess Mary Medal. In addition, those attaining an exemplary standard on higher level professional courses may also be considered for the award. Typically three or four of these awards are made each year.

Master of Signals Award. This award is a formal recognition of a special contribution or service to the Corps made by an individual or corporate body which cannot be properly accommodated by either the Princess Mary Medal or the RSI Silver Medal. This award is open to individuals outside the Corps who have contributed significantly to the performance, status or reputation of Royal Signals. Typically, two awards are made each year.

Medal for Adventurous Endeavour. This award is intended to recognise outstanding achievement or service by a member of the serving Corps arising from exploration, expeditions or adventurous endeavour. Normally, up to one award is made each year.

Timings. The timeline for the Royal Signals Annual Awards process for 2014 is as follows:

• 1 Apr 13 – 31 Mar 14 Period covered by the citation

1 May 14
 Names of nominees (but not citations) to HQ Royal Signals

1 Jul 14
 All citations to HQ Royal Signals

2 Oct 14 Awards announced

20 Nov 14 Awards presented at RSI London Lecture and Dinner

Whistler Trophy. The Whistler Trophy for excellence at Regimental Duty is open to all subalterns and junior captains and is awarded annually. For simplicity, the Whistler Trophy nominations and selection procedures for the period 1 Apr 13 to 31 Mar 14 will follow the same process and timeline shown for the Royal Signals Annual Awards except that the award will be presented at the Corps Guest Night in Spring 2015.

External Awards. Each year the Royal Signals is asked by three external bodies to identify suitable individuals to receive recognition and an award for their operational signalling and operational engineering prowess over the previous 12 months. Details of the three awards in question are shown below:

The Churchill Medal. This is the premier prize awarded annually by the Professional Engineering Institutions for Defence engineering achievement. The award is for an individual or a small team (the majority of whom are serving members of the Armed Forces or were serving at the time) for "achievement in Engineering and Technical Advancement in support of Military Operations". This award is open to all three services and to all cap-badges within the Army. Whilst any CO or line manager across the MoD can independently submit a citation direct to the Institute of Engineering and Technology, HQ Royal Signals runs its own 'filter board'; giving added endorsement to what it judges to be the best citation from across the Corps. Citations should not exceed 1000 words and can include a maximum of one diagram and one photograph.

The WCE Royal Signals Operational Engineering Award. This medal is award annually by the Worshipful Company of Engineers (WCE) to the Royal Signals officer who has "best applied professional engineering judgement or technical innovation to contribute significantly to the maintenance or enhancement of operational capability or effectiveness in any theatre of operations, including the UK". This recipient of this award will be decided by the RSI Awards Sub-Committee. Citations should be roughly 500 words (1 page of A4) in length.

The WCIT 'Through' Award for Operational Military Signalling. This award was inaugurated in 2012 by the Worshipful Company of Information Technologists (WCIT) to recognise the 20th anniversary of the formal affiliation between the Royal Signals and WCIT. Eligibility for the 'Through' Award is restricted to Royal Signals soldiers, non-commissioned officers and warrant officers who have made "an exceptional contribution to the provision of information services on operations, in support of operations or in supporting the training of others preparing for operations". The eligibility criterion goes on to say that "a successful recipient will, in particular, thereby have displayed conspicuous levels of innovation and determination". Once again, this award will be decided by the RSI Awards Sub-Committee. Citations should be roughly 500 words (1 page of A4) in length.

Timings. The timeline for the External Awards process for 2014 is as follows:

1 Apr 13 – 31 Mar 14
 7 Apr 14
 Period covered by the citation
 Full citations to HQ Royal Signals

14 Apr 14 Winning citations passed to IET, WCE and WCIT

May 14 Awards Announced
 Jun – Jul 14 Awards Presented

Master of Signals Commendation. Whilst a prestigious award, the Master of Signals Commendation is intended to be given to a greater number of recipients and for achievements that do not merit a higher award. It is therefore recognised as the lesser of the RSI awards. Nominations can be submitted at any time. If agreed by the Corps Colonel and the Master of Signals a suitable presentation can then be made under local arrangements. An absolute minimum of four weeks should be allowed between receipt of the citation and the intended presentation date. Typically about thirty commendations would be awarded each year.

Citations. The template to be used for all citations can be found on the HQ Royal Signals pages of the Defence Intranet or is available from the Corps Adjutant or the RSI Secretary (see page 65 for contact details). Where appropriate a single form can be used to nominate an individual for multiple awards. All nominations and citations must be sent electronically to the Corps Adjutant or the RSI Secretary.

Awards Committee. The RSI Awards Committee reserves the right to consider nominees for an alternative award. Any unsuccessful nominations for the Royal Signals Annual Awards will be automatically reconsidered for a Master of Signals Commendation.



Roll of Honour

OBE

Col Garry Hearn (January 2013) Lt Col Rob Healey (January 2013) Lt Col Niall Stokoe (January 2014)

MBE

Lt Col Stephen Morgan (January 2013)
SSgt Stuart Nash (January 2013)
Sgt Terry Fitzgerald (January 2013)
Lt Col Michael Dooley (June 2013)
Maj Charles Cooper (June 2013)
Maj Richard Craig (June 2013)
Maj Simon Perrett (June 2013)

QVRM

Sgt Sonja McCoy (January 2013) Lt Col Jackie Allan TD (June 2013)

QCVS

A/Lt Col Alexander Smith (September 2012)
Sgt Mark Harle (September 2012)
Capt Thomas Gardner (March 2013)
Lt Col Colin Vaudin (October 2013)
Capt Paul Ceaser (October 2013)

Joint Commander's Commendation

WO1 (FofS(IS)) Arron Marsh (October 2013) Cpl Michelle Smith (October 2013) Cpl (now Sgt) Rana Saroj (October 2013)

Worshipful Company of Engineers' Royal Signals Operational Engineering Award

Capt Paul Ceaser (July 2013)

Worshipful Company of Information Technologists' 'Through Award' for Operational Military Signalling

Cpl Christopher John (July 2013)

Princess Mary Medal

Cpl Jason Crabb (October 2012)

The RSI Silver Medal

Maj Simon Perrett (October 2012)
SSgt (YofS) Brett Appleyard (October 2012)
SSgt George Cowan (October 2012)
Sgt (now SSgt) John Swanson (October 2013)
Cpl (now Sgt) Matthew Weston (October 2013)
Cpl (now ASgt) Graham Martin (October 2013)
Cpl Michael Sammons (October 2013)

Master of Signals Award

Mr Larry Stone (October 2012) SSgt Jimmy Scott (October 2012) Dr Brian Davies (October 2013) Maj (Retd) Paul Ford (October 2013)

RSI Medal for Adventurous Endeavour

Capt Billy Morris (October 2012) WO1 Mark Morgan (October 2012) Sgt Rich Simpson (October 2012) Since the last edition of the RSI Journal was published a significant number of members of the Corps and the wider Corps family have had their superb efforts recognised; be they on operations, in barracks, in the classroom or further afield. Some of the citations for these individuals are included in the following pages but, for now, here is the full Corps 'Roll of Honour' for the period August 2012 to February 2014. Each and every one of them thoroughly deserves their award and also our congratulations.

Master of Signals Commendation

Maj Richard Lock AGC(SPS) (October 2012)

Maj Mick Solomons (October 2012)

Capt Ronald Jephcote (October 2012)

Capt Angus Young (October 2012)

WO2 (YofS) Sven Heaps (October 2012)

SSgt Paul Casey (October 2012)

SSgt Suresh Limbu (October 2012)

Sgt Martyn Angus (October 2012)

Sgt Alexander Graham (October 2012)

Sgt Mark Turton (October 2012)

Cpl Peter Reynolds (October 2012)

Cpl Alan Sanderson (October 2012)

Cpl Christian Taylor (October 2012)

LCpl Benjamin Ross (October 2012)

Sig Gavin Ackrill (October 2012)

Sig Bradley Carse (October 2012)

Col (Retd) Tom Moncur (November 2012)

WO1 Paul Hounsell (December 2012)

Lt Col (Retd) John Chambers (December 2012)

Cpl Kirsty Wint (May 2013)

SSgt (FofS(IS)) Lindsay Derbyshire (May 2013)

SSgt Tony Ramsay (May 2013)

MAJ Darcy Saint-Amant US ARMY (December 2013)

Lt Col Debbie Douglas (January 2014)

Capt Richard Fallon (January 2014)

Capt Terry Morrisey (January 2014)

Mrs Joan Adlington (January 2014)

WO2 Damien Cheung RA SIGNALS (January 2014)

WO2 Andrew Clarke (January 2014)

WO2 (FofS) James Powell (January 2014)

SSgt (FofS) Graeme Firth (January 2014)

SSgt (now WO2) Anthony Gallagher (January 2014)

SSgt (now WO2) (FofS) Peter Sorrell (January 2014)

Cpl Thomas Briggs (January 2014)

Cpl Darren Fowler (January 2014)

Cpl Robert Kerswell (January 2014)

Cpl (now Mr) Jamie Trigg (January 2014)

Sig (now LCpl) Darren Harrison (January 2014)

Lt Col Peter Richards (February 2014)

WO1 Lucy Mason (February 2014)

RSI Gold Medal for Academic Excellence

Maj Rebecca Jacques (August 2012) SSgt (YofS(EW)) Alan Sharpe (November 2012)

SSgt (FofS) Roy Organ (June 2013)

Maj Paul Sutcliffe (August 2013)

SSgt (YofS) Dave Ward (September 2013)

CSgt (FofS(IS)) Paul Anderson RM (October 2013)

SSgt (YofS(EW)) Elizabeth Perks (November 2013)

Agar Memorial Prize

2Lt Benjamin Eaton (August 2012)

2Lt Peter Stradling (December 2012)

2Lt David Baxter (April 2013)

2Lt Lauren Hall (August 2013)

2Lt Kyle Macaulay (December 2013)

Whistler Trophy

Capt James Thomas (January 2013) Lt Jim Collins (January 2014)

Deane-Drummond Prize Essay

Capt Benjamin Woollan – 1st Prize (February 2013) Capt Emma Thomas – 2nd Prize (February 2013)

Capt Emilia Momas – 2nd Prize (February 2013)
Capt Benjamin Brown – 3rd Prize (February 2013)

Capt David Burnett – 3rd Prize (February 2013)

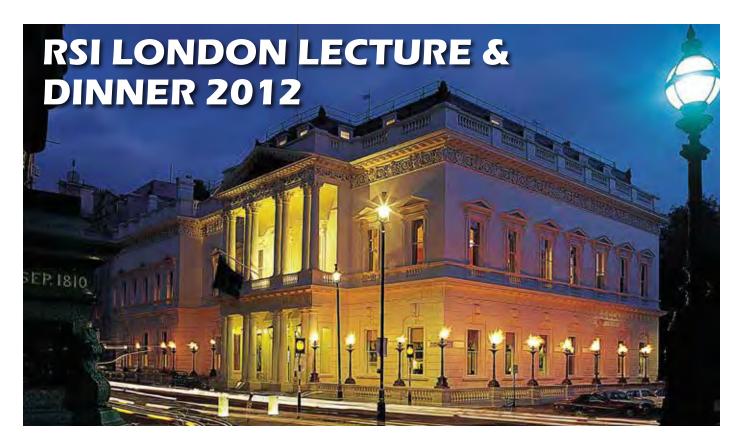
Capt Samuel Brinkworth – 1st Prize (January 2014)

Capt Sam Rice – 2nd Prize (January 2014)

Lt Harry Joseph – 3rd Prize (January 2014)

Royal Signals Undergraduate Prize

Capt Emma Hughes (April 2013)



The 2012 RSI London Lecture and Dinner took place as usual in the very splendid surroundings of the Institute of Directors in Pall Mall on Thursday 15 November. There were a total of 254 attendees at the event, sat at 24 corporate-sponsored tables – making it a record-breaking year!

Arranging the guest speaker at this event is very much the personal purview of the RSI Chairman and he proudly announced some six months before the event that he had persuaded the then Commander of Joint Forces Command, Air Chief Marshall Sir Stuart Peach, to be the guest speaker. Alas about two weeks before the event Commander JFC was obliged to withdraw from the dinner to accompany the Foreign Secretary on an overseas visit. Mercifully, he did arrange a 4-star replacement in the form of the new Permanent Under Secretary at the MoD, Jon Thompson; thereby quickly restoring the RSI Chairman's normal calm composure!

On the day of the dinner itself, PUS was taken ill with food poisoning and the RSI Chairman's pulse began to quicken once more as he yet again faced the prospect of a high-profile event without a guest speaker! The day was saved, with hours to go when the MoD's Chief Information Officer, John Taylor, stepped into the breach and delivered the speech which Jon Thompson had thankfully already written! The thought-provoking speech was delivered with great aplomb by John Taylor who also happily answered a number of very probing questions from the audience. The RSI are indebted to both Jon Thompson and John Taylor for their contributions to a very successful and enjoyable evening.

As is usual, the second highpoint of the evening was the presentation of RSI Annual Awards for 2012 to the very deserving recipients. The full list of recipients can be found on Page 20, a selection of their citations are reproduced below.

Corporal Jason Crabb

Princess Mary Medal

Acting Corporal Crabb deployed to Afghanistan from September 2011 until March 2012 with 20 Armoured Brigade Headquarters and Signal Squadron (200) on Operation HERRICK 15. He was detached to the Reconnaissance Platoon, Combined Force Lashkar Gah as their Rear Link Detachment. Based at Patrol Base Attal, he was deployed for extended periods in austere conditions establishing Temporary Check Points in order to help build an understanding of the local population and to spike insurgent activity. As the sole communications expert, he was responsible for maintaining communications from these Temporary Check Points; his secondary role was as a Heavy Machine Gunner on the Platoon Commander's Jackal vehicle.

Acting Corporal Crabb was faultless as a communicator, not only providing the essential communications but also driving forward the exploitation of BCIP 5.4 capabilities and ensuring adequate reversionary modes were available for all operations. Given the role of his platoon, there was often little warning of deployment and the plan often changed whilst on the ground. To operate successfully in that environment requires self-confidence, adaptability, poise and complete mastery of your communications capabilities; these are attributes Acting Corporal Crabb has in spades. He also sacrificed what little free time he had to mentor the other Royal Signals personnel in Patrol Base Attal and to improve both operational and tactical

communications. The Chief of Staff of Combined Force Lashkar Gah was effusive in his praise for Acting Corporal Crabb's all-round impact.

As befits his character, Acting Corporal Crabb contributed significantly far beyond his formal remit. In the aftermath of an Improvised Explosive Device (IED) strike, Acting Corporal Crabb was faced with a catastrophically injured colleague stranded in un-cleared territory. He did not hesitate in sprinting across IED-seeded ground to provide life-saving medical aid to his colleague. To illustrate the danger he faced, another colleague attempted to join him and was struck by an IED. Throughout this and several other incidents, Acting Corporal Crabb was resolute and fearless in the face of extreme danger, provided the required communications and managed other enablers ranging from ISTAR assets to MERT.

Acting Corporal Crabb's actions both in and out of trade have been of the highest order. His contributions to communications within Combined Force Lashkar Gah stand shoulder to shoulder with any in theatre. His actions



in the face of the enemy have been truly remarkable and earned him the respect of the most-able Infantrymen. He has been a fine ambassador for the Royal Corps of Signals throughout the most demanding of operational deployments and for his exceptional achievements he is awarded the Princess Mary Medal.

Staff Sergeant George Cowan

RSI Silver Medal

Staff Sergeant Cowan is the Training Permanent Staff Instructor of 2 (City of Dundee and Highland) Signal Squadron (Volunteers); for more than a decade he has been the principal driving force behind the operational success of the Low Frequency Fall Back (LFFB) communications system. The system was brought into service in 2003 to provide a high powered LF radio system designed to operate through the atmospherically harsh conditions of a post-nuclear strike against the UK.

Utilising the engineering and operating principles that he gained from his previous 14 years as a Radio Telegraphist, Staff Sergeant Cowan's personal contribution to the operational effectiveness of the LFFB is unsurpassed. From its inception in 2001 he has been instrumental in developing a unique unproven civilian system into a deployable military CIS installation. During the two years of trials he was personally involved in the modification of many hardware parts of the system and major safety operating procedures.

The operational capabilities of the LFFB system have been successfully proved on over 20 deployments since its acceptance into service; much of its success is due solely to the determination and "the message must get through" attitude of Staff Sergeant Cowan. He was responsible for the design and accreditation of all LFFB training packages. His knowledge of the system and all of its components is unique; indeed he has been the solitary Flight Control Officer capable of flying the system for over eight years.

The LFFB system has continued to be modified and improved over its service, and Staff Sergeant Cowan has been the unit point of contact with both Lockheed Martin, the manufacturer, and British Telecom, the contractual service provider. His technical input and professional



manner has ensured value for money has been provided by both organisations without jeopardising the operational effectiveness of the system.

As a Non-Regular Permanent Staff member of the unit, Staff Sergeant Cowan's selfless contribution to maintaining and improving this vital national CIS capability, whilst assuring its credibility within the Nuclear Firing Chain, has been above and beyond the service expected of him.

In addition to his LFFB responsibilities he has been the driving force for trade, military and adventurous training within his Squadron and the Regiment at large. His contribution to charities has been excellent throughout his tenure, organising at least one event per year.

For such an outstanding and long-term contribution, Staff Sergeant Cowan is awarded the Royal Signals Institution Silver Medal.

Colonel Larry Stone

Master of Signals Award

Colonel Larry Stone was appointed the Honorary Colonel 81 Signal Squadron (Volunteers) in 2006. From the outset he has made his mark, carving a new path for modern Honorary Colonels with no previous military experience; where he has led many will follow. In recognition of his impact in his first five years, Colonel Stone's appointment as Honorary Colonel was extended for a further five years.



The first of Colonel Stone's great strengths is a huge enthusiasm for the military, the Reserves and 81 Signal Squadron (Volunteers) in particular; the second is his extensive network of connections and influence within BT and the wider telecommunications industry. Following his 2008 appointment as BT President Group Public & Government Affairs he oversees the company's Parliamentary and political matters and global public affairs. This places him in a unique position to lead on all Reserve Forces matters within the industry. He is tireless in his efforts to secure support for the Squadron, the Corps and the entire Reserve Forces. His contributions range

from the strategic to the specific; providing leadership within the industry for such initiatives as Armed Forces Day and Defence Career Partnering to pioneering Special Leave policy and support to individual Reserve Forces personnel with issues or concerns.

In 2007, Colonel Stone was the driving force behind the important employers' visit to soldiers from the Squadron serving on Operations in Iraq, even gaining the personal involvement of the then Chairman of BT, Sir Christopher Bland. This prestigious visit gained extensive national press, TV and radio coverage thereby raising awareness of the critical contribution made by Reserve Forces to operations and underlined the commitment of British firms in supporting employees who serve in the Reserves. 81 Signal Squadron (Volunteers) could not support operations to the level that they do without the commitment of the industry. Keeping that commitment alive needs constant nurturing as in 2012 when Colonel Stone facilitated a visit to the Squadron by the current Chairman of BT, Sir Michael Rake. The visit was highly successful in reinforcing the unrivalled support BT provides to the Squadron and celebrated a decade of the Squadron's and BT employees' continuous mobilised service. Such visits provide a rich source of marketing within BT and the industry, enabling the Squadron to continue to recruit high calibre specialists.

Colonel Stone himself visits the Squadron on a regular basis in the UK and overseas; he has a natural ability to connect with people of all backgrounds and ranks and is hugely popular with the serving and retired members of the Squadron. For six years he has championed the soldiers of the Squadron and the Corps in BT and industry. In recognition of his motivational leadership Colonel Larry Stone is granted the Master of Signals Award.

Staff Sergeant (Pipe Major) Jimmy Scott

Master of Signals Award

Staff Sergeant (Pipe Major) Scott has provided outstanding service to the Royal Corps of Signals and the wider Army in the field of military music. He has actively developed the Royal Corps of Signals Pipes and Drums from an ad-hoc collection of hobbyists and reservists with varying levels of commitment and expertise to a state of full recruitment and the highest levels of professionalism.

This has required high levels of initiative, determination, skill and management in all matters related to piping. He leads by personal example, his professionalism and determination is inspiring. He has been awarded the top place in every piping course he has attended at the Army School of Bagpipe Music and Highland Drumming, and in doing so completed the fastest ever progression from basic piper to Pipe Major. He has single-handedly raised the profile of the Royal Corps of Signals in national

piping circles to a hitherto unsurpassed level, and earned the approbation of senior figures throughout the piping fraternity.

He has actively pushed the Pipe Band's programme of engagements which has extended from regimental parades, through support to other Service and civilian agencies, to full exposure as the lead band in international military tattoos in Edinburgh, Moscow and Basle. Particularly noteworthy are his engagements at RMA Sandhurst, for Her Majesty the Queen, and at the Commonwealth Games in India leading out the Scottish team.

Not content with these achievements he has initiated a programme of teaching, instruction and advice to local state and independent schools, as well as the local civilian pipe band and motivated his fellows to take part in a programme of assistance and development. His contributions are all the more remarkable for having been achieved in his own time, and he has thereby set an example of dedication, selflessness and performance which has resonated particularly well with the young players who are joining his teaching classes in steady numbers.

