



**Resume of our first Fireside Chat, 29 May 2026,
held at Millbank and online,
between two former UK Surgeon Generals,**

**Lieutenant General (Retd) Louis Lillywhite
interviewed by
Lieutenant General (Retd) Professor Martin CM Bricknell**

'Adaptation and Innovation in the First Gulf War'



Having reorganized for a hot war in Europe, the Army Medical Services unexpectedly found itself having to support a major war of manoeuvre in the Middle East in 1990-91. This fireside chat outlines the challenges of responding to an operational scenario completely different to the one for which the AMS had just reorganized. (See more detail below)

**The recording is on our Members Area,
<https://www.friendsofmillbank.org/talks-2026/>
Proceeds supported the Museum of Military Medicine**





The medical challenges of the First Gulf War

In the Autumn of 1990, after Iraq had invaded Kuwait, the UK contributed an Armoured Brigade Group to deter any attempt by Iraq to extend its invasion into Saudi Arabia. Subsequently, when it was decided to retake Kuwait, the Armoured Brigade was expanded to a full Armoured Division.

The eventual UK medical component comprised four hospitals (1,600 beds), a Casualty Receiving ship, two Armoured Divisional Field Ambulances, a wheeled Field Ambulance and a multitude of minor units. However, the medical deployment was based on that designed for a relatively static Cold War which whilst suitable for the initial Brigade deployment was unsuited to a war of manoeuvre covering a distance equivalent to the distance from Cherbourg to Berlin.

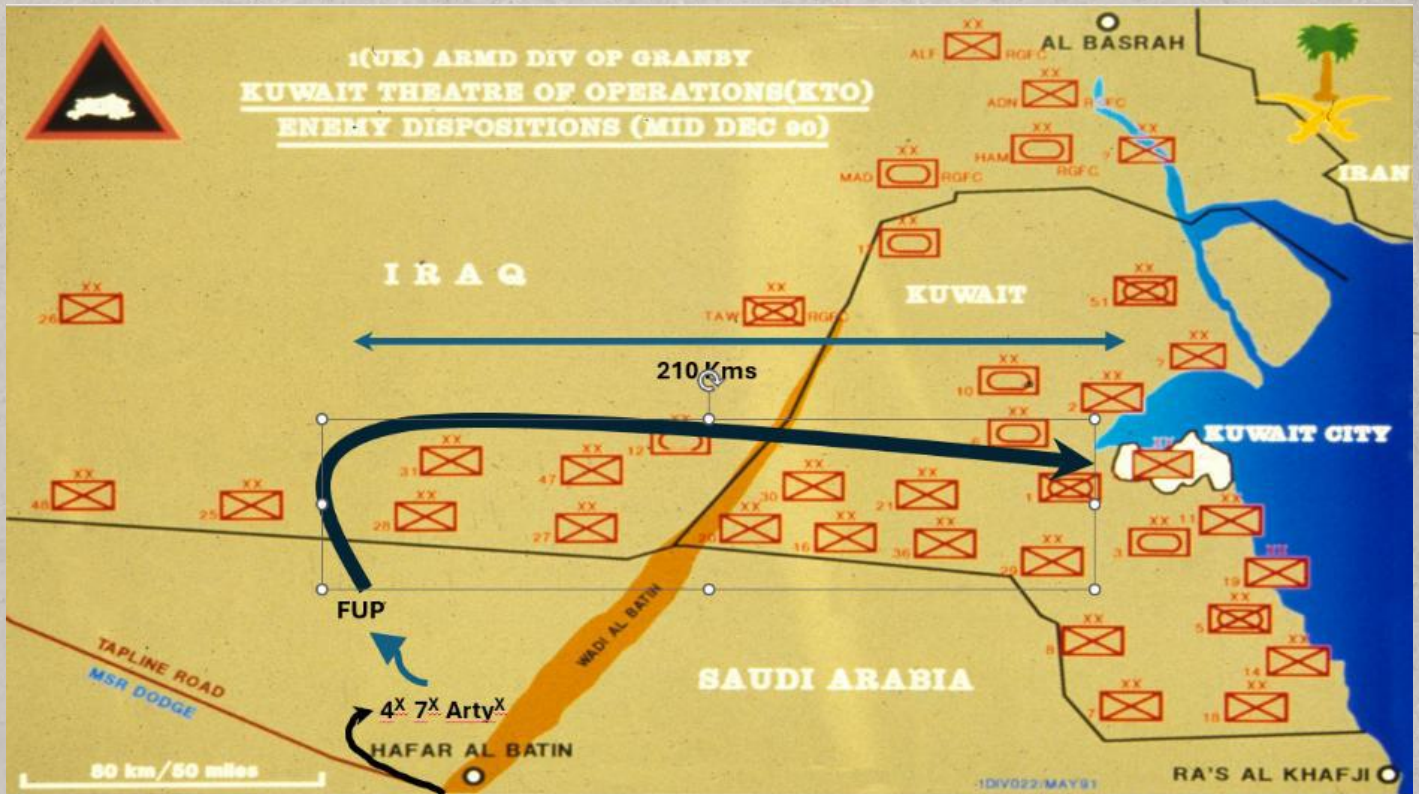
The operation also required two Divisions, 1st (UK) Armoured Division and 1st (US) Infantry Division, each comprising approximately 13,000 troops, to concentrate in the same area and then undertake a passage of lines as 1st (UK) Armoured Division first supported and was then launched into Iraq through the US Division, subsequently fighting its way over 210 kilometres of desert to Kuwait City.

