

**DRAKE
SCULL**

Technical Report

5

**Building
Automation
Systems**

DRAKE & SCULL BROCHURES

1976-80

TECHNICAL REPORTS

*These reports were written by Brian Roberts, Chairman of the CIBSE Heritage Group
in the mid-late 1970s when Company Chief Engineer of Drake & Scull.*



Technical Report

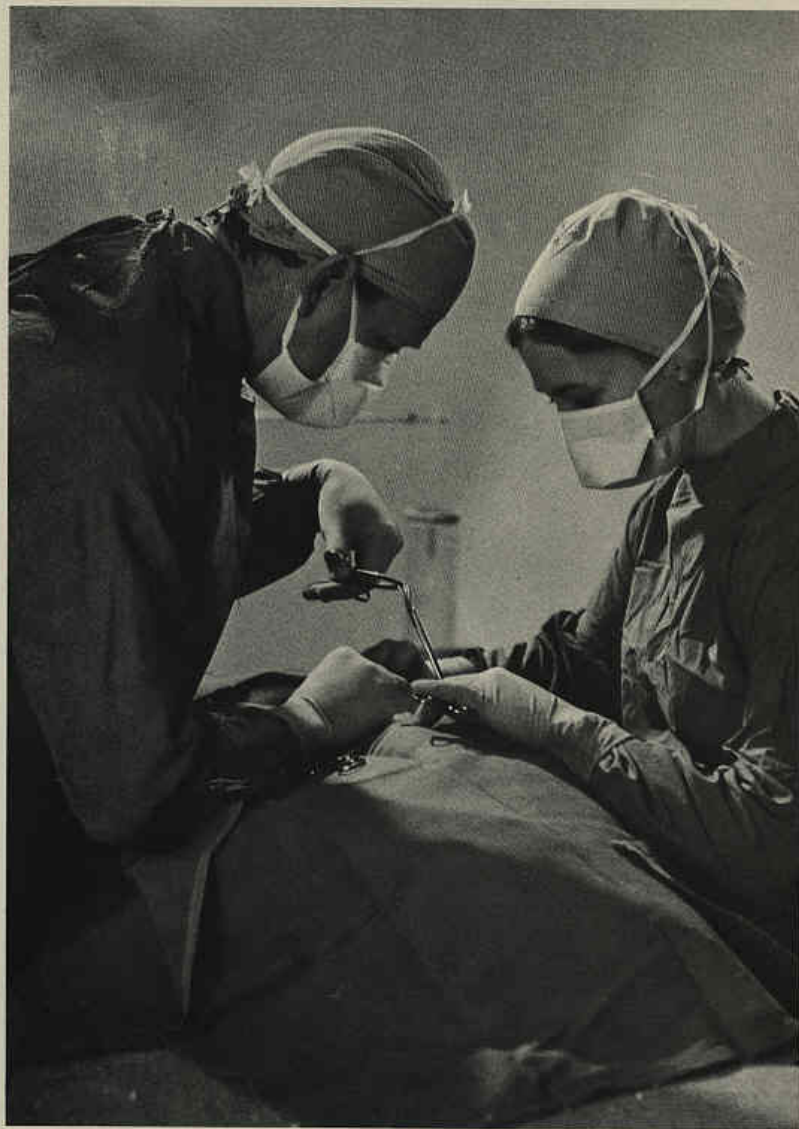


**Commissioning
of Hospital
Services**

Commissioning of Hospital Services

*by Brian M. Roberts, FCIBS, MASHRAE AMIP.,
Chief Engineer, Drake and Scull Engineering Limited.*

*An updated version of the article previously published
in Electrical Review, August 1975.*