Staff Sergeant Scott has always had the personal maxim of soldier first, and piper second. He has sought to complement his high piping standards with a similar energy and dedication in his formal employment as Squadron Quarter Master Sergeant. Here, he has had to

contend with a spectacular increase in inventory with the addition of modern technical communications equipment and an ever expanding Regimental sports inventory in a busy training establishment.

Staff Sergeant Scott's personal contribution to military music has maintained the Royal Corps of Signals firmly and positively in the public eye. His invaluable and inspirational service makes him a worthy recipient of the Master of Signals Award.

[Staff Sergeant Scott actually received his award from the Master of Signals after playing at the Corps Autumn Guest Night in Blandford on 1 November 2012.]

Team Mercury (Captain Billy Morris & WO1 Mark Morgan)

RSI Medal for Adventurous Endeavour

On 14th December 2011 Captain Billy Morris of 22 Signal Regiment and Warrant Officer Class One (Regimental Sergeant Major) Mark Morgan of 21 Signal Regiment (Air Support) flew from London to Cape Town to finalise their preparations to take part in the 100th Anniversary Amundsen-Scott Race to the South Pole as Royal Signals Team Mercury; this marked the culmination of a 16-month build-up phase which proved to be a huge endeavour in its own right. Not only did they need to prepare themselves individually and collectively for the challenges that lay ahead, they were faced with the daunting task of raising the £93,000 entry fee for the race. They approached the fundraising with characteristic determination, inspirational innovation and a strong dose of typical military cheek; events included 12-hour crosstrainer sessions, marathons in large freezers and even a traumatic all-over body wax!

Eight days later Team Mercury reached the Russian base station at Novo, Antarctica, from where they set off on a 7-day training trek covering 150km and an assent to 2950m. With acclimatisation complete, they and the other six competing teams were flown forward to the start point.

When they set off on the race itself on 4th January 2012, what lay between them and their ultimate destination, the Geographic South Pole, was a gruelling journey of 800km across a barren and bleak white landscape. Heavy sleds laden with 90kg of equipment, and temperatures in the region of -30 to -43oC, took their toll on Team Mercury during the course of the next three weeks. Captain Morris and WO1 Morgan found themselves suffering from sleep deprivation, chest infections, swollen joints, severe weight-loss and a case of frostbite; yet they pressed on at remarkable speed, even managing to cover 80km in one particular 24-hour period.

At 08:00 hours on 24th January 2012 Team Mercury reached their goal of the Geographic South Pole; remarkably, given the events of 1912, they were in second place behind a Norwegian Army Special Forces team. Over the course of the race Captain Morris and WO1 Morgan had each lost about 30 pounds in body weight but

together they raised over £30,000 for charities, including the Royal Signals Benevolent Fund.

Throughout two years of demanding preparation and the event itself, Captain Morris and WO1 Morgan showed extraordinary levels of self-sacrifice, commitment, courage and determination; they doggedly fought through the personal pain barrier to see the event through. The remarkable achievements of Team Mercury were carried out to the highest standards, and in accordance with the very best traditions of the Royal Corps of Signals; Captain Morris and WO1 Morgan thoroughly deserve the award of the Royal Signals Institution Medal for Adventurous Endeavour.

[WO1 Mark Morgan was unable to attend the RSI London Lecture & Dinner and received his medal from Brigadier Steve Vickery at a ceremony hosted by 39 Signal Regiment in Bristol in early 2013.]



Sergeant Rich Simpson

RSI Medal for Adventurous Endeavour

Sergeant Richard Simpson deployed to the Antarctic as part of the British Services Antarctic Expedition 2012. This expedition formed the principal effort by the Armed Forces in commemorating the 100th anniversary of Captain Robert Falcon Scott's Terra Nova expedition; it also formed the most recent event in the armed services quadrennial mountaineering expedition programme, which only selects the best and most dedicated mountaineers from each of the three services.



Sergeant Simpson was appointed as the expedition's communications officer in November 2009, a task that required him to organise the entire communications plan for the expedition extending from equipment acquisition and communications planning, through to training. This required a comprehensive understanding of satellite communication systems as well as HF and UHF radios. On his own initiative, he arranged the loan or purchase of the necessary communications assets from defence contractors and military units and delivered a comprehensive training package to the expedition members prior to deployment.

Once deployed in the Antarctic, Sergeant Simpson took a full part in the expedition; his exceptional fitness and excellent mountaineering skills were pivotal in the expedition's successful ascent of over a dozen hitherto unclimbed mountains. Over the two-month deployment Sergeant Simpson had to endure extreme weather conditions, with winds often exceeding 80mph and wind-chill temperatures as low as minus 50oC. Always volunteering to support other elements of the expedition, Sergeant Simpson was a powerhouse of enthusiasm throughout. Even when required to drag a sled weighing over 100kg across heavily crevassed terrain, he was able to maintain an optimistic outlook and remain calm and effective.

It was, however, his efforts in maintaining the expedition's communications that deserve the utmost credit. Sergeant Simpson constantly gave advice to expedition members on how to maintain communications and was able to make running repairs to essential radio and satellite components when they became damaged. His efforts, whilst under intense mental and physical strain, ensured that the expedition was able to communicate in the most difficult of circumstances. Almost solely due to his efforts the expedition's radio and satellite assets provided unbroken communications for the duration of the deployment.

Overall, Sergeant Simpson has performed to an exceptional standard and has sustained this effort over a two-year period. His completely selfless commitment to the team was fundamental to the expedition's success. He has been utterly reliable throughout, and his efforts, once deployed into the extremes of the Antarctic, were extraordinary; he is a worthy recipient of the RSI Medal for Adventurous Endeavour.

EDITOR'S NOTE



The venue for the annual RSI London Lecture and Dinner each November is the Institute of Directors (IoD) at 116 Pall Mall. Located in central London, just 200m from Trafalgar

Square and equally close to St James's Park, this very splendid Georgian landmark (shown here and on pages 22 and 27) was designed by John Nash as the residence of the Prince of Wales; today it is still owned by the Crown Estate.

In 1820 it became the home of the United Services Club and was used as such until 1978 when the club amalgamated and moved to smaller premises. The building still houses much of the club's historic art collection, including a bust of Admiral Nelson which is said to be the only one created from life.

As a general rule, membership of the IoD is open to company directors and also to military officers with annual budget responsibility for over £250K and three years' experience at this level. Associate and student membership is also available. Applications should ideally be sponsored by an existing member and are subject to individual scrutiny. Membership gives access to the IoD's services and their facilities in London and elsewhere. Further details are available via the IoD website or the RSI Secretary.

RSI LONDON LECTURE & DINNER 2013

The grand surroundings of the Institute of Directors on Pall Mall once again provided the backdrop to the 2013 RSI London Lecture and Dinner on Thursday 14 November.

Having had to pull-out from the 2012 dinner at relatively short notice, Air Chief Marshall Sir Stuart Peach readily agreed to come along as the guest speaker; this time in his new capacity as Vice Chief of the Defence Staff.





VCDS gave an impassioned speech about the importance of information to delivering effect within Defence and on operations, about transformation in contact for C4ISR capabilities and paid tribute to the regular and reserve service personnel who have been, and currently are deployed on operations. He also welcomed the appointment of the MoD's new 3-star Chief Information Officer, Yvonne Ferguson. Finally, VCDS congratulated the RSI in its 60th Anniversary year.

As is customary, the evening concluded with the presentation of RSI Annual Awards to four of the six very deserving recipients; sadly two were unable to join the gathering and had to be separately recognised at a separate ceremony in December in Blandford. The full list of recipients can be found on Page 20; the citations for those who received their awards on 14 November are reproduced overleaf.

EDITOR'S NOTE

GUEST SPEAKER - Air Chief Marshal Sir Stuart Peach KCB CBE, Vice Chief of the Defence Staff

Air Chief Marshal Sir Stuart Peach has held the post of Vice Chief of the Defence Staff since May 2013. He has previously served as the first Commander of Joint Forces Command and prior to that Chief of Joint Operations. He is also a former Chief of Defence Intelligence and, before that, Director Intelligence Collection.

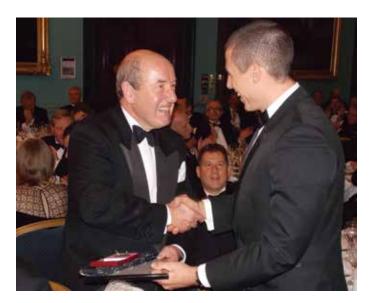
Air Chief Marshal Peach's military career began in 1974 when he was appointed a University Cadet. After being commissioned in 1977 he trained as a Canberra pilot and subsequently as a Tornado pilot. In 1994 he commanded IX (Bomber) Squadron and was Deputy Station Commander at RAF Bruggen. Following a period as NATO Air Commander in Kosovo in 2000 he went on to become Commandant of the Air Warfare Centre and then RAF Strike Command's Assistant Chief of Staff Intelligence.

He is a graduate of the University of Sheffield, has an MPhil from Cambridge and is a Fellow of the Royal Aeronautical Society.

Sergeant Matthew Weston

RSI Silver Medal

Corporal (now Sergeant) Weston is a Reservist who deployed to Afghanistan with 16 Signal Regiment as an Application Specialist responsible for providing technical support for a myriad of applications across the operational theatre. Extremely professional, good natured and with a raw leadership ability he matched many of his regular counterparts in terms of all-round performance. However, it is his prowess as a Microsoft Office SharePoint Services (MOSS) engineer that allowed him to stand out during the deployment.



It quickly became apparent that Corporal Weston's skill as a MOSS engineer was key to operational success. The delivery and training of MOSS across defence is still developing and as such the risks associated with managing MOSS are not fully understood. One of Corporal Weston's first challenges was to re-build the MOSS team sites and recover a Brigade's worth of data.

The Regiment's ability to offer 100% data assurance to all Battle Groups throughout MST is directly attributable to Corporal Weston. He used his technical ability to find, fix and restore thousands of corrupted data files.

In theatre the issue was even more critical and during the early part of the Regiment's deployment it became apparent the MOSS architecture and back up processes were inadequate and did not offer any resilience. The most pressing issue was the inability to backup and recover Headquarters Task Force Helmand data. Any failure in the MOSS server would have had catastrophic and immediate operational impact.

Corporal Weston's skill and experience placed him at the centre of the risk mitigation plan and he worked tirelessly to ensure continued data integrity while identifying a strategy to deliver a reliable backup and recovery solution. He was a key player in the design and implementation of a theatre-led staged system recovery plan. Without his clarity of thought, drive, determination and technical skill it is likely that a catastrophic loss of data would have occurred. With the immediate issue abated Corporal Weston then instigated changes to ensure 100% data assurance and developed a comprehensive training package for use during pre-deployment training.

Corporal Weston's performance has demonstrated the battle winning skills enshrined in our Reserve forces and how these can be best applied as part of an integrated whole force concept. His outputs throughout his period of mobilised service were of the highest order. He has unquestionably contributed to maintaining the UK's standing in driving forward campaign success in Afghanistan. For his outstanding achievements Corporal (now Sergeant) Weston is awarded the RSI Silver Medal.

Dr Brian Davies

Master of Signals Award

Dr Brian Davies has enjoyed a long and distinguished career working in radio design with international recognition for his research and involvement in military Currently the Bowman System communications. Architect within the Battlefield Tactical CIS (BATCIS) Delivery Team, Dr Davies has advised the communications capability sponsor and delivery team since 1988, leading risk reduction demonstrations, major system modelling and technical architecture specifications. Employed at the heart of Bowman development and evolution, Dr Davies has shaped the system improvement, including the development of a world-leading robust tactical transmission protocol and development of the first large scale self-forming battlefield Tactical Intranet. He has advised key design decisions, has been vital to the outcome of four major Bowman operational field trials and has used his cross-system knowledge to ensure the delivery of a unified network.

In parallel to his involvement in the support and evolution of the current core tactical communications programme, Dr Davies has been pivotal in tactical communications developments for Operation HERRICK. In particular he has been the principal technical subject matter expert on the Enhanced High Capacity Digital Radio programme, working with industry radio designers to review and assure design decisions and developments. This has enabled the development and expansion of the Tactical Internet thereby delivering improved information dissemination at the tactical level.

Adept at judging the technical acumen of his audience, he presents relevant issues at a level that can be readily understood and he has the rare and important gift of making the technically complex accessible to the military generalist: he achieves this with characteristic patience and humility. Through his long-term engagement with



tactical CIS, Dr Davies has contributed to the growth of a more technically accomplished Corps and influenced generations of signallers.

As BATCIS starts the development of the next generation of tactical communications, Dr Davies is once again a critical contributor. His unique knowledge of current systems, their strengths and limitations, and of the opportunities offered by the latest developments in radio design and commercial information technology will be fundamental to delivering battle-winning military communications systems in support of UK Forces involved in future conflicts.

The British Armed Forces has benefitted greatly from Dr Davies' expertise and genuine enthusiasm in tactical communications. For his dedication and contribution to Defence communications he is awarded the Master of Signals Award.

Major (Retired) Paul Ford Master of Signals Award

Major (Retired) Paul Ford has been a highly enthusiastic and active member of Royal Signals Alpine Skiing for 40 years. Initially becoming involved in the sport as a 16-year-old apprentice at Harrogate over the winter of 1973/74, he turned out to be quite a 'decent' racer and gained the coveted "Red Jumper' after skiing for the Army Alpine Race team in the early 1980s.

Keen to foster enthusiasm for Alpine Racing across the Corps, Major Ford was instrumental in the move, due to the increasing number of participants, of the Royal Signals Race Camp from Zermatt to Kaprun in 1987. He later assumed overall responsibility for the Camp from 1990 until 1992 when he first introduced the concept of the Inter-Unit Race Championships. These early Championships attracted only 40 odd skiers, but the format he devised currently allows the Royal Signals Championship to host some 120 racers with representation from upwards of 90% of Corps Units, this is undoubtedly due to the vision and drive shown by him over the years. Ever passionate for Alpine Racing as a sport, he later went on to coach the British Ladies Army Ski Team (BLAST) and for a time Royal Signals hosted BLAST at Kaprun.

Some 40 years after first taking to snow, Major Ford has not let a season pass without skiing either competitively, recreationally or simply helping out with the Championship. Indeed, he even managed a weekend on skis last season, despite having successfully undergone a hip replacement not 17 weeks earlier.

Major Ford has cleverly worked out how to connect his other passion in life as a sports photographer with skiing – he now acts as the 'official' photographer for the Royal Signals Race Championships. He redirects all profit made from the sale of his pictures for the good and benefit of all and has donated generously to purchase numerous items over the years; most recently procuring new IT equipment for use by the officials during the championships as this



was not available through official sources. He has also become a valued and trusted advisor to the Corps Alpine Race Committee, offering valuable guidance from his years of racing experience.

For his selfless commitment, unwavering loyalty to Royal Signals Alpine Skiing and true passion for the sport over 40 years, Major (Retired) Paul Ford is awarded a Master of Signals Award.

RSI London Lecture & Dinner 2014

The 2014 RSI London Lecture and Dinner will be held on Thursday 20 November. As usual, the venue will be the Institute of Directors. Any company wishing to host a table should contact the RSI Secretary by 1 July.



In December 2013 a ceremony was held in the Princess Mary Hall at Blandford Camp to present RSI Awards to three Blandford-based soldiers; the three were:

- Sergeant Graham Martin. Awarded the RSI Silver Medal for his work at Joint Service Signals Unit (Digby) and now an instructor at 11 Signal Regiment.
- Corporal Michael Sammons. Awarded the RSI Silver Medal for his work at 16 Signal Regiment and now attending his Class 1 Course at 11 Signal Regiment.

 Major Darcy Saint-Amant. Awarded the Master of Signals Commendation for her work as the US Exchange Officer in Capability Directorate Information and now posted back to Washington DC on promotion.

The awards were made on behalf of the Master of Signals by the Corps Colonel Royal Signals, Colonel Graham Norton; their citation are reproduced below. A full list of recipients of Master of Signals Commendations can be found on Page 21.

Sergeant Graham Martin

RSI Silver Medal

In 2007, Corporal (now Sergeant) Graham Martin successfully changed trade from Radio Systems Operator to Electronic Warfare Systems Operator (EW Sys Op) to assist with alleviating an acute manpower shortage in that particular trade. Since then he has significantly built upon his initial Single SIGINT Battlespace (SSB) passport skills training to a point where his abilities are far above those of his peers and even many of those who are more senior to him. Currently employed as an instructor in the Operational Training Section (OTS) in Joint Service Signal Unit (Digby) (JSSU(D)), he delivers specialist Electronic Warfare/Signals

Intelligence (EW/SI) skills training in support of an Other Government Department. He is considered a true expert in his field by the Chain of Command, his fellow instructors and the Subject Matter Experts (SMEs) whom he regularly advises and liaises with.

Corporal Martin's professional knowledge and dedication to his tradecraft have delivered marked success within OTS, where his astute and considered instruction has been crucial to developing over 300 personnel in high-end SSB skills. Many of the plaudits lauded on the OTS instructional

team as a whole, including winning the JSSU(D) Support Trophy for 2012 and direct praise from both Commander Joint Force Command and Senior Civil Servants in Other Government Departments, are in no small part down to his personal efforts.

In 2012, a portfolio of Corporal Martin's operational intelligence evidence was presented to a panel of the



National Authority SMEs, who judged him to have achieved the standard required to meet skill level 3 in Special Technical Analysis. By National Departmental standards this is a huge achievement with few civilian staff ever achieving this grade. He is now treated as an equal by the community of SMEs and rightly so. Further weight is added to this accolade and his standing as a junior EW Sys Op tradesman by the fact that he is the only level 3 qualified instructor throughout the entire military SSB cadre.

Testament to the National Authority's confidence in Corporal Martin's abilities and advice as an instructor of specialist skills, SMEs regularly ask for his personal assistance to provide training to their personnel. The confidence and trust thus placed in his abilities importantly cement further the SSB partnership.

Corporal Martin is the perfect example of an intelligent, articulate, driven and professional tradesperson that other Royal Signals personnel should aspire to. For his efforts and outstanding achievements, Corporal (now Sergeant) Martin is awarded the Royal Signals Institution Silver Medal.

Corporal Michael Sammons

RSI Silver Medal

Corporal Michael Sammons was employed as a Class 2 Communications System Engineer in the Forward Repair Team of Bastion Information Communication Systems Troop during Operation HERRICK 16. His duties involved deploying to Patrol and Forward Operating Bases throughout Helmand in order to effect repairs on the full suite of operational communication systems. Corporal Sammons' deep seated interest and enthusiasm for technology has driven him to attain additional extremely high level Cisco technical qualifications which he has achieved in his own time and at significant personal cost. In addition to performing his routine daily responsibilities to an exceptional standard, Corporal Sammons proved that he had the initiative, intelligence and capacity to identify a critical area in need of improvement as well as the personal drive to push it through to resolution.

The principle communications bearer system in Helmand is the Kestrel network which has layered hardware and software systems. Over time this network had been adapted to meet differing requirements resulting in a technically complex entity. On arrival in Theatre Corporal Sammons used his initiative to commence an in depth investigation of the entire network as it became apparent that it was not performing to the optimum level. He systematically worked his way through each and every level of complexity, including the specific programming languages, used to route information across the network.

By interpreting a huge range of complex data, Corporal Sammons identified serious flaws impacting on the reliability of the network. With the technical acumen and operational breadth of vision expected of a much senior and more experienced tradesman, he formulated technical improvements in network availability thereby enabling

commanders to make better informed, effective and timely decisions.

Corporal Sammons' ability to produce high quality written and verbal briefs was key to raising awareness of the issue. His confident, calm and technically accurate briefings to senior commanders were mirrored by his clear and logical written work which resulted in a comprehensive technical audit and the first deployment of the a technical support team for the Kestrel network.



Without Corporal Sammons' professional inquisitiveness, technical ability, tenacity and personal drive the improvements made to the Kestrel network design would not have been delivered. Directly through his efforts operational risk was successfully mitigated. For his outstanding achievements Corporal Sammons is awarded the Royal Signals Institution Silver Medal.

Major Darcy Saint-Amant

Master of Signals Commendation

Major Darcy Saint-Amant has served for two years in Army Headquarters within the newly formed Capability Directorate Information. As the US Exchange Officer, she has proven to be an exceptional staff officer working in a UK environment and leading the development of Communications and Information Systems (CIS) doctrine relevant to the coalition environment. Over a period of significant change, she has routinely faced a myriad of complex challenges characterised by the high watermark in deployed CIS capability on Operation HERRICK but also the need to re-focus doctrine, training and equipment capability towards contingent operations.



Major Saint-Amant became rapidly immersed in UK doctrine development and capability management, demonstrating her capacity for hard work and skill in resolving challenging problems. Significant tasks

included an analysis of UK deployed CIS capability from Afghanistan for future contingent operations. Major Saint-Amant led this highly effective work effort to prioritise operationally relevant CIS which informed UK Defence funding decisions. Furthermore, she has led the revision of Royal Signals tactical doctrine and provided a pivotal contribution to the development of Network Operations doctrine as part of the multinational American, British, Canadian, Australian and New Zealand Armies (ABCA) Programme. Throughout, she has demonstrated a first class understanding of the concepts of employment of UK CIS capabilities and communicated it with accuracy and clarity. At the same time she has been the architect for critical technical and organisational elements for the major C4ISTAR experiment with coalition partners in 2014; demanding focus and innovation to deliver optimal outcomes.