Because of both the distance and the concept of operation, significant reorganization of the medical units was undertaken 'on the fly', with novel methods designed to support the two Divisions when they were co-located during the initial break-in battle, and then to manage and evacuate casualties over the considerable distances.

Superimposed on the tactical planning were issues of NBC Defence with disagreement on the need or otherwise for protective measures, highlighting differences between UK and US Intelligence assessments and the need to balance preventive measures against the realities of the battlefield.



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The passage of lines by 1st (UK) Armoured Division through the US Division into Iraq and then Kuwait

This fireside chat presents a 'functional' rather than a historical narrative, and is based around various themes such as working with Allies; the need for flexibility; the importance of innovation; the importance of clinical understanding in decision making; and the place of medical within the wider military organization.

The session was delivered by two former UK Surgeon Generals. Lieutenant General Louis Lillywhite, who was on the initial Strategic Reconnaissance, then became Commander Medical 7 Armoured Brigade Group and finally Commander Medical 1 (UK) Armoured Division, was interviewed by Lieutenant General Martin Bricknell, ensuring that relevant points for the emerging military environment were highlighted.



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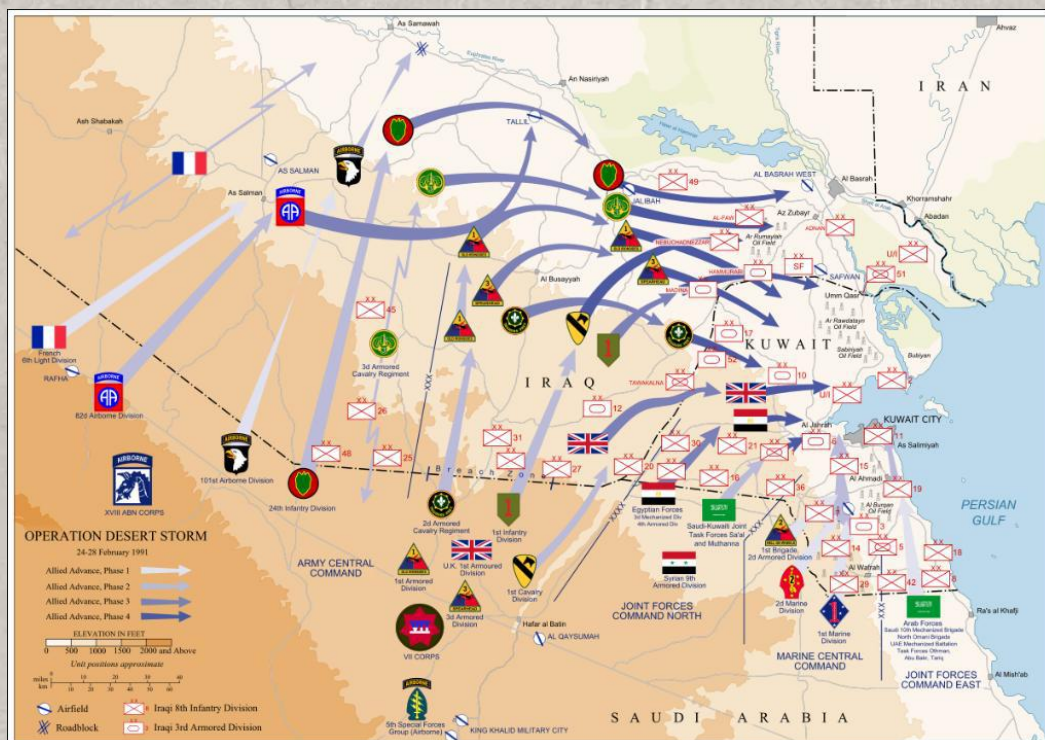


