

Criminal Justice Act 1988, s.30
Magistrates Courts Act 1980, s.5E
Criminal Procedure Rules (2014), r.33.3(3)& 33.4

EXPERT EVIDENCE REPORT

NOTE: only this side of the paper to be used and a continuation sheet to be used if necessary. All sheets and paragraphs to be consecutively numbered. If Reports are to be typed please use double spacing.

Report of : **Dr. Frank Boulton**
(name of expert)

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Qualifications:

London University (St Thomas' Hospital Medical School) 1959-1965 BSc, MBBS, MD 1975;
MRCPath 1972 (FRCPath, 1984); FRCP Edinburgh 1982

Relevant experience and accreditation:

- Medical Specialty - Haematology and Blood Transfusion; retired from full time medical practice in June 2006.
- Consultant Physician and Deputy Director, Edinburgh and SE Scotland Regional Blood Transfusion Service, 1980 to 1990; during which the coterminous post of honorary Senior Lecturer (Asst Professor) was held
- Consultant Physician, Medical Director and Chief Executive, Wessex Regional Blood Transfusion Service, Southampton; 1990 to 1996
 - This post was absorbed, after the national re-organisation of all Regional Transfusion Services and Regional Health Authorities in England and N. Wales in 1996, into the Senior Clinical Medical Consultancies of the newly-formed National Blood Authority (now NHS BT)
- Honorary Civilian Consultant Advisor to HM UK Armed Forces in Blood Transfusion, 2001 to 2006

- President, British Blood Transfusion Society 2005 to 2007, after which GMC Registration and Specialist Accreditation expired.
- Co-opted member, Specialty Advisory Committee of British Committee for Standards in Haematology (appointed by the Council of the British Society for Haematology) 2000 to 2006
- Consultant Physician emeritus, National Blood Service (now NHS BT) 2006 to 2008
- Honorary Lecturer emeritus (University Visitor), University of Southampton since June 2006; active as tutor in clinical and laboratory haematology, and global health

Professional appointments and experience other than those listed above

- Postgraduate training 1967 to 1973 in London (St Thomas' Hospital to 1970; and The (Royal) London Hospital 1971-1973)
- University Senior Lectureships (Asst Professor)
 - London (Royal London Hospital School of Medicine) 1973 to 1975
 - Liverpool (Liverpool University Teaching Hospitals) 1975 to 1980

Extensive undergraduate and postgraduate teaching experience, including haemato-oncology, tropical medicine and global health

Other honorary appointments

Hon Consultant WHO in Blood Transfusion –1990 to 2012

Overseas experience

- Nigeria (locum Professor of Haematology, Ahmadu Bello University) July/August 1976
- Singapore (External Postgraduate Lecturer in Medicine (Haematology and Immunology), National University, August 1981)
- Malaysia (External advisor in Blood Transfusion, National University Hospitals); 1983, 1987, 1992.
- Grenada, West Indies (External advisor in haematology and Blood Transfusion, sponsored by the EU); August 1989.
- Zimbabwe (Leader of WHO multi-specialist course in Blood Transfusion, Harare) August 1990.
- Amman, Jordan; Co-leader and consultant to WHO course in Blood transfusion, WHO Middle East Region; June, 1993
- Jeddah, Saudi Arabia; Consultant and co-leader of WHO ME Region post-graduate course in Blood Transfusion, 2003
- Khartoum, Sudan; senior tutor, Blood Transfusion (sponsored by the NBS of England and N Wales) August, 2004
- Accredited External Consultant Advisor to WHO in Blood Transfusion 1990 to 2012

Relevant but non-specialty appointments to UK NGOs

- Co-founder, Edinburgh branch of MCANW, 1981 (Branch Chair, 1987-1989).
- Board Member, Oxford Research Group 1999 to 2008 – Company Secretary from 2004 to 2007

- Current Board member, Medact (UK affiliate of IPPNW); Medact Board Chair 2007 to 2012).
 - Co-founder of UK Medical Campaign Against Nuclear Weapons (Edinburgh, 1980):
 - Medact representative on ICAN UK since 2007; member of ICAN UK Management Group, 2012 to present
 - WMD Awareness Group UK Steering Group since 2010 – current Chair (since 2014)
- Lecturer, Hexham Debate 2012 “Is there a place for a new nuclear build in generating energy for civilian use?”
- Appointed Deputy Speaker, IPPNW International Council, from 2015.

Academic Publications and related responsibilities

- Over fifty letters and peer-reviewed clinical articles published in medical scientific journals up to 2014
- Member of the Editorial Boards of the peer-reviewed Journals *Transfusion* (since 2005); and *Medicine, Conflict and Survival* (since 2007)
- Selected articles in peer-reviewed Journals
 - Which bio-weapons might be used by terrorists against the United Kingdom? *Med Confl Surviv.* 2003;19(4):326-30(Sole author)
 - Biko to Guantanamo: 30 years of medical involvement in torture; (with Nicholl, DJ; Jenkins, T; Miles, SH; Hopkins, W; Siddiqui, A; Boulton, F; and other signatories) *Lancet* 2007;370(9590):823.
 - Prevention of torture by doctors and organisations. (with Augustin YS¹, Birch M, Bodini C, Boulton F, Robertson E, Spada VM, Weingarten M) *Lancet* 2011 Dec 17; 378 (9809) :e22-3. doi: 10.1016/S0140-6736(11)61300-7. Epub 2011 Sep 7
 - External financial aid to blood transfusion services in sub-Saharan Africa: a need for reflection. (with Ala F, Allain JP, Bates I, Boukef K, Boulton F, et al) *PLoS Med.* 2012;9(9):e1001309. doi: 10.1371/journal.pmed.1001309. Epub 2012 Sep 11.PMID:22984355
 - Dangers associated with civil nuclear power programmes: weaponization and nuclear waste.*Med Confl Surviv.* 2015 Jul 24:1-23 (sole author)
 - Geographies of health and development.*Med Confl Surviv.* 2015 Aug 17:1-3. [Epub ahead of print] (Book review – sole author)