Over a two year period Major Saint-Amant has made a remarkable contribution to capability development decision-making in the Army Headquarters well beyond that which is routinely expected of someone in her appointment. She has consistently demonstrated enthusiasm and exemplary commitment to her work which is of the highest quality and upholds the values and standards of the US Army. Moreover Major Saint-Amant has willingly made a significant wider contribution to all aspects of Garrison life and leaves her post having ensured the relationship between the Royal Signals and her own US Army Signal Corps remain vibrant and enduring.

For her outstanding efforts Major Darcy Saint-Amant is awarded the Master of Signals Commendation.



What is AFCEA? Armed Forces Communications and Electronics Association (AFCEA) was established in 1946, it is a not-for-profit membership organisation serving the military, government, industry, and academia as an ethical forum for advancing professional knowledge and relationships in the fields of communications, IT, intelligence, and global security.

What does AFCEA do? AFCEA links professionals in Command and Control, Electronics, Communication and Intelligence, across more than nineteen countries on four continents. It covers the defence, national security, intelligence and civil government sectors, providing a forum to support customers and suppliers alike.

What will AFCEA do for me? Give you the chance to network with like-minded people; expand your knowledge with briefings from leaders in their field; develop your professional expertise through the full and frank exchange of ideas ... all in a friendly and ethical environment.

What is AFCEA UK? Within the UK, AFCEA has four branches – London, South (centred on Portsmouth, Andover and Blandford), West (centred on Cheltenham, Bristol and Corsham) and East (centred on the USAF bases in East Anglia) – each of which normally meets monthly. All RSI Blandford Lectures are run in conjunction with AFCEA South.

What is the AFCEA Academic Trust (AAT)? The AAT is registered with the UK Charity Commission and promotes academic excellence by awarding prizes to the best academic performance on more than 30 MoD courses each year, including the FofS, YofS, FofS(IS), YofS(EW) and CISM courses.

More information? Go to the AFCEA UK website or contact the RSI Secretary.

THE WHISTLER TROPHY



In 1963, on relinquishing the appointment of Signal Officer in Chief (Army), Major General A M W Whistler CB CBE presented a Georgian silver tankard to be awarded annually to the outstanding Royal Signals Subaltern of each year. The rules were changed in 2006 to extend eligibility for the award to reserve officers and junior Captains of less than two years seniority.

The winner is the junior officer who is judged to have done the most for their unit over the year; paying particular attention to what they have done for those under their command, to the level of enterprise shown and to their overall contribution to the Corps. Emphasis will be placed upon effort, achievement and professionalism, though significant achievements in sport and adventurous training that have benefited those under command will also be taken into account.

The 2012 recipient of the Whistler Trophy was Captain James Thomas who was serving in 20 Armoured Brigade Headquarters & Signal Squadron (200) at the time of his nomination; he is now attached to 3 Commando Brigade. He received the trophy from the Master of Signals at the Spring Corps Guest Night in Blandford in March 2013; his citation is reproduced below.

Captain James Thomas

Captain James Thomas is a first-tour Troop Commander in 20th Armoured Brigade Headquarters and Signal Squadron (200). He has commanded the Rear Link Detachment (RLD) Troop during Mission Specific Training (MST) and deployment on HERRICK 15. Prior to deployment, in addition to his Troop Commander responsibilities, he was selected for early promotion to Captain to fill the new and crucial role of SO3 Afghan National Security Force Development (ANSF Dev) in the Task Force Helmand Headquarters (TFH HQ) J6 Branch. Utterly committed to his job with an admirably self-effacing side to his character, he has been an inspirational leader to those he commands and a stirring example to those he has served with.

During MST, he showed vision and application that belied his experience, personally engaging with the Battle Groups to shape and develop their understanding of the RLD role. He fought ferociously for tight training resources and led by example to ensure his soldiers were adequately prepared mentally, physically, militarily and in trade. The fact that the RLDs were some of the most effective soldiers on the Brigade's CFX, speaks volumes for his dedication and foresight. Despite this frenetic period of activity he still found time to organise a Squadron multi-activity Adventure Training package in Bavaria and take eight soldiers to run the Marrakech Marathon, raising over £1000 for charity. As the Unit Media Officer, he organised a series of media events to advertise the Squadron's MST activities; an effective morale boost for those 'starring' individuals and the

Squadron as a whole. Importantly, he never fell behind on the more mundane aspects of commanding his troop such as appraisal reports or vehicle inspections.

Dynamic, intelligent and self-assured, he quickly cemented his burgeoning reputation in TFH HQ in the new role of SO3 J6 ANSF Dev on HERRICK 15. Dealing daily with the fiercely independent Brigade Advisory Group (BAG) and Police Mentoring Advisory Group (PMAG) he forged a highly effective link between these units, himself and the ANSF Dev Branch in Regional Command (South West) (RC(SW)) CJ6 Branch. His clarity of staff work and considered engagement delivered freedom of movement to the BAG and PMAG, while greatly increasing the situational awareness of RC(SW) CJ6. His role was used as HQ 'best practice' in terms of ANSF Dev. No mean feat for a junior officer who was competing against post-ICSC(L) SO2s in other branches. He still maintained his responsibilities as OC RLD Troop, managing the 60 personnel in 11 RLDs scattered across the Area of Operations. They and their respective Officers Commanding had nothing but praise for his patience, energy and, crucially, his effect.

Caption Thomas is a junior officer of real intellect, significant aptitude and considerable poise. He has delivered real effect on operations as a staff officer, whilst still being able to deal with the challenges of running a troop and not losing his sense of humour. He is truly an outstanding ambassador for the Royal Corps of Signals and a worthy recipient of the Whistler Trophy.



CHIEF OF THE DEFENCE STAFF'S SPEECH TO RUSI – 18 DEC 13

EDITOR'S NOTE

General Sir Nick Houghton GCB CBE ADC Gen was appointed Chief of the Defence Staff in July 2013 having previously been Vice Chief of the Defence Staff and prior to that Chief of Joint Operations. He was commissioned into The Green Howards in 1974 and went on to command the 1st Battalion in 1991-94.



He subsequently commanded 39 Infantry Brigade in Northern Ireland and later, on promotion to Major General, he became Chief of Staff HQ Allied Rapid Reaction Corps. In 2005 he assumed the appointment of Deputy Commanding General Multi-National Force – Iraq. He has been Colonel Commandant of the Intelligence Corps since 2008.

CDS gave the traditional pre-Christmas 'Armed Forces State of the Nation' address at the Royal United Services Institute on 18th December 2013 at an event that was hosted by Lord (John) Hutton, the former Defence Secretary. CDS has very kindly agreed to the address being reproduced in the RSI Journal.

Thank you John (Hutton) for your very kind introduction. Can I say what a genuine pleasure it is to be here. I am very happy to continue what is now the established pre-Christmas tradition of giving a Chief of Defence Staff talk to the Institute.

But if the fact of this talk is now something of a tradition; I am not as certain whether or not the style of the talk is yet so established. Is this meant to be an 'Armed Forces State of the Nation'; a stare into the Defence and Security Crystal Ball? Or is it in my case the assessment of the challenge six-months-in? Or is it merely some pre-Christmas entertainment?

Well my own view is that an opportunity such as this should not be wasted on some rosy reflections or some self-indulgent congratulations. It is an opportunity. It is an opportunity to inform, to enlighten, and to challenge. In doing so it is not my intention to be critical, radical or rogue. But it is my purpose to inform debate, because I strongly believe that, given the emerging security challenges of the age, Defence has more to do to be fully fit for purpose in all respects.

If I were to offer a thesis for this talk, then it would be that the current paradigm which informs the funding, structure and employment of Defence and the Armed Forces will need to evolve in order to meet the emerging Defence and security challenges of the age. We are in a situation which thoughtful people should pay attention to; and that

the Ministry of Defence and government more widely will need to respond to in the years ahead.

Now, in many respects this audience is not the target of this talk. You are here to pay witness to an outing of professional conscience – which I hope will guide some of the activities of Defence over the next few years.

I will structure what I have to say in four parts. The first will cover the International Security Context; the second will cover the UK national context; in the third I will briefly outline what I see as the current UK paradigm for funding, force structure and employment of military power; and finally I will set out some of the things I believe we need to do to respond to the situation I portray.

I am humble enough to recognise that the situation I describe will not be a wholly accurate one; and that the responses I suggest will not necessarily be sufficient nor wholly appropriate. My thesis is borne of individual observation and experience; not of exhaustive research and analysis. Let me make a start.

What I have to say about the International Security context will, to many or most of you, not be revelatory. I capture it in four observations. They are uncertainty; instability; the advent of threats which are more diverse, less existential and less symmetric than hitherto; and, fourthly, the increasing mutuality of nations and the interdependence of the world in general.

The uncertainty is partly a product of both economic and demographic change in the current world order. Old Europe is in relative economic and demographic decline; the Asia-Pacific is in the ascendancy; and the United States is somewhere between pivot and rebalance. It is also, in part, a product of policy shifts and diplomatic initiatives which, in many parts of the world, and specifically in the Middle East, will alter a status quo with which some nations have become comfortable.

The instability is also most obviously evident in the Middle-East, but also North Africa, where the so-called Arab Spring has not necessarily liberated the forces of democracy. But the potential for instability spreads much wider: it is the primary internal concern of both Russia and China; and manifests itself in increasing areas of ungoverned space in the Sahel, the Horn of Africa and, potentially still, astride the Afghan-Pakistan border. And instability is a maritime as well as land based phenomenon, as witnessed in the Gulf of Guinea, the South and East China Seas and the Indian Ocean.

The advent of more diverse and less state based threats has become an increasing feature of the age. Most mature Western democracies no longer face existential state-on-state threats in classic force-on-force terms. Rather the challenges are more insidious. There are threats which relate to terrorism, to international crime, to energy resources and critical national infrastructure. There are challenges to our human security, our way of life; there are hazards which derive from the dangerous conditions attendant on a warming planet. And these are threats which have emerged in the rising domain of warfare: cyberspace.

And my final condition of the international security scene is the phenomenon of mutuality. The world is increasingly inter-dependent. Nations depend on other nations. The nature of the way power interacts between countries has become far more diffused.

What are the implications of all this? Well I think it is possible to derive some quite clear conclusions. The first is that countries such as our own, which derive their relative power and prosperity from the maintenance of a stable world and an international rules based order, are confronted by the twin challenges of change and instability. So the Grand-Strategic challenge of the age could be seen as "how to accommodate change whilst maintaining stability."

A second conclusion is that the content of much of the current military inventories of Western nations, optimised as they are for symmetrical, state-on-state conflict, at scale, is in need of review.

"Defence is also going to have to better prioritise its money towards things which are most relevant to the security demands and capability needs of the future."

And my third conclusion is that the dangers to the homeland which derive from novel threats, widespread instability and the diffusion of power beyond state monopoly begs a re-examination of homeland security and national domestic resilience.

Can I next move to the UK domestic scene where the military instrument of national power is increasingly confronted by challenges in respect of funding, utility and societal support.

I am not tonight going to say that Defence immediately needs more public funding. In part this is because I buy into the narrative that there can be no strong Defence without a strong economy. I also believe that Defence needs to continue to improve its financial competence, both in reputational and real terms, if it is going to win the argument for more funding.

But what I will say tonight is that the leadership of the Armed Forces are bought into a wider narrative that speaks to the real-terms growth in Defence Funding that should accompany the nation's recovery from austerity. This is a narrative which the Prime Minister has acknowledged. Defence will need real growth in the next parliament if the reality of the force structure set out in the last SDSR is to be realised.

But, and this is my second point, "Defence is also going to have to better prioritise its money towards things which are most relevant to the security demands and capability needs of the future."

This point links to the absence, for the moment at least, of state-based symmetrical threats at scale.

My third point relates to the state of domestic support for the use of military force. And, in-truth I could extend this point to that of political anxiety about its beneficial use and incremental legal constraint on its employment. My prevailing view is captured in the assessment that the UK's Armed Forces have never, in the forty years that I have known, been held in such popular high regard. But the purposes to which they have most recently been put has seldom been more deeply questioned. As a nation we have become a touch sceptical about the ability to use force in a beneficial way.

Such a combination of tight national resources, concerns regarding utility and political and societal reservation about the beneficial use of military force does not create a benign environment for Defence funding.

"We are critically deficient in the capabilities which enable the joint force. Such things as intelligence, surveillance, compatible communications, joint logistics and tactical transport."

And my stark conclusion is that, when you combine the International Security Context to the UK Domestic scene, then one of my great challenges as CDS is to help to revalidate the utility of the military instrument of National Power in the minds of government and the wider public.

The third part of what I want to say is just to pause a moment on what I call the current paradigm of Defence in respect of funding, force structure and force employment. We are, in truth, already making considerable progress to change this paradigm, but I will tell it as starkly as I can to make my more general point.

Defence has for many years, certainly since the successful end of the cold war, and in strong international company within Europe, been managing the decline of military hard power. Defence funding has been reducing and we have enjoyed reduced manoeuvre room in how we spend Defence's money. Increasingly we have spent it on large capital equipment programmes often with an eye on supporting the United Kingdom's Defence industrial base.

Our approach has been through an equipment lens which has emphasised technical overmatch in force-on-force conflict. And, whilst exquisite technology has been protected as the key to operational superiority, manpower has been seen more as an overhead and activity levels have been squeezed.

Indeed, the one bit of Defence's future funding that has political commitment to real growth is the equipment programme. But the dawning reality is that, even if we maintain the non-equipment budget in real terms, rising manpower costs raise the prospect of further manpower and activity cuts. Unattended our current course leads to a strategically incoherent force structure: exquisite equipment, but insufficient resources to man that equipment or train on it. This is what the Americans call the spectre of the hollow-force. We are not there yet; but across Defence I would identify the Royal Navy as being perilously close to its critical mass in manpower terms.

Elsewhere in the paradigm we remain too platform focused and insufficiently concerned about enablers. The historic service-centric, major equipment focus has left us with relatively strong environmental components, but devoid of senses and a central nervous system. I exaggerate, but you get the point. We are critically deficient in the capabilities which enable the joint force. Such things as intelligence, surveillance, compatible communications, joint logistics and tactical transport.

Next I would observe, as we enter our final year of combat in Helmand and revert to a contingent posture; the paradigm continues to fund Defence's capability primarily to hold forces at readiness; not to fund them for pro-active activity in this uncertain and unstable world. And so, much of a 33 Billion Pound insurance policy could sit awaiting the next crisis, because it is only funded for contingency and not for engagement. And if the government wants to use it, it has first to have a discussion about who is paying.

And the final part of the paradigm has the potential to become the most damaging of all. It is the creeping aversion to risk in the employment of our Armed Forces. This aversion has multiple origins – politics, society, the media and the Armed Forces themselves.

I have recently observed with some admiration the relative ability of French Forces to operate with a mindset of aggressive risk management. We must be careful as a society and as a professional military not to lose our courageous instinct since it is one of the things which keeps us in a class-apart.

The final part of what I want to do is to offer some thoughts on how we should respond to the circumstances I have described. I will cover three areas briefly – funding, structure and employment of Defence capability.

As far as funding is concerned, again this is not the moment to ask for more. But we must, as we go forward, protect what we have and ensure that there is a balanced investment in our people as well as our equipment. I would argue most strongly that it is our people that give the United Kingdom's Armed Forces our qualitative edge; so we must protect our ability to recruit and retain the best ... in both our Regular and Reserve Forces.

We must also be careful that the Defence Budget is not disproportionately used to support British Defence Industry. There is a strong strategic case to retain specific sovereign capabilities in national hands; and there are very sound reasons to husband the ability to re-constitute specific capabilities nationally. But the Defence budget does not exist primarily to subsidise the Defence Industry or promote Defence exports. It exists to maximise Defence capability. And it should do so in a way that recognises that our national defence industry does have a part to play as an element of our national hard-power.

And finally on funding, we must find better ways of resourcing activity that sits in the grey area of conflict prevention and upstream stabilisation; or we will fail to monetize a huge national asset which can considerably assist the delivery of developmental benefits.

As far as force-structure is concerned we must exploit the advent of the Joint Forces Command to champion the enablement of the force. This command is now the proponent for C4ISR, for Cyber, for Special Forces, for Joint Logistics and Defence Medical Services. It owns those things which represent the nervous system of capability. And its age has now come.

A second consideration on structure, especially as the United States rebalances, is our use of Alliances and Coalitions. We must start to be braver in recognising that the European pillar of NATO has to start to genuinely share capability rather than indulge in some reductionist alchemy which leaves everyone doing less of the same.

Finally on the employment of Defence capability. If the United Kingdom wants to stay in the Premier League of smart power then it must invest in Armed Forces that can generate hard power capability that is credible in respect of conventional coercion and deterrence.

But having done that, government must not, given the security challenges of the age, keep that capability at home awaiting the next intervention. Rather it must exploit it pro-actively in meeting the challenges of stabilising an uncertain and dangerous world; helping to prevent conflict; and to build the security capacity of other nations.

In this context I would suggest that we need to be far more pro-active in our investment in United Nations Operations. After all such operations come pre-funded and with the benefit of an extant legal mandate which confer legitimacy. And I also think that the time has come to dramatically professionalise the career stream of the international officer. The days of defence attaché appointments being a reward for a career well-spent cannot continue.

In adopting a strategic posture of engagement we can better add to the country's influence on the world stage; support national security and policy objectives; and be more proactive on the national prosperity agenda. We will also sustain the potential for attractive and fulfilling careers for those who do not want to live ordinary lives. But most importantly of all we will understand far better areas of potential conflict. Because, to misquote Antonio Giustozzi, arguably one of the follies of our current age has

been an unmatched ambition to change the world without bothering to understand it first.

Lastly, we must recognise that the domestic dimension of security threats, rather than merely being terrorist related, could impact on national critical infrastructure such that a national domestic response is needed at large scale. We must re-evaluate, from a defence perspective, the nature of our approach to homeland security and domestic resilience. And we should be mindful that the prospect of state sponsored asymmetry could change many of our calculations about the security of the United Kingdom in the years to come.

Well that is all I intended to say. As I said at the outset I may be wrong in some of this; but it makes sense to me. You can be reassured that some of this is already in hand. And if some of what I have said seems unduly alarming it is because I do not think it is the job of a CDS to pamper to a comfortable state of negligence in matters of our nation's security.

I remain convinced that the provision of such security cannot be wished away; and will remain one of the defining duties of government. But the Armed Forces will need to evolve to ensure that they remain appropriate to the demands of the age in which they live. And the country must sustain the appetite to use them appropriately in the national interest.

Thank you. Have a very Happy Christmas. And can I on your behalf extend that greeting to the many thousands of UK Servicemen and women serving in Afghanistan and around the world this Christmas. I am sure you would join me in thanking them and their families and friends at home for all they do on our behalf; especially at this time of year.



The Royal United Services Institute (RUSI) is located on Whitehall in London, SW1A 2ET.

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EDITOR'S NOTE

In November 2013 the Royal Signals Institution (RSI) ran a workshop to explore the issues surrounding the integration of the Regular and Reserve elements of the Royal Corps of Signals. The serving Corps was represented by the commanders of 1 and 11 Signal Brigades along with several of their staff, Capability Directorate Information and the Commanding Officers of Royal Signals units. In addition to the military presence, there were a number of retired senior Royal Signals officers and representatives from industry, including Brigadier (Retired) Mike Lithgow, at his first workshop since assuming the Chairmanship of the RSI. Collectively, workshop members represented a highly qualified quorum for the task at hand.

The workshop did not pretend to deliver "magic wand" solutions to a complex problem. Rather, it sought to jump-start thinking and provide Commanders 11 Signal Brigade and 2 Signal Group, who command the majority of the Corps' reserves, with an increased understanding of the challenges facing integration and furnish them with specific considerations and, where possible, recommendations. It was intended that the product of this workshop would also help to inform the 11 Signal Brigade directive on the integration of its Regular and Reserve components.

This article from Brigadier Tim Carmichael, Commander 1 Signal Brigade and Vice Chairman of the RSI, summarises the main themes addressed during the workshop.

Under Army 2020 (A2020), the Army will be restructured to become a fully integrated force of some 112,000 trained personnel (about 82,000 Regulars and 30,000 Reservists). The Reserve Forces will be an integral part of our armed forces, with elements of the Reserve required for almost all future operations.

Future Reserves 2020 (FR20) is a complete redesign of the structure and terms of service of the Reserve Forces and will enable the Reserve to play a much more significant role in the new integrated Army. In an Army where the demand for information and communications services, electronic warfare and cyber will be as high as ever, the Royal Signals will restructure to deliver an integrated Corps of Regulars and Reservists to support the twin initiatives of A2020 and FR20.

In the Royal Signals, the majority of the Reserve will come under 2 Signal Group as part of 11 Signal Brigade. The chart on the next page shows the Corps order of battle when the A2020 and FR20 work is complete. Units are already in the process of aligning to this structure; more details on the titles, roles, locations and organisation of the new units can be found at the end of this article.