The First Gulf War, 1990-91 / Op GRANBY – A brief historical narrative.¹

On 2 August 1990, Iraq, under the leadership of Saddam Hussein, invaded and occupied Kuwait, claiming the territory for itself. A massive UN-endorsed international force of over 750,000 troops was assembled under US command (General Norman Schwarzkopf), initially to protect Saudi Arabia from invasion (Operation DESERT SHIELD), and then to liberate Kuwait (Operation DESERT STORM).

Britain contributed strongly to the liberation of Kuwait, under Op GRANBY, eventually supplying an armoured division of two brigades: the 1st Armoured Division with 7th Armoured Brigade (the Desert Rats) and 4th Mechanised Brigade, with impressively large logistic support. Over 30,000 Army personnel were involved, as well as there being significant Royal Navy and Royal Air Force participation.

The 1st Armoured Division, with its Challenger tanks, was to play a pivotal role in the massive left hook around Iraqi defences. Militarily, the operation was a resounding success, the Iraqis being expelled from Kuwait after only a few days and with minimal allied casualties. These included 45 British fatalities (24 from hostile action) and 148 US battle deaths (out of 694,550 US personnel deployed to the Gulf). Iraqi casualties probably numbered in the thousands. Saddam Hussein remained in power, and simmering tensions eventually resulted in a full-scale invasion of Iraq in 2003 (the Second Gulf War / Op TELIC).



Map of ground operations of Operation Desert Storm starting invasion February 24-28th 1991.

Source: <https://commons.wikimedia.org/w/index.php?curid=3502725>

¹ Vassallo, David. *Military Conflicts involving the UK and US, 1945 – 2021*.

Published on Friends of Millbank 'The Defence Medical Services in War' webpage, <https://www.friendsofmillbank.org/dmswar/>.

Direct link: <https://www.friendsofmillbank.org/downloads/UK-US-Post-WW2.pdf>.





Our Guest Speaker



Lieutenant General (retd) Louis Lillywhite
CB MBE CStJ FFOM FRCP(Glas) FRCGP
Former Surgeon General, UK Armed Forces

Lieutenant General Louis Patrick Lillywhite, occupational physician by profession, was born on 23 February 1948, and educated at Lichfield KEVI Grammar School, Cardiff University, London School of Tropical Medicine and Hygiene, and the Army Staff College. He joined the Army as a medical student in 1968, retiring as Surgeon General in 2010, only to be invited back in 2017 as the first Master-General of the Army Medical Services, serving in this advisory and mentoring role until January 2022, a span of 54 years in the Army.

He spent much of his first 21 years in Airborne Forces, first as a Medical Cadet with 144 Parachute Field Ambulance then in 16 Parachute Brigade as a section officer, Regimental Medical Officer with 3 PARA, and Second in Command of 23 Parachute Field Ambulance seeing many tours in Northern Ireland. He was instrumental in the reformation of 23 Para Fd Amb as its first Commanding Officer from 1984 to 1989, which included the first Ex SAIF SAREEA (a large scale exercise in Oman) intended to deter the control of both sides of the Hormuz waterway to Iran.

His subsequent tour at Army Medical Department (AMD) was particularly frantic: he undertook a full review and reorganization of the Field Medical Service and of the medical plans for evacuation to the UK of the estimated 80,000 expected surviving military casualties of a general war in Europe; work with Tech Int Army saw him visit Iraq during the Iran -Iraqi War (including an illegal visit into captured Iranian territory); and he was involved



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in negotiations on taking up British Railways stock, Cross Channel Ferries and Holiday camps (for convalescence and rehabilitation) and call up of Army Regular Reservists and Pensioners.

