

## Contents

Preface	vi
ROSE, E. P. F., EHLEN, J. & LAWRENCE, U. L. Military use of geologists and geology: a historical overview and introduction	1
<b>Coastal fortification</b>	
BROMHEAD, E. N. The landslip-damaged Roman fort at Lympne in SE England	31
MATHER, J. D. Groundwater supplies to maritime and coastal defences in southern England: a story of risk and innovation	47
HENDERSON, S. W. American coastal defence Third System forts: how geomorphology and geology dictated placement and influenced history	61
HÄUSLER, H. The northern Atlantic Wall: German engineering geology work in Norway during World War II	83
<b>Excavation</b>	
DOYLE, P. Trench construction and engineering geology on the Western Front, 1914–18	109
WILLIG, D. German military geology and military mining on the Eastern Front in World War I	131
ROSE, E. P. F. Quarrying Companies Royal Engineers in World War I: a geologically constrained innovation to support British armies on the Western Front	151
ROSE, E. P. F. Quarrying Companies Royal Engineers in World War II: contributions to military infrastructure within the UK and to Allied forces during the North African, Italian and NW Europe campaigns	173
ROSE, E. P. F. Tunnelling Companies Royal Engineers in World War II: excavation of bomb-proof facilities in France, Gibraltar, Malta and the UK	201
MACKAY, A. D. Engineering geological considerations for the ‘Old’ Beacon Hill Railway Tunnel, Hong Kong Special Administrative Region	233
BULMER, M. H. Geological considerations of contemporary military tunnelling near Mosul, northern Iraq	241
<b>Terrain evaluation</b>	
HARRELSON, D. W., TORRES, N., TILLOTSON, A. & ZAKIKHANI, M. Geological influence of the Great Red River Raft on the Red River Campaign of the American Civil War	267
ROSE, E. P. F. Aerial photographic intelligence during World War II: contributions by some distinguished British geologists	275
MALM, F. One hundred years of cross-country mobility prediction in Germany	297
Index	307