When considering change of such a fundamental nature, a clear divide between the Regular and Reserve Forces, it is worth considering three areas that will influence the with distinct roles and responsibilities for each. achievement of success:

- Outputs. What is the integrated force for? What are the best outputs for the reserve element of the force?
- Best Practice. What is being done elsewhere that might offer an insight into successful models? What does "good" look like?
- Culture. What cultural issues might enable or impede progress?

"We must integrate our Regular and Reserve forces. This is a critical endeavour, and it will require a concerted effort to make it work. Success will deliver an Army that has strength in depth, greater flexibility and is tailored to meet the security needs of the nation."

> General Sir Peter Wall Chief of the General Staff July 2013.

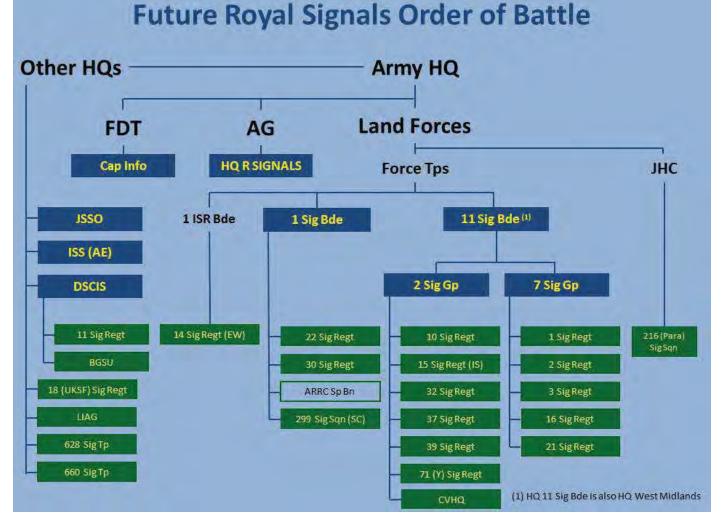
For the Royal Signals, the solution not straightforward presents a potential structural vulnerability, as without the UK Ops role, further Reserve Royal Signals units may have been cut under A2020. Solutions worth considering further are:

- Remove 'UK' from the 'UK Ops' title. This ensures that the Reserve is focused on its outputs: delivering capability in support of operations, agnostic of location.
- Change emphasis. Switch the emphasis from a UK Ops based role with additional duties, to
- a Reaction Force focused role with additional duties based upon Adaptive Force and the current UK Ops commitments.
- Share the load. View the capability for UK Ops being held at the 'paired Regimental' level (see below), which is subsequently delegated to a Reserve sub-unit, perhaps on an internal rotation.

OUTPUTS

Since its inception over 100 years

ago, the sine qua non of the Territorial Army was to underpin the territorial integrity of the United Kingdom. The Royal Signals Reserve units today still retain a predominantly "UK Ops" focus to their tasks. Arguably, this could be seen as a barrier to the integration process, as it portrays the Reserve units as still committed to a separate territorial role. While this is a non-discretionary, enduring and important task for which real capability needs to be maintained, it arguably perpetuates the impression of



BEST PRACTICE

In order to establish what "good" looks and feels like in terms of integration of the Regular and Reserve components of the Corps, it is worth seeking examples of best practice from elsewhere. Without re-hashing individual case studies, two common themes emerge when one analyses the experience of transformation change at a Corporate level from BT, the approach taken by the Honourable Artillery Company (HAC) and the evolution of 63 (SAS) Signal Squadron from a distinct entity to a fully integrated capability within 18 (UKSF) Signal Regiment. The two themes are the importance of training and unity of purpose.

Training. The existing training programme only delivers a fully trained Reserve soldier capable of supporting UK Ops and reaction tasks after four years, thus:

Year 1. Phase 1 complete by year-end.

Year 2. Phase 2 complete by year-end.

Year 3. Phase 3 complete by year-end.

Year 4. Additional training for Reaction Force Ops.

Clearly, the length of time that it currently takes to train a Reserve soldier fully presents a considerable challenge to retaining the attention and interest of the recruit. A solution must be sought to shorten the time it takes to train Reserve recruits from four years to two years. The following concepts should be considered:

- De-centralised training. Conduct de-centralised Phase 2 training for reserve recruits. This is very similar to what the Regular Corps is now doing for its Phase 3 training, with units working in conjunction with DSCIS to deliver de-centralised training (e.g. the PNCO cadre).
- Licensed training. The HAC and Special Forces units have the ability and authority to conduct their own licensed Phase 1 training. It would be worth examining whether all Royal Signals Reserve units should be authorised/licensed to conduct their own Phase 1 training.
- Modular training. Elements of Reserve forces training could be modular and designed to be partially completed on-line. This could also be used to ascertain the relevance of existing knowledge, skills and experience, thus allowing those professionally qualified in similar areas to gain credits for training or be fast tracked whenever their existing knowledge is of direct relevance to their employment in the Reserve forces.

Anecdotal evidence indicates that where an individual Reservist has joined and trained with their 'pals', the wastage rates are reduced and retention increased. Arguably this is the sort of improved training that pairings with Regular units could bring and in turn generate more trust between Regular and Reserve elements - a virtuous spiral.

Unity of Purpose. For integration to be successful it is imperative that an ethos of 'all of one company' is created, to which all Royal Signals soldiers, Regular and Reserve, can subscribe. For this to be realised, there needs to be a common sense of belonging and purpose that is the same for both Regular and Reserve Forces. The pairing of Regular and Reservist units (see below) is likely to be at the heart of this effort, but instinctively there is more that could be done to deliver unity of purpose and a genuine sense of shared identity. Migration of individuals between the Regular and Reserve components of the Corps (in both directions) could help, though this is all likely to require time. Taking 18 (UKSF) Signal Regiment as an example, soldiers can serve in the Regular or Reserve components. A high proportion of the Reserve regimental duty and supervisory appointments are from the Regular part of 18 (UKSF) Signal Regiment. This wider employment is seen as positive as it provides appointments for promotion and wider experience.

A more radical step might be to create Reservist posts in a Regular component that do not require a full-time individual. This might also have budgetary advantages. It would require a break from the view that to progress, a soldier needs to move every 2-3 years to different Regular units. Finally, at the end of a Regular's career, pro-active management should consider placing them into the Reserve component. This is best managed at the paired unit level, facilitated by APC Glasgow. It needs to be selective so that it is not perceived as restricting promotion and command experience within the Reserve component.



Pairing. In some units, there has been a perception of a lack of trust between Regulars and Reservists. This has been due to a certain level of mutual ignorance, through lack of exposure of each others' routine activity outside of deployments. In line with CGS's direction, pairings will be made between Regular and Reserve units, which it is anticipated will help to bridge this gap. In addition, it should provide the Reserve force with improved access to equipment, while also providing more opportunities for training and exercising. It is crucially important that these pairings are not an arrangement that exists solely on paper. They should instead be viewed as the opportunity for Regular and Reserve soldiers to take part in the same exercises, adventurous training expeditions, social functions, ceremonial occasions and operations. It should become second nature that both the Regular and Reserve units in a pairing are involved in the planning processes for all activities. Recent examples, from the Corps Alpine

Skiing Championships, to successful integrated exercises between 16 Sig Regt and 37 Sig Regt, point to the genuine utility of pairing. Key to success of the pairing mechanism is to plan collaboratively:

- Integrated Plan. An integrated plan is needed for recruitment, training, career management, employment and deployment of the Regular and Reserve components of the paired organisations. This should be jointly written, jointly signed and jointly managed. It would contain individual annexes for each part of the pairings to manage that which is different between them. This plan should cover a minimum of 24 months and potentially look out to a 5 year horizon. It would be a live document that was regularly and jointly reviewed to take into account changes in defence requirements.
- Formation Sign-off. The integrated plan should be signed off at formation level and should have a set of metrics to measure progress against the plan. These metrics should be assessed and form part of the annual appraisal process for both the Regular and Reserve chains of command.
- Frequent Communication. The integrated plan would provide a clear set of messages that should be communicated frequen is crucial after all, most soldiers (regardless of "flavour") work better when they know what is going on.

CULTURE

One of the main potential barriers to organisational change is bringing about a change to an organisation's culture. In the case of the Army, these are the separate cultures of the Regular and Reserve forces. As part of the preparatory work for the Whole Force Concept (WFC), in 2012 the Director Personnel Capability ordered a review to be conducted of the cultural differences between the Regular army and the then TA. The review concluded that there were indeed clear cultural differences between the Regular Army and the TA and that these differences would need to be addressed since they were likely to be a barrier to the implementation of the WFC. It further stated that a much greater level of coherence was required between Regular and Reserve elements. The paper¹ describes how the Regular Army's culture is dominant and, that it must change in order for integration to be successful. The paper acknowledges that the Reserve forces will also have to change.

Professor Connelly's studies have determined that, while there can be much respect for individual Reservists from members of the Regular Army, there is reluctance on behalf of the Regular Army to accept the idea of a truly integrated Army of the future. It was perceived that the reliance on collective groups of Reserves as laid out by Army 2020 goes against many of the cultural beliefs of the Regular Army. Therefore, it could be difficult for the Regular Army truly to accept the integration based on the current organisational structures.



"This change must be command-driven through energetic leadership and the message delivered will need to be clear and understood by all, if it is to have a chance of being supported by all."

The primary challenge in breaking down cultural barriers will be to engender trust between both parties. Work will need to be put in place to change the stereotypical view of some Regulars that the Reserve Forces are collectively "unprofessional"; equally, the organisation and method of operating for the Reserve Forces will also need to change. The Regular Forces must take active steps to avoid being perceived as being arrogant and condescending towards their Reserve counterparts. These are not changes that can take place in isolation but instead must be done in parallel, so that trust and professional respect can be gained on both sides. This challenge will need to be acknowledged and factored into any plan for integration of the Regular and Reserve elements of the Royal Signals. Strong leadership and clear direction will be needed if our outdated stereotypes are to be exorcised.

Routine Contact. There is anecdotal evidence that, in existing hybrid (Regular/Reserve) organisations where routine face to face contact occurs, there is a much greater level of trust and cohesion. For example, in HQ 11 Signal Brigade this routine contact takes place each week and allows the Reserve members of the team to maintain efficient working relations with their Regular counterparts, while keeping up to date on the main issues affecting the Brigade. This routine contact can be as simple as a member of the Reserve 'popping in' to see their Regular counterparts for a short time during the week.

CONCLUSION

So what does this all mean? Is it the end of our Corps as we know it? Or is it a new beginning? The changes associated with A2020 and FR20 represent a great opportunity for the Corps (Regular and Reserve) to be a far more integrated and cohesive organisation. The opportunities presented are already taking shape and the recent, highly successful partnered exercise between 16 Sig Regt and 37 Sig Regt has served to reinforce this as a positive way forward.

Integration will not be easy; there will be hurdles to overcome and the occasional dinosaur or two to slay on the way. Therefore, this change must be command-driven

¹ Cultural differences between the Regular Army and TA as barriers to integration – V Connelly, Jan 2013

through energetic leadership and the message delivered will need to be clear and understood by all, if it is to have a chance of being supported by all. It will need to be a sustained and concerted effort across the whole Corps.

For the Royal Signals and the wider Army, it is indeed a critical endeavour.



16 & 37 Sig Regt on a joint training exercise – September 2013

Summary of Army 2020 Changes to Royal Signals Units

Current Title:	1 (UK) Armd Div HQ & Sig Regt	Current Sub-units:	201, 211 & 212 Sig Sqn
New Title:	1 Sig Regt	New Sub-units:	200, 211 & 212 Sig Sqn
New Role:	Command Support (CS) Multi-Role Signal Regiment (MRSR) principally aligned with 20 Armoured Infantry (AI) Bde; delivering Small, Medium and Large Points of Presence providing tactical and operational communications. Regt will not provide life support to the Bde.		
Location:	Regt moving from Herford to Staffo both in Summer 15.	ord and 200 Sig Sqn m	oving from Sennelager to Stafford,
Notes:	(1) Deploys on Op HERRICK 20 in 2	014. (2) Structurally	y changes to a MRSR by Jul 15.
Current Title:	2 Sig Regt	Current Sub-units:	219 & 246 Sig Sqn
New Title:	2 Sig Regt	New Sub-units:	214, 219 & 246 Sig Sqn
New Role:	General Support (GS) MRSR providing ICS support to the Reaction Force Div HQ plus the Reaction Force Log Bde. Equipped with a broad balance of network assets providing flexibility as required. Regt will not provide life support to the Div.		
Location:	York – No change.		
Note:	214 Sig Sqn re-subordinates from 2	21 Sig Regt in Aug 14;	sub-unit already based in York.
Current Title:	3 (UK) Div HQ & Sig Regt	Current Sub-units:	202, 206 & 258 Sig Sqn
current ritie.	3 (OK) DIV TIQ & SIG KEGE		202, 200 & 250 3ig 5qii
New Title:	3 Sig Regt	New Sub-units:	202, 206 & 228 Sig Sqn
	3 Sig Regt GS MRSR providing ICS support to	New Sub-units: the Reaction Force Div ce of network assets p	202, 206 & 228 Sig Sqn

(1) 228 re-subordinated from 12 Armd Bde to 3 (UK) Div HQ & Sig Regt in Dec 13.

(3) Regt restructures to MRSR in Aug 14. (4) Regt becomes OPCOM 11 Sig Bde by Aug 14.

(2) 258 re-subordinated to 30 Sig Regt in Dec 13.

Notes:

Current Title:	10 Sig Regt	Current Sub-units:	225, 241, 243 & 251 Sig Sqn
New Title:	10 Sig Regt	New Sub-units:	81, 225, 241, 243 & 251 Sig Sqn
New Role:	High readiness ICS, IM and specialist expe		
Locations:	No change with the exception of 241 Sig		
Note:	81 Sig Sqn re-subordinated to 10 Sig Reg	t in Apr 13.	
Current Title:	11 (RSS) Sig Regt	Current Sub-units:	1, 2, 3, 4 & 5 Sqn
New Title:	11 (RSS) Sig Regt	New Sub-units:	1, 2, 3 & 4 Sqn
New Role:	•		rs and officers undergoing trade, military us All Arms and Joint CIS courses. It is part of
Location:	Blandford – No change.		
Notes:	Internal restructuring has taken place to	o reduce from five Sqns	to four.
Current Title:	14 Sig Regt (EW)	Current Sub-units:	223, 226, 236, 237 & 245 Sig Sqn
New Title:	14 Sig Regt (EW)	New Sub-units:	223, 226, 237 & 245 Sig Sqn & JESC Tp
New Role:	Provides EW capability when required fo	r operations. OPCOM 1	Intelligence and Surveillance Bde.
Locations:	Move from Brawdy to St Athan not befor	re 2018. JESC Tp will be	located in RAF Digby from Apr 14.
Notes:			
	15 Sig Regt (IS) Current Sub-units: GCN, GIS, LSST		
Current Title:	15 Sig Regt (IS)	Current Sub-units:	GCN, GIS, LSST
Current Title: New Title:	15 Sig Regt (IS) 15 Sig Regt (IS)	Current Sub-units: New Sub-units:	GCN, GIS, LSST 233, 259 & 262 Sig Sqn & LICSG
		New Sub-units:	
New Title:	15 Sig Regt (IS)	New Sub-units:	
New Title: New Role:	15 Sig Regt (IS) Level 3 support for delivered and assured	New Sub-units: d deployable ICS. ter	
New Title: New Role: Locations:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sur	New Sub-units: d deployable ICS. ter mmer 15.	233, 259 & 262 Sig Sqn & LICSG
New Title: New Role: Locations: Notes: Current Title:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Suitable Sig Regt	New Sub-units: d deployable ICS. ter	233, 259 & 262 Sig Sqn & LICSG 230 & 255 Sig Sqn
New Title: New Role: Locations: Notes:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sur 16 Sig Regt 16 Sig Regt	New Sub-units: d deployable ICS. tter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me	230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing
New Title: New Role: Locations: Notes: Current Title: New Title:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sum 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Bo	New Sub-units: d deployable ICS. ter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me Regt will not provide I	233, 259 & 262 Sig Sqn & LICSG 230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde.
New Title: New Role: Locations: Notes: Current Title: New Title: New Role:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sur 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Botactical and operational communications	New Sub-units: d deployable ICS. ter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me Regt will not provide I	233, 259 & 262 Sig Sqn & LICSG 230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde.
New Title: New Role: Locations: Notes: Current Title: New Title: New Role: Location: Notes:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sur 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Bottactical and operational communications Regt moving from Elmpt to Stafford and (1) 207 Sig Sqn re-subordinates from 7 Al (2) Restructures to MRSR by Jul 15.	New Sub-units: d deployable ICS. tter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me a. Regt will not provide I 207 Sig Sqn from Hohne mmd Bde to 16 Sig Regt i	230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde. to Stafford, both in Summer 15. n Aug 14.
New Title: New Role: Locations: Notes: Current Title: New Title: New Role: Location: Notes:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sulta 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Bottactical and operational communications Regt moving from Elmpt to Stafford and (1) 207 Sig Sqn re-subordinates from 7 Al (2) Restructures to MRSR by Jul 15.	New Sub-units: d deployable ICS. tter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me Regt will not provide I 207 Sig Sqn from Hohne rmd Bde to 16 Sig Regt i Current Sub-units:	230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde. to Stafford, both in Summer 15. n Aug 14. No change
New Title: New Role: Locations: Notes: Current Title: New Title: New Role: Location: Notes:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sur 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Bottactical and operational communications Regt moving from Elmpt to Stafford and (1) 207 Sig Sqn re-subordinates from 7 Al (2) Restructures to MRSR by Jul 15.	New Sub-units: d deployable ICS. tter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me a. Regt will not provide I 207 Sig Sqn from Hohne mmd Bde to 16 Sig Regt i	230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde. to Stafford, both in Summer 15. n Aug 14.
New Title: New Role: Locations: Notes: Current Title: New Title: New Role: Location: Notes:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sulta 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Bottactical and operational communications Regt moving from Elmpt to Stafford and (1) 207 Sig Sqn re-subordinates from 7 Al (2) Restructures to MRSR by Jul 15.	New Sub-units: d deployable ICS. tter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me Regt will not provide I 207 Sig Sqn from Hohne rmd Bde to 16 Sig Regt i Current Sub-units: New Sub-units:	230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde. to Stafford, both in Summer 15. n Aug 14. No change
New Title: New Role: Locations: Notes: Current Title: New Title: New Role: Location: Notes: Current Title: New Title:	15 Sig Regt (IS) Level 3 support for delivered and assured No change – Blandford, Corsham & Bices (1) LICSG re-subordinated in Apr 13. (2) Restructures by Mar 14. (3) Larkhill detachment closes. (4) Elements remain in Germany until Sulta 16 Sig Regt 16 Sig Regt CS MRSR principally aligned with 12 Al Bottactical and operational communications Regt moving from Elmpt to Stafford and (1) 207 Sig Sqn re-subordinates from 7 Al (2) Restructures to MRSR by Jul 15. 18 Sig Regt 18 Sig Regt	New Sub-units: d deployable ICS. tter mmer 15. Current Sub-units: New Sub-units: de; delivering Small, Me Regt will not provide I 207 Sig Sqn from Hohne rmd Bde to 16 Sig Regt i Current Sub-units: New Sub-units:	230 & 255 Sig Sqn 207, 230 & 255 Sig Sqn dium and Large Points of Presence providing ife support to the Bde. to Stafford, both in Summer 15. n Aug 14. No change

Current Title:	21 Sig Regt (AS)	Current Sub-units:	43, 214, 220 & 244 Sig Sqn	
New Title:	21 Sig Regt	New Sub-units:	204, 215 & 220 Sig Sqn	
New Role:	CS MRSR principally aligned with 1 Al Bde; delivering Small, Medium and Large Points of Presence providing tactical and operational communications. Regt will not provide life support to the Bde.			
Location:	Regt remains in Colerne, 215 Sig Sqn mo	ves from Tidworth to Col	erne in Summer 14 (tbc)	
Notes:	(1) 244 Sig Sqn re-subordinated to 30 Sig	Regt in Jul 13, moves to	Bramcote by Summer 14.	
	(2) Regt re-subordinated from JHC to 11	Sig Bde in Aug 13.		
	(3) 215 Sig Sqn re-subordinates from 1 M			
	(4) 214 Sig Sqn re-subordinated to 2 Sig I			
	(5) 204 Sig Sqn starts forming from Aug 1	.4.		
Current Title:	22 Sig Regt	Current Sub-units:	217, 222, 248 & 252 Sig Sqn	
New Title:	22 Sig Regt	New Sub-units:	217, 222, 248 & 252 Sig Sqn	
New Role:	Provides a combination of network, data support is delivered by the ARRC Sp Bn.	and application services	to HQ ARRC. Infrastructure and life	
Locations:	Regt based in Stafford, less 252 Sig Sqn v	vhich is based in Innswor	th.	
Note:	Regt restructured by Apr 14.			
Current Title:	30 Sig Regt	Current Sub-units:	250 & 256 Sig Sqn	
New Title:	30 Sig Regt	New Sub-units:	244, 250, 256 & 258 Sig Sqn	
New Role:	Mixed Role. One sqn supporting HQ ARRC with 22 Sig Regt. The AS Sqn provides communications support to the Joint Support Helicopter Force. Two high readiness CS sqns provide strategic and operational communications and HQ infrastructure to the deployable JRRF HQ, such as JTFHQ.			
Location:	Regt remains in Bramcote, 244 Sig Sqn w	rill move from Colerne to	Bramcote by Summer 14 (tbc).	
Notes:	(1) 244 Sig Sqn re-subordinated from 21 (2) 258 Sig Sqn re-subordinated from 3 (1)		Dec 13.	
Current Title:	216 (Para) Sig Sqn Current Sub-units: n/a			
New Title:	216 (Para) Sig Sqn	New Sub-units:	n/a	
New Role:	Independent CS Sig Sqn providing comm continues to deliver life support to a HQ.		or 16 AA Bde. Only R SIGNALS unit which	
Location:	Colchester – No change.			
Notes:	Small reduction in liability.			
Current Title:	32 Sig Regt (V)	Current Sub-units:	33, 50, 51, 52 & 69 Sig Sqn	
New Title:	32 Sig Regt	New Sub-units:	2, 51, 52 & 69 Sig Sqn	
New Role:	Delivers UK-wide ICS capability.		_, _, _,	
Locations:	RHQ (Glasgow), 2 Sig Sqn (Dundee/Aberdeen), 51 Sig Sqn (Edinburgh/East Kilbride), 52 Sp Sqn (Glasgow) & 69 Sig Sqn (Belfast/Londonderry) (1) 33 Sig Sqn re-subordinates to 37 Sig Regt by 31 Mar 14. (2) 50 Sig Sqn re-subordinates to 37 Sig Regt by 31 Dec 14. (3) Request for 69 Sig Sqn to be renamed 40 (North Irish Horse) Signal Squadron submitted to AHDC. (4) Hartlepool to close with opportunities to transfer to RLC. (5) Restructuring complete by Nov 14.			
Notes:				

Note: Other units within the R SIGNALS ORBAT e.g. 299 Sig Sqn that are Not directly impacted by A2020/FR20 measures and are not shown.