During this time at AMD, he successfully proposed an expansion of the Army Medical Service, including formation of some new units, at a time when the rest of the Army was contracting, proving that the medical voice is heard if well-articulated!

Following a MSc he was posted as SO1 Prev Med to HQ 1 (BR) Corps from where he was chosen to participate in the Strategic Recce considering the Army's potential role and size in the First Gulf War; subsequently he was appointed Commander Medical 7 Army Brigade Group deploying as part of the Advance Party; and subsequently became Comd Med 1st (UK) Armoured Division on its arrival in Theatre.

Further posts included Colonel PB3 (Officer career and postings), Senior Medical Adviser Allied Forces Northwest Europe, Chief Executive of the British Forces Health Service, Director General Army Medical Health Services, Director of Medical Operational Capability and Training, and then Surgeon-General from 2006, retiring in 2010.

However, in 2017 he was invited by the Army Board to assume the appointment of the First Master-General of the Army Medical Service to resolve some ongoing issues. He was not amused to find that the first Job Description he was offered was essentially the same as the one he had had as DGAMS but without the pay! At the time he was also Chief Medical Officer St John Ambulance and a Senior Research Fellow at the Royal Institute of International Affairs, Chatham House, focussing on the relationship between health and conflict – however here he was 'captured' by the World Health Organization to be a member of the external independent enquiry into the response to the Ebola outbreak. He also became a Trustee of the Parachute Regiment and Airborne Forces Charity, a Patron of the Order of St John's Care Trust, and a Trustee and President of the Medical Society of London. He has co-authored a number of papers in his Chatham House role. He is a Bevan Commissioner for Wales, which also involves mentoring a young health professional every year for project from clinical to organizational and participating in their leadership programme.

Chief among his honours are the Companion of the Order of the Bath (CB), Member of the Order of the British Empire (MBE), Commander of the Most Venerable Order of the Hospital of St John of Jerusalem (CStJ), honorary fellow of the Royal College of General Practitioners; Fellow of the Royal College of Physicians and Surgeon of Glasgow, Honorary Member of the Association of Medical Consultants to the (US) Armed Forces and the first foreign national medical recipient of the USA Secretary of Defence Medal for Exceptional Public Service.

Professionally, he is a Fellow of the Faculty of Occupational Medicine and remains licenced to practice.



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Our Interviewer



Lieutenant General (Retd) Professor Martin CM Bricknell
CB OStJ PhD DM MBA MA MedSci
Professor of Conflict, Health and Military Medicine

Professor Bricknell is Professor of Conflict, Health and Military Medicine at King's College London, commencing in 2019. Previously he served 34 years in the UK Defence Medical Services, finishing as the Surgeon General of the UK Armed Forces. He undertook operational tours in Afghanistan, Iraq, and the Balkans with numerous additional overseas assignments. He was awarded the Companion of the Order of Bath, the Order of St John and the US Bronze Star. He is a specialist in General Practice, Public Health and Occupational Medicine.

His multiple academic papers cover: how organisations learn, care pathways in military healthcare, military healthcare ethics, civil-military relations in health, and the political economy of health in conflict. He convenes a MA module in Global Health, Security and War, and co-convenes a MA module in Conflict and Health.

He is also Deputy Director of the KCL Centre for Military Ethics, Veterans Adviser for the King Edward VII Charity, Editor-in-Chief of the Military Medical Corps Worldwide Almanac, and on the editorial board for the Journal of Military and Veterans Health. He is a life member of Friends of Millbank and has been our President for two years. In 2025, he was a member of the UK Strategic Defence Review panel on the Defence Medical Services.

Professor Bricknell commenced our 2026 programme in January with a talk on '*Strategic Medical Lessons from the 20th Century to inform the 21st - The contemporary relevance of military medical history*'. The recording of this is also on our Members Area.