Report

1. In my capacity as former Chair and Treasurer of Medact, a UK based charitable research group and also in my capacity as the Medact representative on the Management Group of ICAN (UK) – the UK component of the International Campaign for the Abolition of Nuclear Weapons – and also current Chair of the Weapons of Mass Destruction Steering Committee, I have served on many committees, attended many and several conferences, informed myself by discussion with other experts, and read volumes of materials, in the course of which I have gained knowledge and experience with respect to the cases against nuclear weapons policies and practices in general, and those of the UK Government in particular.
2. In this capacity, together with several other prominent experts in their field, on 4-5 March 2013 I attended an international Conference on the Humanitarian Impact of Nuclear Weapons, hosted by the Norwegian Foreign-Minister in Oslo. The aim of the conference was “to provide an arena for fact-based discussion of the humanitarian and developmental consequences associated with a nuclear weapon detonation. All interested states, as well as UN organisations, representatives of civil society and other relevant stakeholders [were] invited to take part.”
3. In preparation for this event ICAN gathered together a small collection of UK sourced expert source materials addressing themselves specifically to the humanitarian and developmental consequences of the use of nuclear weapons.
4. First, there was a digest report produced by my Swedish colleague on the International ICAN Steering Group, Beatrice Fihn, who is the manager of the Women’s International League for Peace and Freedom’s disarmament programme, but who published this Report through her

campaigning Group “Reaching Critical Will”, and which is entitled “*Unspeakable Suffering : the humanitarian impact of nuclear weapons*”, again available on line at the following link :

<http://uk.icanw.org/wp-content/uploads/2012/08/Unspeakable.pdf>

It comprises an excellent anthology on the broad topics raised by this issue from a collection of nearly a dozen scientists, sociologists and other experts who examined the subject in forensic detail, and in particular examines three separate “case studies” on both the historical and prospective uses of nuclear weapons. I attach a copy hereto in the Exhibit labelled “**F.B.1**”.

5. I have also studied in some depth, and presented at local meetings, the findings of the team led by Dr Alan Robock published in 2014 (*Earth’s Future*, 2, 161–176, doi:10.1002/2013EF000205.). This has been distilled by Dr Ira Helfand , current Co-President of IPPNW, into the report “Nuclear Famine – two billion people at risk” (IPPNW 2013) which summarises the effects on food supplies of the world-wide significant climate disruption caused by even a limited exchange of nuclear weapons which might follow a limited regional nuclear war between India and Pakistan.

See <http://www.ippnw.org/pdf/nuclear-famine-two-billion-at-risk-2013.pdf>

I attach a copy hereto in the Exhibit labelled “**F.B.2**”.

6. Finally, with my MedAct hat on, also in January of 2013, I too also produced a report entitled “*Blood Transfusion Services in the wake of the humanitarian and health crisis following multiple detonations of nuclear weapons*”, and it too is available for download at

the following link : <http://www.medact.org/wp-content/uploads/2014/01/report-bloodtransfusionnuclearweapons-jan2013.pdf>

7. In this Report I specifically set out to explore the possibilities and challenges which would face the organisations involved in transfusing blood or blood products as part of the clinical management of survivors of a hostile detonation of multiple nuclear weapons. I attach a copy hereto in the Exhibit labelled “**F.B.3**”.

List of any Materials referred to and exhibited hereto.

- (1) *“Unspeakable Suffering : the humanitarian impact of nuclear weapons”* edited by Beatrice Fihn (Reaching Critical Will), “**F.B.1**”
- (2) *Multidecadal global cooling and unprecedented ozone loss following a regional nuclear conflict* Mills, M. J., O. B. Toon, J. Lee-Taylor, and A. Robock (2014), , *Earth’s Future*, 2, 161–176, doi:10.1002/2013EF000205 “**F.B.2**”
- (3) *“Blood Transfusion Services in the wake of the humanitarian and health crisis following multiple detonations of nuclear weapons”*
Frank Boulton “**F.B.3**”

Details of any other Literature, Publications and other Material relied upon.

N/A

Statement of facts supplied.

N/A

Statement as to facts within knowledge

All other facts

Statement regarding any examination, measurement, test or experiment done and relied upon.

N/A

Summary of Conclusions

8. With this collection of well researched and empirically based scientific papers I honestly and sincerely believe that, whilst in no way comprehensively dealing with such a broad and multi-disciplinary topic, nonetheless that the reader will be given an accurate, albeit most frightening, insight into the true humanitarian devastation, economic and sociological disruption and even long-term and persistent climatic destruction, which would inevitably follow up on even the use of multiple nuclear weapon strikes on a single city, such as Moscow, and as is contemplated by the prosecution scenario painted by the facts in this case.

I have read and understand my duties to the Court as an expert witness (as set out at CPR r.33.2), and I have complied with and will continue to comply with those duties.

This Report consisting of **6** page(s) signed by me, is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence, I shall be liable to prosecution if I have wilfully stated in it anything which I know to be false or do not believe to be true.

Signature

Dated the

day of

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