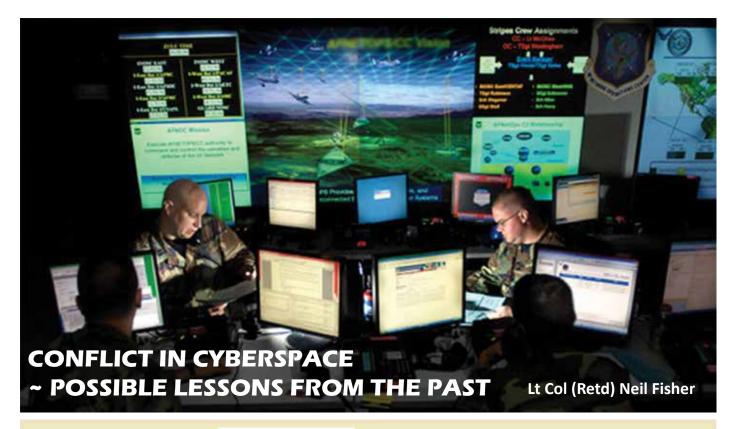
Current Title:	37 Sig Regt (V)	Current Sub-units:	36, 48, 53 & 54 Sig Sqn
New Title:	37 Sig Regt	New Sub-units:	33, 48, 50, 54 & 64 Sig Sqn
New Role:	Delivers UK-wide ICS capability.		
Location:	RHQ (Redditch), 33 Sig Sqn (Liverpool/Manchester), 48 Sig Sqn (Birmingham/Coventry), 50 Sig Sqn (Darlington/ Leeds), 54 Sp Sqn (Redditch) & 64 Sig Sqn (Sheffield/Nottingham)		
Notes:	 (1) 36 Sig Sqn re-subordinates to 71 Sig Regt by 31 Mar 14. (2) 53 Sig Sqn re-subordinates to 39 Sig Regt by 31 Mar 14. (3) Cambridge to close with opportunities to transfer to Int Corps. (4) Restructuring complete by Jul 15. 		

Current Title:	38 Sig Regt (V)	Current Sub-units:	1, 2, 41 & 64 Sig Sqn
New Title:	n/a	New Sub-units:	n/a
New Role:	RHQ and 46 Sp Sqn to be disbanded.		
Location:	n/a		
Notes:	(1) 1 Sig Sqn to close with opportunities to transfer to RLC, Int Corps and AAC.		
	(2) 2 Sig Sqn re-subordinates to 32 Sig Regt by 31 Jan 14.		
	(3) 41 Sig Sqn re-subordinates to 71 (Y) Sig Regt by 31 Mar 14; the Sqn will be based in Coulsdon. Kingston to close with opportunities to transfer to RAMC.		
	(4) 64 Sig Sqn re-subordinates to 37 Sig F	Regt by Jan 15.	

Current Title:	39 Sig Regt (V)	Current Sub-units:	43, 56, 57, 93 & 94 Sig Sqn	
New Title:	39 Sig Regt	New Sub-units:	43, 53, 93 & 94 Sig Sqn	
New Role:	Delivers UK-wide ICS capability.			
Locations:	RHQ (Bristol), 43 Sig Sqn (Bristol/Bath), 53 Sig Sqn (Cardiff/Gloucester) & 94 Sig Sqn (Windsor)			
Notes:		Dec 14 with opportunities to transfer to INF and RLC. c) closes Jul 14 with opportunities to transfer to PWRR. d 43 Sig Sqn by Jun 15. (5) Restructuring complete by Nov 15.		

Current Title:	71 (Y) Sig Regt	Current Sub-units:	47, 68 & 265 Sig Sqn
New Title:	71 (Y) Sig Regt	New Sub-units:	36, 47, 68 & 265 Sig Sqn
New Role:	Delivers UK-wide ICS capability.		
Locations:	(1) RHQ (Bexleyheath), 265 Sp Sqn (Bexleyheath), 68 Sig Sqn (Lincolns Inn/Whipps Cross), 47 Sig Sqn (Uxbridge/ Coulsdon) & 36 Sig Sqn (Colchester/Chelmsford)		
Notes:	(1) 36 Sig Sqn re-subordinates to 71 Sig Regt by 31 Mar 14. (2) 47 Sig Sqn merged with 41 Sig Sqn. (3) Request for 47 Sig Sqn to be renamed 31 (Middlesex Yeomanry and Princess Louise's Kensington) Signal Squadron submitted to AHDC.		
	(4) Southfields to close with opportunities to transfer to the Royal Marines.		
	(5) Restructuring complete by Dec 15.		

Current Title:	LIAG	Current Sub-units:	n/a
New Title:	LIAG	New Sub-units:	n/a
New Role:	Specialist ICS capability as part of the wider Joint Cyber Unit (Reserve).		
Location:	HQ based in Corsham, but unit recruits nationally		
Notes:	(1) Uplift in liability. (2) Unit re-subordinates to JFC (OPCOM) in Apr 15.		



Warfare.

EDITOR'S NOTE

attending Welbeck After College and RMAS, Neil Fisher was commissioned into the Royal Signals in 1973. His early career included tours in Germany, UK, Northern Ireland and the Far East



Commander in 7 Signal Regiment and subsequently Commanding Officer of 16 Signal Regiment. Nearly all

with Queen's Gurkha Signals. He was a Squadron

Information Warfare, Information Assurance and latterly Cyber Security have been a constant thread throughout

his staff jobs were in counter terrorism. Before retiring from the Army in 1999 he was the MoD policy lead for the then emerging military concept of Information

his subsequent civilian career. He is currently VP Global Physical and Cyber Security Solutions at Unisys and a member of the Emeritus Group of the Information Assurance Advisory Council having previously served as its Vice President. He was also a founding member of the Board of Directors of Cyber Security Challenge UK.

In 1999 I made a prediction about how future conflict may develop by the year 2010 and published it as a paper in 2000 after I left the Army. It was based on the development of an information warfare/operations capability during the white heat of the dot.com boom when the consequences of an online society with total dependency on the Internet were only just beginning to be considered by Government and Business. My paper foresaw that society in 2010 would be influenced by the availability of masses of information for everyone, borne on an infrastructure that straddled the globe, allowing for seamless connectivity. Society would be critically dependent on the infrastructure for its

wealth creation and for the sustenance of critical services and the continuity of Government.

I described what I saw as the key drivers of change. I looked at how conflict could be waged in such an environment and how it differed from conventional conflict. Several conclusions fell out of such an analysis; not least that such a conflict required a different type of leader and decision maker. An edited copy of my article is below. Please read it as if it is being read in 2000. I will leave it to the reader to form their own judgment on its prescience and whether there are lessons that can be learned from the past.

EVOLUTION OF CONFLICT – VIEWS OF THE FUTURE (ROLE OF THE INFORMATION INFRASTRUCTURE IN CONFLICT IN 2010)

"It is always wise to look ahead, but difficult to look further than you can see" Winston Churchill.

"You can't drive the car by looking in the rearview mirror" Peter Drucker.

Predicting the future is a favourite pastime at any time of the year and particularly at the beginning of a Millennium. It is entirely reasonable, measured against the processes of the past, to believe that studying past trends might give a glimpse of what society and conflict may look like 10 years from now. Indeed, it is also highly necessary to

do this since long term investments need to reduce risk for investors in industries that seem to have long lead times – new aircraft and ships spring to mind. But forecasting is not an exact science by any means. Indeed, in 1977, forecasts that 1987 would be similar to that present day would have been proven remarkably correct. Five years later and the forecasts would have been spectacularly wrong. Such an error in forecasting could be explained by saying that then they were trying to predict what turned out to be a watershed of change from a position of stability. Today we are attempting to predict a period of stability from a period of great change and uncertainty. The probability that we will get it wrong is high. What is certain is that there is no certainty about the future.

This paper will concentrate on exploring aspects of conflict expected in 2010 through using the information infrastructure as the context. Although the title of the paper involves evolution, the military will not stand alone as in traditional conflict. A glimpse of how society may be in 2010 may set the scene: the New Economy dominates. All leading world economies are totally dependent on the information infrastructure. For there to be this amount of trust the information infrastructure has developed and refined secure, safe and resilient networks over which every person now transacts; such safety and resilience is underpinned by foresight of problems, either accidental or malicious, by intelligence provision driven by the Private Sector; Government has fragmented creating a nexus of Regional Departments coordinated centrally and seamlessly from an enlarged administrative hub enveloping Ministers and the Prime Minister. Government has reached almost every individual through every individual's personal computer - whatever shape that takes - using a much improved Internet where information is accessed, that is all information, almost instantaneously through continuous connection of both static and mobile communications over wide bandwidth links.

In UK 100% of all transactions between Government and electorate has been achieved electronically. Money, and the way it is controlled and accounted for, has changed remarkably. Dependence on paper money has reduced as individuals use stored value smart cards to hold their digital cash or else transact over secure links on the Internet. Knowledge of information security and encryption, of rights over personal information and who can access it with individual's knowledge and permission, is now very mature. The individual is highly empowered and very conscious of his or her rights. In business the equivalent of the Revolution in Military Affairs - the Revolution in Business Affairs – started in the first year of the Millennium, has settled down as e-Business continues to be exploited globally at an accelerating rate. No business that was not on-line by 2004 has survived.

INDENTIFYING A DOMINANT CHANGE AGENT

There are a number of drivers that may reduce the probability and risk that the forecast from the Year 2000 will be spectacularly wrong. The dominant challenge is to understand how to articulate the pace of change. Society now has a number of change drivers going at various tempos. The dominant one is undisputedly telecommunication

technology that is enabling vast amounts of information to be moved and accessed around the world instantaneously through the availability of greater bandwidth. This communication technology manifests itself on what is known as the information infrastructure. This infrastructure carries many important, but intangible, features of modern society that shape modern society. One is command and control, either of individuals, businesses or states.

The other is empowerment of the individual in society by allowing access to an almost limitless repository of information over a platform called the Internet. For many, Society's rate of change is represented by the pace of change of the Internet. This pace has been described as the Internet Year; a period of development on the Internet equivalent to a year's worth of development in other industries. The Internet Year is arguably about two ordinary months. Looking forward to what conflict may be like in 2010 through the eyes of the information infrastructure in terms of development is, therefore, like trying to foresee 60 Internet Years ahead.



POINTS OF CLARITY

The first point of clarity is that all future conflict will be governed by International Law and conducted within a legal context known as "peace". This is not new but allows the less than clear cut distinction of modern conflict to be explored through peace, tension and crisis, before it breaks out into kinetic conflict between adversaries, whoever they may be; sovereign states or minor asymmetric entities.

Kinetic conflict will still be here in 2010. It will combine all three dimensions of conflict (air, land and sea) in a way that command and control is seamless and entirely dependent on the information infrastructure that everyone else uses. It has to. It cannot afford its own unique bespoke infrastructure. It also needs an adversary to share that infrastructure if it wants conflict to be conducted efficiently and effectively. We are moving swiftly towards such a condition now.

But in sharing the same infrastructure as everyone else brings vulnerabilities, threats and risks. The pursuit of national aims and policies can be disrupted, potentially, by anyone else using the same infrastructure. That "anyone" can be a small group of individuals geographically dispersed. The adversary does not have to be a sovereign state with geographic boundaries. The old world of conventional conflict against symmetric adversaries constrained by

geographic boundaries and tidily packaged within legal rules of conflict has gone. It has now been supplemented by the addition of unconventional conflict prosecuted by asymmetric adversaries.

The infrastructure will be a key target and those dependent on it will be the victims, be they commerce, health, services, finance and, most importantly, the individual citizen. The military are included in that list but they cannot be dealt with in isolation. Indeed, the military may not be the target. The Chinese are already preparing a doctrine around the concept of "Unrestricted War", the title of a book published last year and only recently translated into English.

60 years ago conflict revolved around the projection of power to assist wealth creation. Nothing is different today or will be in 2010. Every country and infrastructure entity will be endeavouring to succeed in wealth creation by exerting an influence on its competitors to its advantage. Since the infrastructure will now be the dominant conduit for wealth creation then that pressure will be exerted on and through it. There are three facets of the infrastructure that provide a high probability of resistance to external influence and will be the principle targets needing protection: confidentiality, integrity and availability. These facets are as relevant to the information that the infrastructure carries as well as to the infrastructure itself, affecting so-called reach and richness. Solutions that enable these three facets are produced in hardware and software and, if you take an holistic view, in the people who use it. Solutions can be measured against five metrics that articulate infrastructure robustness; does the solution deter, protect, detect, react and assist recovery. Compare these facets and metrics against traditional principles of war. In doing so they bring new meaning to those ubiquitous principles, still relevant in 2010; a clear aim, maintenance of morale (which could be articulated as maintenance and sustenance of national confidence), offensive action, surprise, and so on. But conflict will not be implemented in a solely traditional way.

Some things never change. Conflict is waged by people, not machines. People inspire the purpose and inspire the means. When conventional, kinetic conflict was the only means to resolve disputes then certain types of individuals were best suited to command and manage the conflict. The nature of conflict chooses the best suited individuals. The very best were, arguably, also excellent leaders and strategists. To conduct conflict through and on the infrastructure to create a situation where the adversary is outmanoeuvred, possibly without discharging a single weapon, calls for a different individual with a skill set best matched for managing those conflicts at the highest level. This is an important point since most future conflicts may never proceed beyond a state of tension before the perpetrator realises that, through the infrastructure, he has been outmanoeuvred and backs down. Most conflicts will not even reach public consciousness.

In the same way that the individuals who manage future conflict have to possess a different skill set, so the team that manages conflict must represent the various aspects of infrastructure protection. They will appear to be odd bedfellows. If I was to say that the team has to include



psychologists and lawyers, as well as military operators, intelligence operators, police and targeteers, plus individuals from other Departments and Agencies, plus individuals from the Private Sector, then already the mix looks unconventional. And if the response to a threat calls for a coalition effort then the strategic conflict management team must accommodate that too. In 2010 it will get very complex and untidy, as suits the nature of infrastructure conflict.

No mention, so far, has been made of the threat. It's not that threat is not important in an infrastructure dominant society but that capability, especially comprehension and control of it, is far more significant. This tends to suggest that, by 2010, defence (as opposed to offense) may have the upper hand in conflict. This could be so since, by 2010, information security will be dominated by unbreakable encryption whose integrity will be obvious as soon as it arrives with the recipient. Availability of information and availability of the infrastructure will remain the primary weak spots. Precision guided weapons will dominate armed forces' arsenals and will allow simpler, cheaper resolutions, within International Law, to strategic as well as tactical problems.

Intelligence will enjoy a dominance and influence probably never enjoyed quite so before. Because of the Internet Year and the instantaneity of possible attacks, corroborating intelligence is essential. Much work will be needed on articulating infrastructure threat indicators, as well as Alerts and Warnings. Much of this will be privatised since the threats are the same for business as for national security. The private sector will develop a much larger pool of skill sets needed. They will be an essential adjunct to the National effort. Many companies will be the first port of call for up to the minute infrastructure intelligence.

CONFLICT – ONE VIEW OF 2010

Conflict in various forms using the infrastructure may well be constant by 2010. Most conflict will be resolved entirely transparent to public consciousness. Unlike now, though, where much of this is intelligence operations, such actions will constitute the formation of formal incident specific crisis/tension teams, pan-Government. Integrated teams

dealing with all possible conflict in peace, tension and crisis, will be unified and constant in their attempts to control and monitor all and every possible incident occurring on the infrastructure, just in case it is not an isolated incident but part of a concerted and orchestrated attack.

Other conflict may well be neutralised within an adversary's state by the neutralisation of his own infrastructure, leading to a state of internal turmoil that may necessitate armed "police operation" style intervention at Brigade level, as practiced now. For this to happen all possible adversaries must be part of the global infrastructure. The wiring of all nations must be encouraged and supported, particularly by the G7 nations, as a high priority. A world with information rich and information poor will be unacceptable in 2010 and will backfire on the information rich.

CONCLUSION

Change to a total information and infrastructure dependent society, typified by development of the Internet, will be the dominant driver that shapes conflict in 2010. Because of the many variables for conflict, threats will be many and varied. Dominant may be rogue states, particularly those with asymmetric NBC capabilities to weave into the complex picture. Others will be Trans National Criminal

Organisations and infrastructure entities. Multinational Corporations cannot be ignored either. These entities will enjoy no real world geographic boundaries but will be united as an entity only through the infrastructure. The aim of conflict, let alone the identity, of the adversary will be very difficult to discern.

Future conflict may, therefore, be a rich pot pourri of various levels of conflict perpetrated by an equally rich pot pourri of adversaries being conducted concurrently. This will be countered by an amalgam of Government as well as private sector agencies and departments working together to integrate the various strands that can counter conflict in 2010. There will still be man's inhumanity to man, but not over large scale, remote, kinetic battle-spaces similar to the Second World War or even the Gulf.

What will dominate conflict in 2010 will be its management, not necessarily its means; its totality, reaching and affecting every citizen in society, not its detachment from civilian life; its concurrency, not its consecutiveness; its dependence on exquisitely accurate intelligence, not greater firepower. This is how an interconnected information infrastructure passing enormous masses of information at the speed of light will shape conflict, not just 10 ordinary, but 60 Internet, years from now.



Cyber Security Challenge UK is the national initiative to promote careers in cyber security and to identify talented individuals to join the profession by running online and face-to-face competitions. The initiative is supported by over 70 sponsor organisations from across the public sector, academia, professional bodies and the private sector – including large companies and SMEs.

The photograph above shows some of the competitors taking part in the last of the current round of semifinals; this one being hosted in Farnborough by QinetiQ. The top eight competitors went on to join 32 other competitors who have already made it through to the

2014 'Masterclass' final taking place in central London in mid-March. This year the final is being organised by BT, GCHQ and the new National Crime Agency.

A number of service personnel have taken part in the competitions over the last three years; the most promising of whom are now working in the MoD's Joint Cyber Unit. If you know someone who wants to test their cyber security skills then get them to register at www.cybersecuritychallenge.org.uk. Alternatively, you or your company may wish to get involved in supporting this very worthwhile initiative; email the Challenge at queries@cybersecuritychallenge.org.uk for details.



DEANE-DRUMMOND PRIZE ESSAY COMPETITION

The annual Deane-Drummond Prize Essay Competition was inaugurated by the RSI Council in 2010 principally to support Commanding Officers in fostering professional development amongst their young officers. The competition is however open to all serving regular and reserve Royal Signals officers and soldiers, including QG Signals. Essays are required to be between 1,500 and 2,500 words, they must not contain any classified material and all references and quotes must be listed in accordance with the Harvard System of Referencing.

The title for the 2012 essay was:

"The Army of 2020, with broadly unchanged tasks, is expected to comprise of some 82,000 regular and 30,000 trained TA soldiers. Assuming proportional changes to its size and composition, how should the Royal Corps of Signals take advantage of this opportunity?"

Over eighty entries were received and the Marking Panel, which included serving Brigadiers, Colonels and Lieutenant Colonels, had a significant challenge in identifying the winning entries from amongst a cohort of excellent essays. The final decision of the Marking Panel was as follows:

 1st Prize
 £1,000

 2nd Prize
 £500

 3rd= Prize
 £250 each

Capt B A M Woollan
Capt E M Thomas
Capt D S Burnett and
Lt B Brown

The four winning essays are reproduced below; they have not been edited. [Due to space limitations, the essays of the Joint 3rd Prize winners are only available in the online version of the RSI Journal.]

