

Military Aspects of Geology:  
Fortification, Excavation and Terrain Evaluation

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ROSE, E. P. F., EHLEN, J. & LAWRENCE, U. L. (eds) 2019. *Military Aspects of Geology: Fortification, Excavation and Terrain Evaluation*. Geological Society, London, Special Publications, **473**.

ROSE, E. P. F., EHLEN, J. & LAWRENCE, U. L. 2018. Military use of geologists and geology: a historical overview and introduction. In: ROSE, E. P. F., EHLEN, J. & LAWRENCE, U. L. (eds) 2019. *Military Aspects of Geology: Fortification, Excavation and Terrain Evaluation*. Geological Society, London, Special Publications, **473**, 1–29, <https://doi.org/10.1144/SP473.15>

GEOLOGICAL SOCIETY SPECIAL PUBLICATION NO. 473

**Military Aspects of Geology:  
Fortification, Excavation and Terrain Evaluation**

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2019

Published by  
The Geological Society  
London

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Published by The Geological Society from:

The Geological Society Publishing House, Unit 7, Brassmill Enterprise Centre, Brassmill Lane, Bath BA1 3JN, UK

The Lyell Collection: [www.lyellcollection.org](http://www.lyellcollection.org)

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### **British Library Cataloguing in Publication Data**

A catalogue record for this book is available from the British Library.

ISBN 978-1-78620-394-6

ISSN 0305-8719

### **Distributors**

For details of international agents and distributors see:

[www.geolsoc.org.uk/agentsdistributors](http://www.geolsoc.org.uk/agentsdistributors)

Typeset by Nova Techset Private Limited, Bengaluru & Chennai, India

Printed and bound by CPI Group (UK) Ltd, Croydon CR0 4YY

## Preface

The core chapters of this book were derived from 12 papers offered for presentation at a joint meeting of the History of Geology Group (HOGG) and the Engineering Group of the Geological Society (EGGS). Held at the Society's rooms in Burlington House, London, on 16 November 2016, this meeting featured 'Military Aspects of Engineering Geology, Past and Present'. It formed the sequel to a joint meeting of HOGG with the Society's Hydrogeological Group held on 18 November 2009 that generated a companion volume (Rose, E. P. F. & Mather, J. D. (eds) 2012. *Military Aspects of Hydrogeology*. Geological Society, London, Special Publications, 362).

The year 2016 was chosen to help mark the centenary of first deployment by the British Army of an engineering geologist to serve as such on a battlefield: Major (later Lieutenant-Colonel) T. W. Edgeworth David, who arrived in France with the Australian Mining 'Corps' in May 1916 to support the British Expeditionary Force on the Western Front. David was invited to give an account of his service during the 'Great War' of 1914–18 at a meeting of the Geological Society on 26 February 1919, after the close of hostilities – whilst he was detained in London for nearly two weeks by the delayed sailing of the troopship in which he was scheduled to return home to Australia. That account was not published, but David's handwritten notes were discovered in the Society's library archives many years later. They formed the basis of a re-enactment given at Burlington House on 10 July 2014 to help mark the centenary of the start of the war (for the UK, on 4 August 1914), and the core of a consequent explanatory article (Rose, E. P. F. 2015. 'Abstract from Geology at the Western Front' by T. W. Edgeworth David. *Earth Sciences History*, 34, 1–22).

Most of the papers presented at the 2016 meeting have been developed, and supplemented by additional papers, to generate the present book. They were published 'Online First' in 2018, to help mark the centenary of the official end of conflict between Germany and the Allies on 11 November 1918: the final armistice of the First World War. Hardback publication in 2019 marks the centenary of three of the following peace treaties; of David's lecture to the Society; and of the first

account by a British geologist of geological work in support of combat operations (King, W. B. R. 1919. Geological work on the Western Front. *Geographical Journal*, 54, 201–215). It was work for which 'Bill' King was awarded the Society's Wollaston Fund in 1920.

After a historical introduction to the military use of geologists and of geology, the following chapters have been grouped into theme sets that focus on the particular aspects indicated in the book title: fortification, excavation and terrain evaluation. In accordance with standard Geological Society practice, each chapter has been peer-reviewed by at least two referees, anonymous to the authors (initially and, where requested, continuously). The following friends and colleagues assisted in this way (some for more than one paper) and, having allowed their names to be included, are thanked for their help and support: P. H. Banham, David Branagan, Martin Brown, Trevor Davenport, Peter Doyle, T. E. Eastler, F. A. Galgano, J. S. Griffiths, Hermann Häusler, S. W. Henderson, Nigel Hoad, Mike King, P. R. La Pointe, U. L. Lawrence, J. D. Mather, R. T. J. Moody, V. D. Moore, John Peaty, J. D. Priddy, M. S. Rosenbaum, Paul Stewart, Kevin Styles, Geoff Walton, Nick Walton and R. C. Whisonant. We also thank P. L. Guth of the US Naval Academy, Annapolis, and an anonymous reviewer, for their helpful comments on our initial book proposal, and the Society's Book Editor for the volume, J. S. Griffiths, for reviewing our introductory chapter.

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