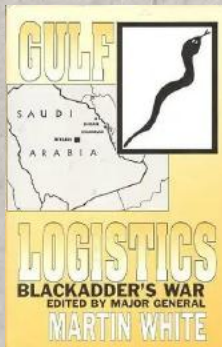


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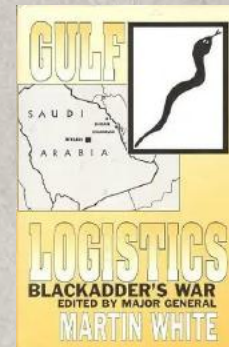


Reagan and Gorbachev, Fireside Chat at Geneva Summit, 1985

Select fireside reading



Lillywhite LP., Leitch RA. *Medical Support*.
Chapter 5 in: White, Martin.
Gulf War Logistics – Blackadder's War.
(London: RUSI/Brassey's, 1995)



Craig RP. Preparations Made and Lessons learned by the United Kingdom Defence Medical Services During Operation Granby. *Journal of the US Army Medical Department*.

November/December 1992, pp. 26-30.

Available on Friends of Millbank website, <https://www.friendsofmillbank.org/dmswar/>.

IHL in Action – Respect for the Law on the Battlefield. *Treatment of wounded soldiers by the United Kingdom and the United States of America in the Gulf War: 1990–1991*. <https://ihl-in-action.icrc.org/case-study/united-statesunited-kingdom-medical-treatment-and-care-wounded-soldiers-during-persian>

The Royal Logistic Corps Museum (Worthy Down, Winchester). *The Black Adder Goes Forth: British Army logistics in the Gulf War, 1991*. <https://rlcmuseum.com/the-black-adder-goes-forth-british-army-logistics-in-the-gulf-war-1991/>



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The Medical Order of Battle (ORBAT) in Op Granby

98 *Gulf Logistics*

BFME TPS:

FULL COMD

RFA Argus (2 × FST, 1 × SST, 100 beds)
 205 Gen Hosp (V) (6 × St, 2 × SST, 600 beds)
 No 1 War Hosp RAF (2 × ST, 100 beds)
 4626 Air Evac Sqn R Aux AF⁽⁺⁾
 MST Alfa (1 × FST, 25 beds)
 MST Bravo (1 × FST, 25 beds)
 MSS 84 FMED

FMA TROOPS

FULL COMD

28 Gurkha Amb Gp⁽⁺⁾
 33 Gen Hosp (6 × ST, 2 × SST, 600 beds) (CMH Aldershot)
 32 Fd Hosp (8 × ST, 200 beds) (BMH Hannover)
 22 Fd Hosp (8 × ST, 200 beds)
 24 (Airmob) Fd Amb
 61 FPT
 1 Air Evac Sqn RAF

OPCON

84 FMED⁽⁺⁾
 Elms 4626 Air Evac Ssn R Aux AF

1 (UK) ARMD DIV

DIV TPS

54 Amb Sqn RCT⁽⁺⁾
 DS 5 Bravo (DS of 3 Armd Fd Amb, 1 × Armd & 2 × Wh Sect, 4 × Armd & 10 × Wh Ambs)
 60 FPT
 Hygiene Det

4 ARMD BDE

5 Armd Fd Amb⁽⁺⁾ (DS, 3 × Armd & one Wheeled Sect; 14 × Armd & 10 × Wheeled Ambs)
 2 × FST (one 23 Para Fd Amb, one 205 Gen Hosp (V))
 Tp HQ, 28 Gurkha Amb Gp
 MAOT
 Hygiene Det

7 ARMD BDE

1 Armd Fd Amb⁽⁺⁾ (DS; 3 × Armd & one Wheeled Sect; 14 × Armd & 12 × Wheeled Ambs)
 2 × FST (one 23 Para Fd Amb, one 205 Gen Hosp (V))
 Tp HQ, 54 Amb Sqn RCT
 MAOT
 Hygiene Det

ARTY GP

DS 1 Bravo (DS of 4 Armd Fd Amb; one × Armd & one × Wheeled Sect; 4 × Armd & 10 × Wheeled Ambs)
 Tp HQ, 54 Amb Sqn Rct
 MAOT

Figure 5.2 The Medical Order of Battle

Source: Lillywhite LP., Leitch RA. *Medical Support*. Chapter 5 in: White, Martin. *Gulf War Logistics – Blackadder's War*. (London: RUSI/Brassey's, 1995)