Captain Ben Woollan – 1st Prize

The British Army of today is in the process of withdrawing from counter insurgency operations in Afghanistan, with a complete withdrawal anticipated by 2014 (NATO, Chicago Summit 2012). The tasks of the British Army in 2020 will change vastly, moving from standing commitments to a more agile force capable of contingency operations (Hammond, Phillip 2012). We will have to reduce in size; Regiments and Squadrons will be disbanded and there

will be more of a reliance on the TA. With the TA due to double in size this is an area which the Corps can exploit and use to its advantage. The Corps is in the unique situation along with various other Arms and Services, whereby the skills that are required for our Officers and Soldiers are readily available and practiced in the private sector and other areas of the public sector. The question is how do we take advantage of this? There are several

avenues that could be explored; however for the purpose of this essay, the way in which we recruit and employ the TA and subsequently restructure the Corps in line with the TA will be the main focus.

The Corps has historically been well supported by the TA and has withstood the test of time throughout various defence cuts. For example, in 1999 the reserve component of the Corps was at the same strength as it was 30 years previously (Lord, C. 2004). With the TA now at only 16,000 regular attendees (Rayment, Sean 2012) there will be a need, to not only increase the numbers but also the quality of the personnel. This is in fact not an alien concept. Historically, the British Army that ruled the Empire was in proportion to the size it commanded; small, with a reliance on a local reserve force lead by professional regular soldiers (Summers, Chris 2011).

The use of a Territorial or Reserve Force in any country comes at an expense to the main employer. There is a recognised need in Parliament to review the legislation that enables reservists to be mobilised (Phillips, Mark 2012; Beckett, Ian 2012). By recruiting the right people from the right industry the TA could actually be seen as an incentive to an employer and also assist the TA and the Corps with its training burden. With more commercial 'off the shelf' equipment being used and training being aligned with recognised civilian qualifications, such as Engineer Charterships, a TA soldier is more likely to be released, or further encouraged by their main employer if it is mutually beneficial. The Corps must seek to establish strong links with relevant industry partners to encourage their employees to consider a role with the TA and how it can be of benefit to both. This will in turn provide a more motivated and qualified soldier, who has the support of his employer to deploy on operations if required. This practice is already applied and continually improved by the US military to good effect (Stultz, Jack 2011).

The UK is recognised as having some of the most prestigious Universities in the world (Times Higher Education 2011) educating students in science and technology. However the number of students studying technical degrees and doctorates is decreasing and the reason for this is due to the lack of employment in a relevant field after education (Thorne, Rosie 2012). As stated by the Strategic Trends Programme "Investments now in technology could hedge against relative technology decline in UK Defence." (MoD, 2012). There is already a programme in place by which the MoD supports undergraduates who later proceed to serve in technical Corps' called the Defence Technical Undergraduate Scheme (DTUS) (Halliwell, Tony 2012). However in order to recruit technical graduates for the TA there has to be an attraction. The Israeli Defence Force operates a programme called Talpiot whereby talented science and technology undergraduates are scouted and provided with further support for advanced study (Rhoads, Christopher 2007). Unlike the DTUS, Talpiot graduates work in consultancy roles working in procurement and research. This model could be specifically adapted for the TA and the Corps to take advantage of. With tuition fees now at their highest in history, the situation exists for the MOD to provide support to those identified. Talented graduates could be used to develop and procure equipment rather than employed as mainstream R SIGNALS Officers. Knowledge gained in their civilian jobs would assist them in their TA work. Making use of S-type engagements would allow them to be employed for a particular project or piece of equipment before returning to industry. This scheme could also be utilised in reverse; regular Officers could be released to industry to provide them with relevant professional experience before returning back to the military, a scheme already used by the Royal Engineers. As recognised in the report by the MoD "Retaining Talent" there will be Officers that excel in command and those that excel in staff (MoD 2012). In order to retain these individuals we must give them the opportunity to produce their best work. By giving people the ability to exploit opportunities in industry for the good of Defence, this will in turn produce a more rounded Officer. We must move away from the career model we currently have and allow those suited to Staff work to stick in that field, especially those in the TA.

Another advantage of employing TA Officers and Supervisors in Staff roles will allow us to recruit subject matter experts (SME) from industry and be able to react quickly to a changing world. An example of where this would have been advantageous would be the recent increase in Cyber operations.

However all this cannot be done without an improvement in conditions. We need to understand why people join the TA and what would encourage them to continue to do so before we can see the increase of the right people with the right skills. The shortcomings of the TA are well publicised in the press and in order to take advantage of the increase in the size of the TA we must first understand its current situation. Professor Ian Beckett of Royal United Services Institute (RUSI) recently recalled Basil Liddell Hart's statement of 1932 "the Territorial Army had 'proved one of the hardiest of British plants' since it operated 'in financially stony soil, without even being watered by morale encouragement'. Little has changed." (Beckett, lan 2012). In order for the TA to not only increase in size but also become a deployable and useful asset; time, money and considerable resources will be required to meet the targets of trained personnel and bring them in line with their regular counter-parts (Steel, Chris 2012). In short, more must be done to ensure that the "one-army" concept (Beckett, Ian 2012) really is lived rather than just talked about.

In terms of how the Corps can take advantage of this, is they must invest in the right people, with the right equipment and in the right place. According to the Independent Commission to Review the United Kingdom's Reserve Forces "we have failed to modernise Reservist Roles", i.e. the TA is still structured for large-scale intervention. As a Corps we can take advantage of this situation and look to update our TA Regiments and Squadrons by training them alongside their Regular counterparts. As part of Army 2020 there will be linkages between TA and Regular units (Hammond, Phillip, 2012). By taking our Multi Role Signal Regiments (MRSR) based in York, Stafford, Colerne and Bulford we can split the majority of the Corps TA units between the north and south of England. These TA units can then work to a regional Headquarters such as 21 Signal

Regiment (AS) in the south to train alongside them. The reasons for this are twofold. It will allow the TA access to Regular expertise and training exercises and it will allow for better integration and the "one army" concept to be believed by the Regular soldier. There is also a further benefit, as stated in Army 2020 R SIGNALS "there will be insufficient R SIGNALS manpower" (Craft, D Col 2012) to support a medium scale enduring operation. Should such an operation become a reality, manpower could be drawn from the TA in a crisis and be able to quickly integrate due to being linked to their regional regular Headquarters. As stated in the report by the Strategic Trends Programme, "No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict"

(MoD, 2012). Therefore it is important that we have the ability to adapt instantly should we need too.

Undoubtedly the Army and the Royal Corps of Signals face significant changes over the next eight years. There will be a reliance on the TA, which has not been experienced by today's commanders. It must be embraced, as otherwise the Army will be unable to meet the requirements of the Government and the World in which we now live. By implementing the recruiting changes, the role in which we use the TA and restructuring our organisation will see the Corps take advantage of this situation and continue to be successful as it has been on Operations over the past ten years.

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Captain Emma Thomas – 2nd Prize

"Read your doctrine people, read your doctrine" is a line which my American born military history tutor at RMA Sandhurst used to repeat to us on a weekly basis. This line has echoed in my head ever since leaving the Academy, and has always proved to be a very good piece of advice. The British Army spent 280 years waiting for official doctrine to be produced; we should make good use of it now it exists. This seems even more apparent in recent times as we appear to be uncertain in many respects which way to turn and what the future may hold.

Any adaptation, modification or mutation which takes place in the Royal Corps of Signals must reflect our doctrine as this should inform our decision making process. Without it we are working blind and we cannot expect a theme of consistency which is essential, to weave through and endure in all that we do. This is even more vital during the current climate of change and economic austerity. We need to stick to a base line, and make sure our planning and progress forward is not skewed on a purely short sighted and reactionary basis. The Strategic Defence and Security review (SDSR) published in October 2011 emphasised quite unsubtly in its title "Securing Britain in an Age of Uncertainty" the situation in which we as a nation and Armed Forces currently find ourselves.

We perceive this to be an age of unknowns and change. Close to the heart of those serving in the British Army and arguably initiated by the current poor economic situation is the uncertainty of the structure of the British Army in 2020 whose announcement is repeatedly delayed, the new pension scheme which is being forced on all serving members, the ever increasing number of redundancy tranches targeting the unsuspecting, and what exactly transition out of Afghanistan will look like and what we will do after that once all our UOR equipment is not taken into Core.

Just from a small snap shot of the British Army, uncertainty is prevalent in many areas. As the economic crisis penetrates deep across the globe, at the very point we need to be investing in our Army and hence the Corps we are forced to make cuts. So we make do with the best we can.

Broadly unchanged tasks

With so much currently undetermined the Royals Signals cannot assume to have broadly unchanged tasks ahead; this would be naive. The Royal Signals will see a significant shift in tasks, most likely towards contingency operations in the near future as we draw out of HERRICK. Certainly the new structure of the British Army in 2020 will redefine what tasks we are able to commit to. The statement of broadly unchanged tasks is a false one, and so should be discounted from any future planning. This bold assumption can only be analysed should the role of the British Army at the highest level be considered. SDSR 2010 gives us some idea of what this might be, "....the means to threaten or use force when other levers of power are unable to protect our vital national interests." ² This however falls out of scope of this essay. The previous SOinC clearly agrees with the assumption on changing tasks when he writes "We must constantly redesign the profession and drive change, against a backdrop of great change across Defence, Government, the future of Operations and technology." 3

And so, with so many unknowns, shifting focuses and priorities we should fall back to our doctrine. We must study the nature of conflict which remains constant, and the current character of conflict which can transform rapidly and make sure we remain agile enough to deal with the majority of situations which may arise. CGS in his recent address to Royal United Services Institute (RUSI) articulated this clearly when he said "It is arguable that 21st Century warfare has yet to reveal its true character because the aftermath of the events of 9/11 has dominated our lives for the past dozen years". We must plan as best we can, and the rest must be taken at a calculated risk.

Taking advantage of this opportunity?

What opportunity is there to take hold of? With a continuing theme of transformation and variation there is an advantage to take hold of. Ultimately however whatever we do now, will inevitably have to be limited due to the rapid pace of change we find ourselves competing against. There are things which must be done to take advantage of the current situation.

The obvious opportunity which is available to us, and laid out in the Future Reserves 2020 review published in Jul 2011, is to take advantage of and buy into the Whole Force Concept which includes the integration and effective use of reservists. According to the report the Reserve forces are said to be in decline, have failed to modernise, are not exploited to their full potential and are not used efficiently. There is a real opportunity here in our reserve forces which is not being capitalised on and should be taken advantage of.

As the Army, and therefore the Royal Signals, declines in numbers due to the sobering fact that we cannot afford the cost of the regular soldier, the Territorial Army can be employed. Key to maximising their potential would be to recruit those who have many of the skills which have already been identified as a requirement. The cost of training these individuals to the relevant trade or 'niche' standard may in some cases be significantly reduced and their employment will be that much more effective. We have already proved this works with units such as with JSSU (Volunteers), who have confirmed their worth time and time again, and most recently supporting operations.

My experience of employing an IT professional from the TA on HERRICK XII was a very positive one. The individual had a real wealth of knowledge to inject into all trade related situations he found himself embroiled in with a great deal of enthusiasm. A regular soldier from our legacy IS trade or CSE would have taken a great many number of years of investment to bring them up to the required standard. In a very crude analogy we instead almost bought a readymade soldier 'off the shelf'.

The arena at the moment which we could really benefit from gaining professionally trained individuals into our organisation is that of Cyber. This is possibly one of the greatest threats faced by Defence currently, and is perhaps the least understood or invested in to date. SDSR 10 describes the ever increasing cyber threat as increasing exponentially over the last decade. Cyber defence and attack is not yet core business for the R SIGNALS, and appears to still be very much a 'buzz' word which is used to impress on occasion. The TA should be looked at to fill current sizeable holes in this area whilst we try and damage control for the future.

Another opportunity we can exploit is the surplus of individuals at present who unfortunately find themselves out of work. As the economic down turn continues unemployment currently sits at 8.2% of the population (2.63 million people) ⁵ there must be some scope to increase recruitment into the TA as a result of this. As we continue to debate professionalising our Corps, why do we not recruit ready-made professionals. Individuals who currently cannot find a job and earn a wage, many of whom are graduates, surely can be enticed to join the TA to earn some money.

In hand with this we must also invest in education of those still serving. If we are to downsize and remodel our current Army into a leaner and more agile force but continue to face the same challenges then it stands to reason that a smaller Army must necessarily be an 'improved' version.

It's soldiers and officers must be better prepared, better educated and of a higher calibre. We will no longer be in a position, as we were in the 20th century, to throw numbers, muscle and weight against an issue, instead we will be forced to use intellect, diplomacy and professionalism. Churchill articulated this eloquently when he said "Gentleman, we have run out of money; now we have to think"

We simply are not adequately facilitating development opportunities for our regular serving Officers and Soldiers. We should look at models such as the Israeli Defence Force's Talpiot or Havatzalot Program which through a competitive selection process provides funding for double higher education in relevant fields. Our closest allies the US have also identified a healthy investment in education as a positive; it is not uncommon for the US military to send its best minds, to the best American universities. General Sir Richard Dannatt summed up the situation well when he wrote:

"In the conceptual component, we have some intellectual catching up to do....We have also concluded that the demands of the current and future operating environments require a much greater emphasis on education than on training. We need to look particularly closely at how we can re-invest in education for this generation of officers, if we wish to identity the next generation of military thinkers." ⁶

The Army of 2020 and the Royal Corps of Signals will be smaller in regular terms, with an increased number of reservists. We will need to be more flexible and agile, and learn to deliver with less. Much change is on the horizon, and this should not be looked at as a new challenge for the R SIGNALS but as a way to maximise some opportunities while maintaining our wider purpose. As discussed there are advantages to be had with employing the TA and maximising our people's potential. This essay argues that although there are many ways to take advantage of the current situation, they may only benefit in the short term and the more stable platform of Army doctrine should also be used as a firm basis to plan against.

Things will transform, converge and adjust and we should be ready to respond as necessary. There is little we can be sure of, and therefore any advantage will be limited itself. What we can however take note of to comfort us are the words of General Sir William Slim "While the battles the British fight may differ in the widest possible ways, they will invariably have two common characteristics – they are always fought uphill and always at the junction of two or more map sheets" We can only hope the Corps doesn't spend too long deliberating over the folds in the map, and instead plans for a more lean and flexible approach to warfighting and signalling.

ENDNOTES

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- 2. SDSR: The Strategic Defence Review October 2010
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- 4. GS keynote speech on Army 2020 at the Royal United Services Institute Land Warfare Conference 11 June 12
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Leading from the Front-The autobiography, General Sir Richard Dannatt, 2010

EDITOR'S NOTE

Due to space limitations, the essays of the Joint 3rd Prize winners in the 2012 Competition (Captain David Burnett and Lieutenant Benjamin Brown) are only available in the online version of the RSI Journal.

The results of the 2013 Deane-Drummond Prize Essay Competition and the winning essays will be published in the Summer 2014 issue of the RSI Journal. Meanwhile, the essay title for the 2014 competition will be published in April's Wire magazine.

Captain David Burnett - Joint 3rd Prize

The Global economic recession has led to an overriding strategic requirement to bring order to public finances. Defence, with its significant funding gap, is not immune to this pressure. This was the context for the SDSR 2010; the first thorough review of defence for over a decade and which highlighted the requirement for significant change to both structure and size of the Armed Forces.

Army 2020 has detailed how the Army must adapt to continue to meet the current Defence Planning Assumptions but with 20% less manpower. The Corps itself has lost a Bde, a Regiment and an independent Sqn. It is due to reduce from current manning of just under 8000 to a forecast liability of 7000 (Norton 2012). Maintaining the delivery of the same provision of service with significantly reduced manpower, will evidently present a significant challenge. This said, it will also afford opportunity. Such opportunities will be considered under the headings; structures, people and training, TA and partnerships.

Structures

One of the weaknesses of the British Army's Regimental and Corps system is its institutional resistance to structural change. For too long we have retained the structures of a much larger force at cost to mounting inefficiencies and securing value for money. As a supporting element, our size and shape depend largely on how the Army and Defence develop, however, we must be look for opportunities to streamline where possible. If correctly identified, these inefficiency savings will enable us to re-direct resources towards ring fencing and developing key capabilities.

The Corps has already made significant adjustments to its structure driven by operational need in Afghanistan. These have included the creation of Campaign Signal Regiments who provide close support to brigades and battlegroups. In future, the Corps intends to focus itself on delivering command support and not life support; with organic support only provided to the very highest readiness HQs (Watts). This is essential as with reduced numbers, we cannot afford to mis-employ specialist manpower.

Furthermore, we must continue to review our trade structures to ensure they remain fit for purpose. It is doubtful that standalone Operator and Line trades will remain for long in their current form. Where possible, we must streamline trade groups but without losing specialist capability, thereby providing greater employability of all of our soldiers.

People and Training

Royal Signals soldiers are among the most technically skilled in the Army. However, the complexity of modern warfare increases apace. Whilst we recruit from a more technically aware population, there is an increasing gap between the technical demands of our systems and ability of our soldiers. This is magnified in the wider Army, who increasingly require Royal Signals support at the battlegroup level and below. The recent success of RSISTs demonstrates this point perfectly.

Centralised training at DCCIS cannot provide the level of training required. Underlying principles should be taught during Phase 2, providing a strong foundation for further modulated training throughout a soldier's career. A greater emphasis must also be

placed on self-development, with guidance and assistance from the Corps, through reading, study and courses. Training should become more up-to-date and commercially relevant. Where possible, it should carry professional accreditation. Being more commercially employable would undoubtedly lead to some soldiers being lost to the civilian workplace; however, we would equally attract replacements keen to develop a unique technical and personal skill-set not available outside of the military.

At present we are under training our Royal Signals DE officers. We must ensure they possess the requisite communications SME knowledge to tackle technical issues without always having to defer to more experienced and better qualified supervisors. This goes beyond improving formal professional training and must also incorporate experience of employment at the battlegroup level as either an RSO or specialist advisor. We must also reassess the technical baseline requirement of those we are trying to recruit and actively pursue those high quality cadets at RMAS who possess technical academic backgrounds. We can no longer afford to have R Signals officers on ICSC(L) who possess little or no understanding of Corps ICS capabilities (Owen).

Recent operations have provided a timely reminder that as Royal Signallers we require combat as well as communications skills. Officers and soldiers must be capable of operating at a tactical level alongside their teeth arm counterparts. This will require higher levels of fitness and military skills across the board.

A streamlined Corps, high unemployment and increased further education costs will provide the opportunity for the Corps to be more selective in its recruitment of both officers and soldiers. Higher calibre recruits will then gain the maximum benefit from improved training models.

TA and Partnerships

Under SDSR and Army 2020, the TA is due to increase from 20,000 to 30,000 in order to enable the Army to deliver current Defence Planning Assumptions with 20% less manning. However, historically we have underinvested in our reserve capability. Future Reserves 2020 review highlighted four broad conclusions: . reserve forces are in decline; 2. we have failed to modernise them; 3. we are not exploiting them to their full potential and; 4. we are not using them effectively. It is understandable therefore that the Reserves are seen as a great opportunity to deliver more with less. (Phillips). The success of SDSR will almost certainly hinge on the ability to fully utilise the unique skills and capabilities of the TA. Increased use of the TA must be more than a cost-cutting exercise. There are risks involved in using the TA if they are not correctly resourced and trained, particularly when operational demands exceed DPA as occurred in both Iraq and Afghanistan (Phillips).

In recent operations the Royal Signals TA have provided vital augmentation of regular units. This will only increase as links improve with the relocation of remaining troops from Germany to the UK and the formation of TA sub-units more closely align with regular counterparts. To enable better use of the reserves we will need to reassess our relationship with employers who often do not understand the benefits specialist military training can bring to the commercial sector. This will not be easy, especially in the current economic climate. The TA's vital link into the local

community and industry must not be overlooked; they represent one of our strongest recruiting tools.

The TA can create mass in specialist areas such as Cyber. For example, the expense of recruiting, training and retaining high-end cyber specialists would be exorbitant and yet large commercial organisations possess cyber defence capabilities similar to those of more advanced nation states — we must find ways to better harness highly skilled individuals in the commercial sector (Burnett). To achieve this we will need to develop a more flexible approach to employment that better suits the individual, Corps and their employer. The Corps, in particular, would benefit from a 'whole career' option that enables individuals to transfer between industry, TA and regular forces throughout their working life, particularly in the niche areas requiring highly specialised skill-sets

A more radical option would be to look at integrating reserves into regular command structures - a system similar to that used in Canada to good effect. At the higher levels, it would provide the opportunity to exploit best practice leadership and management skills from the leaders of industry. It will create its own administrative problems but would provide excellent development of Royal Signals TA officers and improve integration of reserve forces.

Contractor support has made a significant contribution to the Corps success on recent operations. As the Army goes through the transitional process towards 'one force' there will be an increased requirement to outsource some elements of our Corps capabilities. Whilst organic capability is obviously preferred, this is neither practical nor indeed preferred in some areas. For one, we would struggle to match the capabilities of commercial experts in such areas as cyber security and IS. There are obvious disadvantages, including cost and difficulties with terms of service, but they are not insurmountable. Whilst the ability of contractors to provide deployed support and assured service has been proven on recent operations we must balance this against ensuring the Corps maintains its expeditionary capability.

Opportunities with industry go further than just contractor support. We must also look for reciprocal opportunities to second Royal Signals experts into industry and where possible look to develop corporate reserves akin to the US Employer Partnership Program. It would be a mutually beneficial relationship with decreased competition for the same manpower and potential to identify shared training costs.

UK forces are likely to operate as part of international coalitions in future conflicts, primarily with NATO and EU counterparts. Alliances and partnerships will remain a fundamental part of our approach to defence and security. Internationally, we rarely act alone. Maintaining and building constructive and reciprocal bilateral relationships across all aspects of national security can enhance capability and maximise efficiency (SDSR 10). Requirement for national caveat CIS will continue but there will be increased joint funding of programs to aid interoperability and share capabilities, technologies and crucially cost. The corps must ensure we invest fully with the right individuals at the correct level in order to gain the maximum benefit.

Conclusion

It is important to note that no defence review has ever been seen through to completion and SDSR is unlikely to be different. However, change is inevitable – we will have to do the same with less. This will only be possible if we radically rethink our approach to providing full spectrum CIS support to the Army. We can no longer afford to hold everything organically within the regular Corps. Whilst opportunities exist with industry, commercial partners and our allies it will be our development of TA capability and their integration into regular structures that holds the key to success.

Our enduring strength has always been our people, not equipment; this will become even more prevalent as the emphasis shifts from large procurement projects towards more mission specific COTS solutions. With the right training our manpower is capable of much more. We must ensure we foster a more professional approach to our training and take advantage of a positive recruiting environment to raise standards.

Whilst the budget and manpower cuts will create considerable strain on our structures it also provides a generational opportunity to review and alter how we recruit train and operate; we must be bold. It is not the strongest who survive but those most responsive to change.

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Lieutenant Benjy Brown – Joint 3rd Prize

SHAPING

The Regular British Army has been bolstered in numbers by the formalised "Territorial Army" (TA) since 1908 and during this time, the TA has served in every continent and across every part of the Army. Indeed, the first TA unit to serve at war was the Glasgow Territorial Signallers Group, Royal Engineers, later

to become 32 Signal Regiment, at Ypres where the character of conflict was significantly different from that we face today. However while the character of conflict tends to the entropic, the nature and necessity for conflict endures. As an Army and as a Corps we must adapt to meet the future challenges and prepare for the unknown unknowns. As it stands in 2012, Britain's view of the TA can be summed up neatly:

Firstly, it provides highly trained soldiers who can work alongside the Regulars on missions in the UK and overseas. Secondly, it gives people who have specialist skills, like medics and engineers, a range of exciting opportunities to use them in new ways. ¹

In light of the Future Character of Conflict (FCOC) study, coordinated by the Ministry of Defence's (MoD's) Development, Concepts and Doctrine Centre (DCDC) several key areas for development focus were identified one of which is particularly relevant to the R SIGNALS.

The UK must develop capabilities associated with...Computer Network Operations (CNO) ²

So here perhaps lies the implied higher direction on how the R SIGNALS should shape itself in light of the opportunity to revise its structure and makeup. We must recruit the best, on mutually favourable terms with a proposition that is attractive to both parties. In simple terms, we offer future employees a chance to broaden their experiences and gain a know-how of elements of soldiering and the role the Army is playing without being committed to much - other than a deployment. In return, they give us their skills that have been many years and many thousands of pounds in the making, and pass the positive message about the progressive, professional and proactive British Army back into industry.

I will lay down an initial open ended assumption in order not to overly constrain my thoughts; that within the realms of the reason, anything is possible. I do not concentrate my thoughts on specific skills – the requirement for these will change – although it is predicated on my belief that the many of the skills required within the R SIGNALS on operations are available and will continue to be available, in the civilian sector. Finally, as I refer to "soldiers" throughout this paper, I do so in the pursuit of brevity. The main thrust of my discussion is equally applicable to officers and soldiers alike in the Corps.

DECISIVE

As an organisation, the Army has many characteristics that differentiate it from its counterparts in the civilian world. Some of these are fundamental to the success of our organisation, and some may be seen as outdated legacy features of a now-modernising Army.

The Army is almost unique in that few, if any, members of the "top team" - the senior leadership - have any experience of operating outside of the Armed Forces as a whole. This predicates a position whereby the talent pool available when selecting candidates for positions of responsibility is ever shrinking. Considering the changing nature of conflict and, with that, the changing skills required to meet the challenges that brings, this is the first area where I believe the R SIGNALS could begin to differentiate itself. Recruiting experienced IT / communications specialists at every rank, with focus on the relatively senior ranks - SSgt / Major and well above - may make the proposition of working in the Army more attractive, and would at a minimum give those joining a level of responsibility and pay broadly commensurate with that of their civilian life. Isn't it true that as serving members of the Army we expect our years of military experience to be considered when transitioning to post Army civilian careers? So why not extend the same courtesy to our civilian counterparts now feeling pinch of Samuel Johnson's quip that...

...every man thinks meanly of himself for not having been a soldier, or not having been at sea. ³

It is already acknowledged that it will...

...be expensive and take a significant lead time to develop specialist skills in areas such as cyber, culture, linguistics, police, intelligence and others. There is also the question of whether the Regular Army is best suited to providing these skills, as opposed to providing more general, organised manpower for a range of different tasks. Reservists may already have specialist skills from their civilian lives, but the MoD and army have tended to be poor at exploiting these to date. ⁴

That being the case, a process by which we welcome experienced professionals into our organisation at the right level will allow us to recruit specific skillsets quickly, cheaply (all things being relative) and to make available to us technical and management experience gained in another environment.

Research has shown that there is a clear willingness on the part of many companies (of different sizes) to share the training of staff with the armed forces in the future, and an interest in exploring the possibility of developing joint employment contracts or career planning with the armed forces. ⁵

This illustrates at a high level the appetite for industry to support what will be a smaller, leaner Army which now needs to trade on flexibility, responsiveness and skill — all key attributes of a successful business. It is imperative that enduring relationships between the Army, industry and educational institutes are built and strengthened with the aim of highlighting the tangible benefits to those organisations of partnering with the Army to facilitate this change. We in the R SIGNALS have an opportunity to exploit this opportunity but it must be taken now.

So, all great ideas but how would they facilitated and how would we convince organisations to release their people for regular bursts of training. Equally, how do we convince those experts we need to use their precious weekends to run around in a field getting cold, muddy and being shouted at by an "old school" Sergeant Major? Well we need to begin to consider what our role in the R SIGNALS is and what we are likely to actually do in the operations of the future. On Op HERRICK, with the exception of Souter Force Protection and Transport Company (SFPTC) – a non-core R SIGNALS role - less than 20% of all R SIGNALS soldiers set foot outside of fortified bases. We should ensure that R SIGNALS TA soldiers "stick to the knitting" as described by Tom Peters in his book "In the Search of Excellence". 6 Stick to what makes us so valuable – an ability to exploit technology to the advantage of the British Army. The R SIGNALS TA does not require people who can complete a section attack, or even that they know what one is. It requires people who spend their day job managing complex communications and technological resources and have knowledge that can be passed onto our Regular contingent. It also requires those same people to deploy to operational theatres, but only for them to effectively continue their day job, albeit in a different environment.

Removing the requirement for these specialist R SIGNALS TA soldiers to pass through the normal hoops of being part of the Army simultaneously removes what is probably the biggest barrier to entry for many civilians. I believe that this coupled with targeted recruitment campaign highlighting this seismic shift in recruitment policy would in itself facilitate a significant growth in the strength of applications.

With an outline idea of how to convince individuals covered, we should move our attention to the assuaging of industry. How do we convince an organisation that it is a good move for them to lose their top employee for 6-8 months for a deployment?

SUSTAINING

Most importantly and following on from any relatively short term measures that may be introduced is a need to implement a sustainable model for the future that is affordable, manageable and attractive to all stakeholders. This would benefit from a sea change in how we manage our soldiers, both Regular and TA on a long term basis.

As we ask industry to augment the Army with their brightest and best, so we should offer up our soldiers to them on workplace secondments, "look at life" attachments and the like. Soldiers of any level would likely welcome the opportunity to experience life outside of the Army for a period; this would be both an element of "give" on the part of the Army, combined with what would be a significant aid to the soldier in terms of their personal development and, for the vast majority of us a future transition to civilian life. Would this risk an increased rate of attrition amongst our more junior ranks? Perhaps, but it would almost certainly drive a comparable uplift in our ability to recruit TA soldiers from those organisations with which we have built a link.

To manage these links in what would be thoroughly unconventional environment as regards the Army would require the instantiation of a Regiment or Sub-Unit, likely to be spread geographically amongst regional technology clusters, whose specific role it is to bridge the gap between the Army and industry...

...there then needs to be effective communication and training in these approaches at all levels. 7

As a final step, and in order to differentiate the R SIGNALS TA from its legacy incarnations and reflect the paradigm shift in

thinking, I believe that the current units, those mirroring the Regular units should be disbanded. The R SIGNALS TA should be an elite collection of technical specialists who offer the skills, knowledge and capability that are currently being provided by the large number of contractors currently employed on operations. While I accept that the panacea of a civvie free contractor-less operational theatre is unlikely to ever manifest itself, we should make a concerted effort to replace enduring specialist roles that are currently filled with contractors with members of the "new model" R SIGNALS TA.

RECOMMENDATIONS

The Royal Signals should see the push to enlarge the Reserve element of the Armed Forces as a rare opportunity to grow its specialist tradespeople inorganically, quickly and relatively cheaply. We in the R SIGNALS believe we are the...

...leaders in Information Technology and Communications (IT/Comms) for the British Army. $^{\rm 8}$

We must maintain this, and stop our core business being further diluted by the contractor community who are already thriving in our operational theatres. We can only achieve this by recruiting, rewarding and retaining the best. We must:

- 1) Make our soldiers technology proof, not our technology soldier proof.
- 2) Allow TA soldiers to enter service with rank at ALL levels. Recruit fresh thinking.
- 3) Reduce the training burden to TA soldiers make it accessible.
- 4) Skill first, not soldier first in the TA we want them for their technical expertise.
- 5) Create constructive enduring relationships with market leading technology organisations that permeate to the lowest level of soldiers.
- 6) Instantiate a geographically disparate Regiment or Sub-Unit specifically to force generate and coordinate these specialist soldiers / officers.
- 7) Disband R SIGNALS units whose capabilities mirror those of Regular units.

The UK must make its people the edge. 9

ENDNOTES

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THE CORPS IN GERMANY 1945 – 2015 PERSONAL MEMORIES SOUGHT



The withdrawal of the last Corps units from Germany in 2015 will mark the end of seventy years involvement, as an Army of occupation, as part of BAOR and then as a component of British Forces Germany. The Corps was intimately associated with all levels of command, from NATO HQ down to brigade, and the requirements of operating on the North German plain drove the design, deployment and use of communications assets for over fifty years.



Our involvement also shaped the careers of Royal Signals officers and men for generations, and was the major instrument for change as the Corps evolved from its World War Two footing to its present posture. It is intended to capture as much as possible of our activities over this time, before memories fade or become over-embellished, so that consideration can be given to mounting suitable Museum displays, populating the archives and producing a written history of this most significant time in our history.



Submissions are therefore sought from those with personal memories of this time, covering such aspects as the rhythm of military life, encompassing preparation for and participation in exercises and living with the constant awareness of the Soviet threat, as exemplified by SOXMIS cards, border

patrols, the Berlin Military Train and life in Berlin. A high level of responsibility was accorded to relatively junior officers and other ranks, and relationships with staff officers and cooperation with other NATO nations were crucial. In barracks, the duty-free lifestyle, and the availability of cheap cigarettes, petrol and alcohol had their effect on troops and families. Also featuring prominently were the realities of separation from the UK base, including medical facilities, boarding schools, travel and waiting for quarters. Sporting activities played a large part in maintaining fitness, morale and unit spirit, to a much greater extent than now, and saw the emergence of unit teams capable of competing at Army and Inter-Service level. Important relationships had to be maintained with the Royal Air Force and civilian agencies such as the British Families Education Service, the Foreign Office and the Frontier Service. Memories of the events in Berlin when the Wall was breached, and our subsequent existence in the post-Warsaw Pact era, including support to NATO-led operations will also form a major part of this effort. All of these subjects are suitable for consideration.



Journal readers with personal memories of this time are therefore invited to forward their recollections, be they in the form of photographs, documents, diagrams or written accounts to:

> Colonel TF Moncur, PM BAOR History Project

The Royal Signals Museum, Blandford Camp Dorset DT11 8RH

Fax: 01258 482084

E-Mail: moncurtom@gmail.com

Submissions can be submitted by post in hard copy, which will be returned if requested, or fax or e-mail.



EDITOR'S NOTE

The Railway Man is the autobiography of Eric Lomax (above right), a former Royal Signals officer who was captured by the Japanese at the fall of Singapore in 1942. The book recounts his ordeal on the Burma Railway and his struggle for the next 40 plus years to come to terms with his torture and mistreatment. It is a powerful and very readable story, filled with emotion, which concludes with forgiveness and reconciliation.

The film of the same name, staring Colin Firth (above left) and Nicole Kidman, went on general release in the UK in January 2014; nearly 14 years after the producer and co-writer, Andy Paterson, first started working on the project! Andy has kindly agreed to come to Blandford later in 2014 to talk at an RSI event about the challenges project management and leadership in the film industry.

Sadly, Eric Lomax died in October 2012 whilst the film was being edited. An obituary of Eric Lomax follows this short article about the film. The obituary first appeared in the Daily Telegraph on 9 October 2012; it is reproduced by kind permission of the Editor.



Members of the Corps meeting Colin Firth at the prepremiere reception.



It is not very often that members of the Corps find themselves rubbing shoulders with Hollywood film stars such as Colin Firth. But that was exactly what happened on 4 December 2013 when the UK Premiere of The Railway Man was screened in London's Leicester Square.

First there was a reception at a smart Soho hotel for veterans of the Burma Railway, serving members of the Corps who are veterans of more recent conflicts, the cast, the production team and the media. This was followed by a charity gala screening of the film at the Odeon West End in aid of the Royal Signals Benevolent Fund. The evening was rounded off by an after party at the Institute of Directors hosted by the Corps where some 400 attendees met key figures involved in the production.

Overall, the evening raised about £11,000 in aid of the Royal Signals Benevolent Fund of which Eric Lomax was a life-long

supporter. Eric was also the founder and past Chairman of the Berwick upon Tweed Branch of the Royal Signals Association.

The Corps is particularly indebted to Eric's widow Patti, to the producer and co-writer of the film Andy Paterson and



Bill Curbishley, Frank Cottrell Boyce and Andy Paterson (the Producers & Writers) at the premiere. Note the ties!



Patti Lomax and Brig Cedric Burton, Chairman of the Museum Trustees, opening the exhbition.

also to the UK Distribution company Lionsgate for all their support in making the charity gala premiere possible.

In late January, after the film went on general release in UK, Patti Lomax and Andy Patterson travelled to Blandford to open a new exhibition at the Royal Signals Museum dedicated to The Railway Man. The museum is very grateful to Patti for loaning some of Eric's memorabilia to the Museum for the exhibition.

Captain Eric Lomax

Eric Lomax, who has died aged 93, long nursed thoughts of revenge on his wartime Japanese captors then, in his dotage, finally had the chance to act when he came face to face with his principal tormentor; his choice of reconciliation over retribution inspired both those who met him and a film now being made starring Colin Firth.

A Signals officer captured at Singapore in 1942, Lomax was a prisoner at Kanchanaburi camp in Thailand when guards found a radio receiver, and a map he had made of the Burma-Siam "death railway".

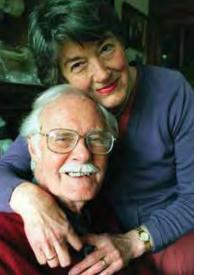
He was made to stand for long hours in the burning sun. Stamped on, he had his arms broken and his ribs cracked with pickaxe handles; later he was waterboarded, with his head covered and water pumped into his nose and mouth to make him feel as if he was drowning. At night he was confined, coated in his own excrement, to a cage. A doctor who examined him later said there was not a patch of unbruised skin visible between his shoulders and his knees.

During his torture, Lomax's English-speaking interpreter repeatedly demanded he confess to espionage, saying: "Lomax, you will tell us ..." and adding "Lomax, you will be killed shortly." Knowing that an admission would seal his fate, Lomax remained steadfast. Such were the tortures inflicted upon him that he remembered calling out for

his mother; but there were moments, too, when he was questioned about his schooling. At the last, when it became apparent he would not be executed, he was told, in a parody of English manners, to "keep your chin up".

When the war ended Lomax seemed normal enough. He returned to Scotland and found that nobody was interested in "the unpleasantness" experienced by prisoners of the Far East. But he found that his mental scars refused to fade: he was woken by nightmares, and his inability to talk about his experiences contributed to the break-up of his first marriage.

When he later met a Canadian girl 17 years his junior on a long train journey, he found himself able to open up a little about his wartime experiences. He sent her letters and tape recordings which described his war, but only up to the fall of Singapore, a moment he described as "the beginning of the descent into hell".



Lomax's loving second marriage to Patti Wallace in 1983 also came under stress, as she faced his immense stubbornness, which could suddenly switch to outright hostility so that he would refuse to speak to her for a week. Eventually she wrote to a doctor studying PoWs' psychological problems, and he read in The Daily Telegraph about the recently-formed Medical Foundation for the Care of Victims of Torture, which he started to visit.

A fellow former-prisoner then gave him a cutting from the Japan Times about a ex-Japanese soldier who had been helping the Allies to find the graves of their dead and claimed that he had earned their forgiveness. The accompanying photograph showed Takashi Nagase, the interpreter during Lomax's interrogation, and the man with whom he most associated his ordeal.

For two years Lomax did nothing. Then he obtained a translation of Nagase's memoir, which explained how shame had led the interpreter to create a

Buddhist shrine beside the death railway. Patti Lomax then wrote to Nagase, enclosing her husband's photograph suggesting and that perhaps the two men could correspond. She asked: "How can you feel 'forgiven', Mr Nagase, if this particular Far Eastern prisoner-of-war has not yet forgiven you?"

The reply she received declared: "The dagger of your letter thrusted me into my heart to bottom." Nagase the admitted that he still had flashbacks about torturing Lomax and thanked her for looking after her husband until they could meet. When Patti Lomax wrote back she enclosed a formal letter from her husband. Eventually the two elderly enemies arranged a meeting.

More than half a century after their previous meeting, the two men approached each other on the bridge on the river Kwai. After bowing formally, Nagase nervously acknowledged that the Japanese Imperial Army had treated the British appallingly. Lomax found himself saying: "We both survived". Later Nagase said: "I think I can die safely now". When they next met, in a Tokyo hotel room, Lomax carefully read out a letter he had written assuring Nagase of his total forgiveness.

The only son of a General Post Office manager, Eric Sutherland Lomax was born on May 30 1919 at Joppa, outside Edinburgh, where he developed a burning interest in trains. He went to the Royal High School until 15, when he won a Civil Service competition to become a sorting clerk and telegraphist with the GPO. He joined a Baptist church, became engaged to marry, and enlisted in the supplementary reserve of the Royal Corps of Signals.

After the declaration of war he was sent to northern India before arriving on Singapore Island as a band played There'll Always be an England at the quayside. He was commanding a Signals section of the 5th Field Regiment, Royal Artillery, when he heard a rumble that turned out to the sinking of the great warships Prince of Wales and Repulse. After two confusing months when he was assured that the Japanese could never attack through the jungle, and which he spent relaying contradictory orders from headquarters, Singapore was taken and Lomax went into captivity along with some 80,000 other Allied troops.

He found himself first in Changi jail, where the Japanese began the systematic humiliation of their prisoners. For two months Lomax and several hundred others were forced to clear the jungle to make room for a Japanese war memorial. Then he endured five days in a stifling railway boxcar as he was transferred 1200 miles north to Ban Pong, 50 miles west of Bangkok in Thailand.

There he and several others built a radio receiver from scrap, huddling around it at night as it brought news of Allied progress in the war. The men kept the radio in a biscuit tin and, despite the risk of discovery, took it with them when they were transferred 100 miles north-west to Kanchanaburi.

It was there that prisoners

were forced to work on the 418-mile railway line to Burma, a task that included erecting the notorious bridge on the river Kwai. Lomax's treatment was better than most: sent to the railway's repair shop, he was spared the physical hardship of prisoners ordered to clear the ground and lay the rails, and maintained his sanity by reading the Bible and studying Hindu and Japanese. He also began to compile his map.

An unannounced search then uncovered the radio, concealed beneath the bunk of another man in Lomax's hut who was immediately put on punishment duty. Shortly afterwards, Lomax and four other prisoners were told to gather their belongings and prepare for interrogation. Lomax, fearing execution, grabbed the map, reasoning that it would be essential if the men were to make a break for freedom. In the event, the men did not run, and the map was quickly discovered. Two of the five would indeed die of the injuries inflicted upon them.

Preparing for the ordeal that he knew lay ahead, Lomax carefully took off his glasses and watch, and thought of the Protestant martyrs. After a day forced to stand to attention in the sun, he was brought in for questioning. He could not remember how long it lasted, only that beatings were followed by more sophisticated torture by the military police. When he regained consciousness he was dragged back into the camp. There a Dutch doctor who treated Lomax told him that he had counted 900 blows in six hours.

Two weeks later, barely recovered from his battering, Lomax was taken to the headquarters of the Kempeitai, or military police. It was there that he first met Nagase who, as interpreter, became the focal point for Lomax during his torment. It was he who asked Lomax about the radio and map, and told him to confess that he

was a spy and name fellow "conspirators" among the prison population. Lomax, however, replied that the map was simply an effort to make sense of his surroundings by recording a few observations. The Japanese were particularly confused by his claim to have been obsessed with railways since childhood. "You are railway mania?" he was asked.

Yet he refused to break and make a false confession. Instead he was sent to

Bangkok and put on trial, charged with being a bad influence. Sentenced him to five years, Lomax was then told that his name had been abolished and that he was now prisoner No 615.

In jail back in Changi, he deliberately starved himself in order to be transferred to the prison hospital, which proved so luxurious by comparison that, when he was discharged, he deliberately fell downstairs to have himself readmitted.

On returning home after the war with a mention-in-despatches he found that his mother had died believing he was dead. Then he married the fiancée who had waited for him since 1941 while signing on with the Army for another two years to teach young undergraduate officers about radios.

His old job at the Post Office then proved unsatisfying. He joined the Colonial Service in the Gold Coast (now Ghana), where he helped to build a huge dam across the Volta river and a harbour at Tema while also overseeing the construction of a 600-mile, 3ft 6in gauge railway. But independence was already in the air, and he spent his last year as an assistant government agent at Sekondi, enjoying the chance to run a district and lending the future President Kwame Nkrumah a pair of swimming trunks – the closest, he would later joke, that he ever got to a seat of power.

Lomax returned home to write occasional feature articles on railways for the Telegraph and work for the Scottish Gas Board before becoming a lecturer on personnel management at Strathclyde University.

The post-traumatic stress never left him, and in fact grew worse after his retirement in 1982. Then he read about the Medical Foundation for the Care of Victims of Torture, and made a 600-mile journey to attend it every six weeks.

His meeting with Nagase was filmed for a television documentary, Enemy, My Friend? (1995), broadcast on ITV and in 23 countries around the world on the 50th anniversary of V-J Day. The following year Lomax published The Railway Man, a powerful memoir placing his wartime experience in the context of his

whole life. It won the JR Ackerley Prize and the NCR book award, and prompted other former Japanese prisoners to write from all around the world.

In 2007 Osamu Komai, the son of Mitsuo Komai, the second-incommand at Kanchanaburi camp who was hanged after the

war largely on Lomax's evidence, visited Lomax at his cottage in Berwick-upon-Tweed to apologise for his father's actions. Their conversation, conducted through an interpreter, was filmed for a Japanese television documentary. Afterwards Komai seemed relieved. "Apparently it was the equivalent of offering me his soul," Lomax said.

Disgusted by his own wartime actions, Takashi Nagase considered suicide after the war, but instead opened an English language school. He married, then began making pilgrimages to Kanchanaburi. Back in Japan he started making speeches promoting reconciliation between former Japanese soldiers and Allied prisoners. He persevered despite a hostile reception from many of his countrymen, and in 1976 introduced 23 ex-PoWs to 51 former Japanese soldiers at Kanchanaburi. In October 1989 Lomax read Nagase's memoir Crosses and Tigers, which described how the interpreter was still haunted by the brutal torture of one particular prisoner. "That prisoner was me," Lomax said. The film of their story, also called The Railway Man, is due out next year.

Eric Lomax is survived by his wife and a daughter of his first marriage. A son and a daughter predeceased him.

Eric Lomax, born May 30 1919, died October 8 2012.



REMEMBRANCE



Since the last edition of the RSI Journal the following senior officers from the Corps have sadly passed away; our condolences to their families and friends.

Brigadier C A Brown (Colin)	Served 1958-93	Died August 2012
Brigadier E M Erskine (Ted)	Served 1939-69	Died September 2012
Colonel W N Lang ERD (Bill)	Served 1941-85	Died November 2012
Major General A J		
Deane-Drummond CB DSO MC* (Tony)	Served 1937-71	Died December 2012
Colonel M J C Galloway OBE (Mike)	Served 1962-98	Died December 2012
Colonel A H Dennis (Tony)	Served 1945-80	Died February 2013
Colonel K Maxwell-Brown (Kenneth)	Served 1939-46	Died May 2013
Colonel D H Briggs (Derek)	Served 1948-80	Died May 2013
Brigadier J B Birkett OBE (Brian)	Served 1936-69	Died July 2013
Brigadier R H Borthwick (Roly)	Served 1941-73	Died October 2013
Colonel J W W Cock	Served 1941-75	Died December 2013
Colonel T A Byrne (Terry)	Served 1954-86	Died December 2013
Major General R Benbow CB (Robert)	Served 1951-93	Died January 2014

There is a tribute below to Major General Tony Deane-Drummond; tributes to other officers will appear in the next issue of the RSI Journal.

Major General Anthony Deane-Drummond CB DSO MC*

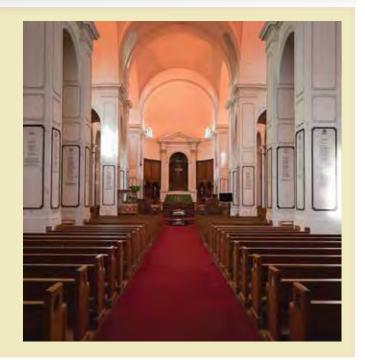
EDITOR'S NOTE

Major General Deane-Drummond was born on 23 June 1917 and died on 4 December 2012 aged 95. A memorial service was held for him in the Memorial Chapel at RMAS on 17 May 2013 supported by the Regimental Associations of the Royal Signals, the Parachute Regiment and the Special Air Service.

The eulogy at the memorial service was provided by Professor Lloyd Clark of the University of Buckingham; it is reproduced below by kind permission of Professor Clark.

An obituary was published in The Daily Telegraph at the time of his death, it can be found at:

www.telegraph.co.uk/news/obituaries/military-obituaries/army-obituaries/9722273/Maj-Gen-Tony-Deane-Drummond.html



INTRODUCTION

It is a very great honour to have been asked by the family to provide this tribute to the extraordinary life of Maj Gen Tony Deane-Drummond – although the challenge to do justice to it has been great.

So, where does one start with a life such as Tony's? A man regarded by Gen Sir Peter de la Billiere as 'one of the most

distinguished and courageous soldiers of his generation' and John Frost called 'a man of the utmost determination and courage.'

BEGINNINGS

Tony was born to Lili in the Cotswolds during June 1917 just as the British completed their final preparations the battle of Passchendaele where his father, Jack, was to continue with his war. Jack, himself the holder of two DSOs and an MC, was a courageous soldier but after the war divorced Lili when Tony was but 9 years old. The absence of a father figure was subsequently seen by Tony as 'regrettable', but his childhood was happy with Lili clearly doing an excellent job raising Tony and his two sisters.

Tony was educated at Marlborough College — part of a generation that, unbeknown to them, would have to emulate their fathers and fight another bloody war. Although not academic, Tony was bright and developed strong principles. Indeed, his potential was seen by one of the Masters, AR Pepin, who said to a young Tony: 'Put you heart and soul - as well as brains - into anything you do at school or after you leave here and you will get to the top'. It is also likely that Pepin, an officer in the school's CCF, also passed on a very great enthusiasm for signals to his pupil, for in 1937 when Tony passed out of the Royal Military Academy Woolwich, he was commissioned into The Royal Signals — a decision sealed by the Regiment's belief that it was the right of every officer to possess two army horses.

Meanwhile, Europe tumbled towards war; a war that seemed to hold no fears for Tony, but began lamely with his evacuation from the Dunkirk beaches in 1940. It was an experience that he never forgot; while some were demotivated by the disasters in France, Tony only became more determined to fight back and later wrote: 'It was time to do something more active'. Churchill thought the same; directing that special operations 'set Europe ablaze' — words which Tony seems to have taken as a personal order. The commandos and airborne forces that followed were just the sort of outfits that interested Tony and they, in turn, were interested in highly motivated, intelligent and capable young men like him.



TRAGINO

Tony was selected for 2 Commando – which later became 11 SAS and then 1 Para – in July 1940 and so played a central role in the birth of these 'special forces'. He was a 'trail-blazer', and that meant that he was often a guinea pig with training procedures that 'would horrify modern safety standards' although jumping with a reserve parachute was regarded as 'sissy'. But lessons were learned – the hard way – and the unit hurtled its way towards its first action.

Tony was specially selected to be part of that first airborne operation and in February 1941, 38 officers and men took part in Colossus, an operation to blow up the aqueduct at Tragino in southern Italy. Dropped at night in difficult mountainous terrain, the force demolished the objective and then began a 60 mile move back to the coast to rendezvous with a submarine. The episode ended with the group being taken prisoner — a cruel anti-climax to the operation considering what had been achieved — and thus began his first period of incarceration.

Tony languished for 10 months in a prisoner of war camp with every passing day being regarded by him as a wasted day. Tony began planning his escape almost as soon as he arrived and even though other officers believed that the chances of escape followed by a 600 mile journey to the Swiss border were slim, he was not deterred. First he worked for six weeks on a tunnel, but it was discovered, but in December he managed to get over the fence when he and a fellow officer – replete in homemade Italian uniforms and carrying a homemade ladder – imitated electricians changing a light-bulb on the perimeter fence and took their chance. Although his fellow escapee was stopped by a guard's bullet – a bullet which also nicked Tony's cheek – Tony made a successful dash for freedom. He then embarked on a long and dangerous journey north by road and rail and successfully evaded capture until close to the frontier.

Detained once again, Tony refused to co-operate with his increasingly irritated Italian interrogators - telling them that he was 'bored, tired and not amused' by proceedings – and was sent for 30 days' solitary confinement. However, as an escapee he was to be sent to a special camp for 'dangerous prisoners' and so he feigned pain and deafness in one ear and was transferred to the Military Hospital in Florence from which Tony escaped through the window of his room – 70 feet above the ground. He then made his way by train via Milan to the Swiss frontier where he scrambled up a mountainside and burrowed his way under a wire fence under the noses of border sentries. From there, through contacts, he made his way back to England via Marseilles and a Gibraltar bound Royal Naval vessel disguised as a fishing trawler. He was one of just two British officers to escape from wartime Italy and was awarded his first MC.

ITALY

Back in Britain Tony became signal officer for 2nd Parachute Brigade and in September 1943 arrived by ship in Taranto with 1st Airborne Division which then went on to take and hold the heel of Italy. Soon after Tony become involved with special 'round up parties', picking up groups of prisoners from the coast that had broken out of their camps when the Italians surrendered and were being hunted down by the Germans. Utilising a variety of strange craft, Tony was instrumental in returning scores of men

to friendly lines. But on the division's return to England, it was not chosen to be part of the initial invasion of France in June 1944 and then a host of airborne operations were cancelled as the ground forces raced towards Germany in late summer. But, Tony and 1st Airborne Division were of course destined to see action again, and in one of the most famous operations of the Second World War - Market Garden.

MARRIAGE

At this point, I need to break my narrative for to continue without reference to another very important development in Tony's life would be to underestimate its significance. As the devastating storm on the Continent was set to reach its crescendo, Tony fell in love and married. Having met a young lady with 'laughing eyes and a welcoming smile', Tony wed Evie in Hampstead Parish Church in January 1944. Evie was Tony's 'lovely and vivacious wife' and they shared their lives together for 58 years. During this time her love and support was unceasing — but I cannot imagine that being married to Tony was without its stresses. In September, for example, Evie (by that time carrying their first child) received news that Tony was missing — last seen going into house in Arnhem that was then set of fire.

ARNHEM

Tony was second-in-command of Divisional Signals and had parachuted into Holland on the first day of Operation Market Garden. As the parachute battalions endeavoured to push through to Arnhem, Tony found himself in the thick of the action and ended up taking command of a 1 Para company after its commander had been killed because 'To take over seemed the only thing to do.' The intense fighting left him with just 20 men all with very little ammunition and under intense German pressure. Taking up defensive positions in some houses on the outskirts of the town, he and four others moved into a building close to the Lower Rhine. When a party of Germans joined them, Tony and his small group secreted themselves in the small ground floor lavatory where they remained for three days and nights. Meanwhile, a dozen of the enemy moved in on the upper floor and a machine gun was set up in the roof. The Germans often tried the lavatory door but finding it engaged, went away again. On the fourth night Tony and his comrades make a break for it and heading for the river, swam its 400 yards and then headed down the bank, only to find themselves in the German front line. Tony was taken prisoner – again.

Escorted to a large house back on the north side of the river which was being used as a temporary 'cage' for prisoners, Tony found a hiding place – a wall cupboard – four feet wide, seven feet high and 12 inches deep. He moved the lock to the inside, sealed the outside keyhole with some wall-paper and when the other prisoners were escorted away, Tony took up residence – and there he stayed for 13 days and nights with just a hunk of bread, a tin of lard and a few pints of water to sustain him while the Germans occupied the room just inches from his nose. Tony's escape from the house and his subsequent evasion of numerous German patrols is an extraordinary story, and with assistance of some brave locals and the Dutch Resistance, he made his way back to friendly forces. 'Arnhem' had been a five week ordeal for Tony – during which time he lost two stone in weight – but he was quickly put on a flight back to England. On landing he spotted a waiting car bearing his unit's insignia.

'Did you know I was coming?' a confused Tony asked the driver, 'Well, not exactly, Sir' came the answer, 'We heard that a party had got back across the Rhine and the Sgt Maj said that you were bound to be with it. I think he had a bet, you see, Sir.' Tony was mentioned in despatches for his escape, and was also awarded a bar to his Military Cross.

POST-WAR MILITARY CAREER

As the war came to an end and in its immediate aftermath, Tony enjoyed a number of interesting tours — although they look rather anaemic in comparison with his wartime experiences — including study at Staff College, Palestine, a stint at the War Office and then, in September 1948, on an advanced signals course in America. The highly competitive Tony came a very respectable second on the course, but later contended, 'If I had not disagreed with their solutions on airborne communication I would have been top.' On his return from the US Tony came here, to RMAS, as an Instructor where — remarkably — he found the time to write up his wartime exploits and have them published as Return Ticket — it became a best-seller and was serialised by the Sunday Times.

His next job, on promotion to Lieutenant Colonel, was as a member of the Staff College Directing Staff and it was at this time that he was diagnosed with cancer and, given just two months to live. A second opinion was more accurate, but having dealt with one health scare, Tony was very lucky not to have been killed on his next tour of duty in Cyprus. While commanding a 1 Para company on anti-terrorist operations, Tony's Land Rover came under attack and his skull was fractured by a stone thrown through the windscreen. Surgeons used a piece of Tony's ribs to fill the two inch the hole in his skull and he eventually made a full recovery. While recuperating, however, he was medically downgraded and, in Tony's words, given jobs 'that were suitable for those recovering from broken heads' and also went gliding — although neglecting to tell Evie that doctors had banned him from flying.

Tony had learned to glide as a subaltern because he 'had a yen to fly', and quickly became hooked. He was captivated by the 'poetry of soaring flight' and 'the sheer joy of using air currents to keep one aloft.' Now, in true Deane-Drummond style, Tony pushed the limits and by 1957 was British National Gliding champion and he went on to represent Britain in competitions on four separate occasions. Evie, meanwhile, had also been gliding since 1951 and herself set the record for the longest distance flown by a lady three times.

THE SAS IN MALAYA & OMAN

Having been passed fully fit again in 1957, Tony was posted to command 22 SAS in Malaya and given the mission to go deep into the jungle and then locate, track down and kill terrorists. 'It was', Tony later said, 'a desperate job' but an important one to do well for the future of the SAS under intense scrutiny in Whitehall. Indeed, one senior officer said to Tony as his troops got to grips with the enemy in Malaya: 'Your chaps have been quite superb in the jungle, but I can't see a task for them away from the trees.' Tony — or 'The Cupboard' as he was affectionately known — was convinced that the salvation of the Regiment would come from fulfilling its task in Malaya — which it did — and then revealing to the decision makers that the Regiment was no one trick pony by doing something

exceptional elsewhere. The much desired opportunity to shine in a different environment came early in 1959 when Tony seized the chance to oust some 500 rebels from a stronghold on a plateau at an altitude of 7,000 feet on Jebel Akhdar in Oman.

The words of some who argued that the job required a brigade of troops motivated Tony to excel and he planned an operation with a meticulous attention to detail while placing complete faith in the qualities the two squadrons involved. It was, said Tony, like 'pitching David against Goliath'. Even so, the night attack was an outstanding success with one squadron providing a diversionary attack while the other climbed the precipitous mountains and struck at dawn – and the rebels disintegrated. The Times said of the action:

"It had been a victory at the first attempt by a numerically inferior force against an able enemy with geography on its side...The enemy were conquered by surprise, not slaughter; a brilliant example of economy in the use of force."

Peter de la Billiere, then a Troop Commander but later, of course, Director of the SAS, has said that Oman "proved a turning point in the history of the SAS ... this victory gave it a new lease of life." For his part in the success, Tony was awarded the DSO.

COMMAND & STAFF

On leaving the SAS Tony was promoted to Colonel and in 1961 took command of 44 Parachute Brigade TA – taking over from Johnny Frost. At this time he was the subject of This is Your Life. Surprised by Eamonn Andrews in the usual style, Tony was initially 'furious' at this subterfuge, but was pacified by the news that he would receive £50 for his trouble. After his brigade command, Tony came back here, to Sandhurst, as Assistant Commandant. A strong believer in academic studies and focussed on developing the military course wherever he found weaknesses, he was always interested in the progress of the Officer Cadets and the quality of what the Academy was turning out into the field army.

On taking command of 3rd Infantry Division in 1966, Tony was promoted to the rank of Major General. During this period he made such full use of helicopters to get around Salisbury Plain to see his units, that he decided that he would learn to fly them himself. Always looking for new challenges, Tony passed the

demanding training without a fuss and later no doubt enjoyed the look of surprise – and admiration – on the faces of those that came to greet him on landing.

Tony's final job before retirement in 1971 was as Assistant Chief of Defence Staff in Whitehall. It was a job with a title that demanded respect, but Tony believed it to be an appointment that was not an efficient or effective use of a two-star with his experience; he quickly became exasperated by the organizational muddle that he found at the top end of the three services — he did not see himself as a 'Whitehall Warrior'.

'RETIREMENT'

Having retired from the Army, Tony's obvious talents and ability were quickly recognised by industry, and in June 1971 he was appointed Director of the Training Board for the Paper Industry. Tony enjoyed the challenge, but after several successful years changed tack with a decision to run his own business selling wood burning stoves in Somerset: 'After seeing so many small firms run by incompetent people' he said 'I was sure I had to do this to satisfy my ego.' With Evie's help Tony hit his sales targets, exceeded them, and grew a new business when he might have been taking an easier path. When he sold the business three years later on moving to south Warwickshire, it was thriving but Tony was still not ready to put his feet up. With Evie he launched into the vigorous renovation of several houses before finally settling in Little Kineton. Here, Tony finally found the time to spend on his carpentry, the restoration of antique furniture and, in 1992, the writing of his autobiography Arrows of Fortune. That book was dedicated to the two halves of his life - 'those soldiers and civilians with whom I have worked and played' and Evie and their four daughters - Shirley, Angela, Anna and Celia.

FAMILY LIFE

With a life such as Tony's it is easy - nay, understandable for a tribute such as this to be dominated by details of his professional feats and adventures, but I am certain that Tony's life would not have been as rich, meaningful or as stable as it was without his family providing a vital anchor of love, support and understanding. Today there are ten grandchildren and six great grandchildren - many of whom are with us here today at this Service. I have had the privilege to get to know four of the Deane-Drummond clan over the years – Anna, and her two children Rebecca and James, and also Shirley's son Anthony, who followed his grandfather into the army and also served at Sandhurst as an instructor – and in all four I detect more than a hint of Tony's looks, along with a heavy dose of his intelligence, talent, tenacity and comradeship. They, and the family as a whole, are quite rightly proud to be related to the extraordinary Tony Deane-Drummond, a man that lived his 95 years to the full and reflected all those values that the British Army holds so dear: selfless commitment; integrity; moral and physical courage; loyalty; discipline and respect for others. Tony Deane-Drummond was, without doubt, the most inspirational man that I have ever met.



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With the passing of the post of Signals Officer in Chief (Army) the new Headquarters Royal Signals came into being in 2012 under the direction of the Corps Colonel Royal Signals, Colonel Graham Norton. The new lean HQ, which now numbers about 35 staff, has settled into its new home in Griffin House, Blandford Camp alongside the Royal Signals Museum and the Princess Mary Hall. The photograph above, taken in Autumn 2013, shows the staff of Headquarters Royal Signals outside Griffin House. The main groupings within the headquarters are as follows:

- People (headed by Lt Col Jase Gunning, SO1 Royal Signals),
- Regimental Headquarters (headed by Col (Retd) Terry Canham, Regimental Secretary),
- Communication & Heritage (headed by Maj (Retd) John Fradley, SO1 Communication & Heritage),
- Royal Signals Institution (headed by Lt Col (Retd) Nigel Harrison, Secretary) and
- Royal Signals Museum (headed by Mr Nick Kendall-Carpenter, Director).

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