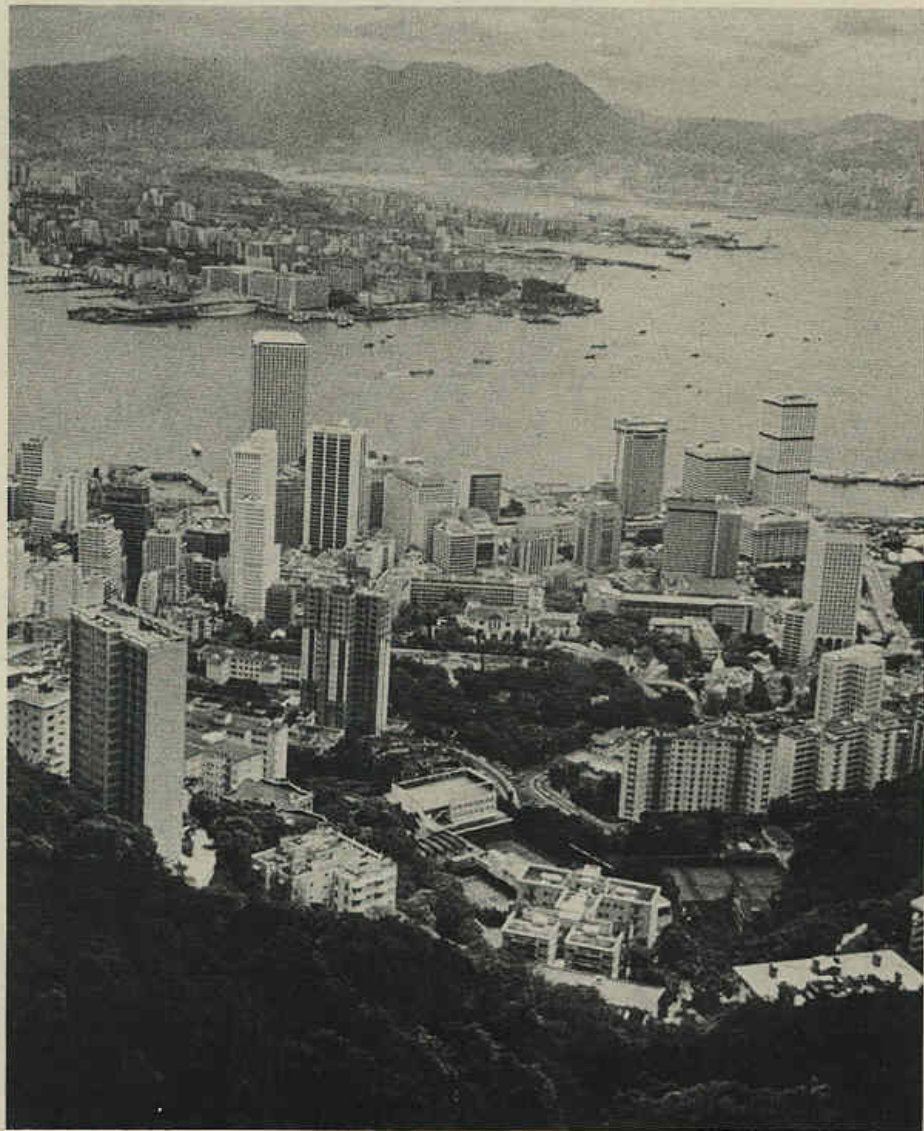
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**Tropical Air
Conditioning**

Tropical Air Conditioning

*by Brian M. Roberts, FCIBS, MASHRAE AMIP.,
Chief Engineer, Drake & Scull Engineering Limited.*



Hong Kong.



Technical Report



**Design and Cost
Effective Operation
of Engineering
Services**

Design and Cost Effective Operation of Engineering Services

*by Brian M. Roberts, FCIBS, MASHRAE AMIP.,
Chief Engineer, Drake & Scull Engineering Limited.*





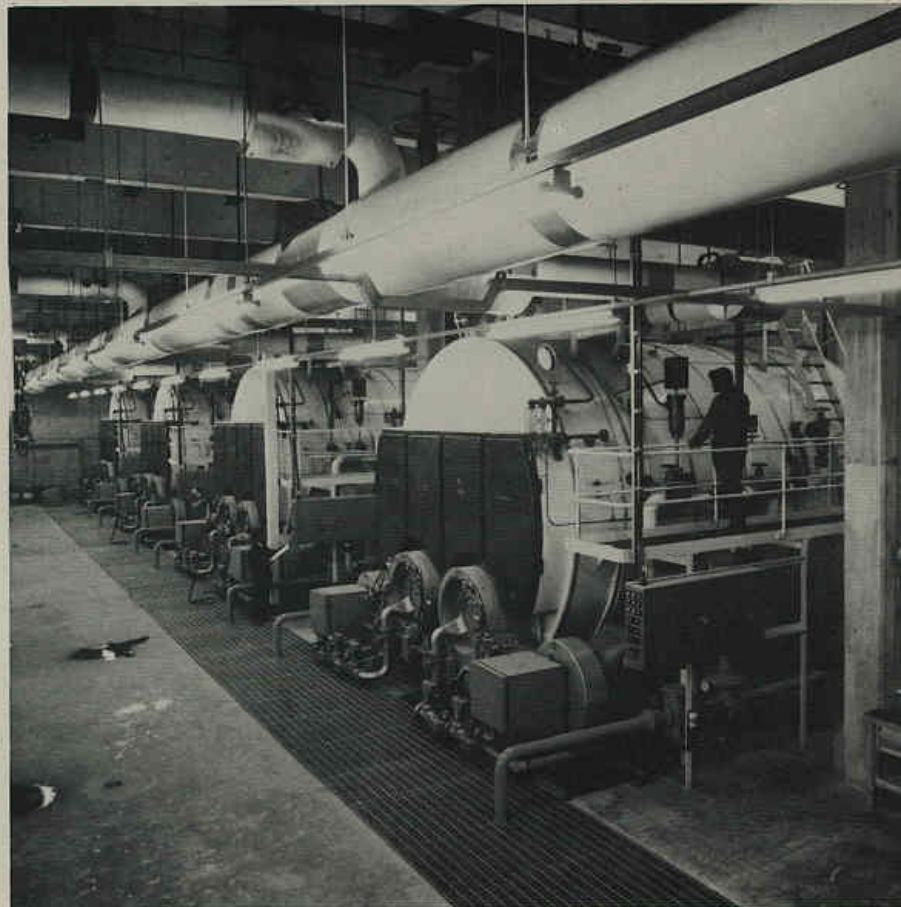
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4

**Performance Testing
of Environmental
Engineering
Systems**

Performance Testing of Environmental Engineering Systems *

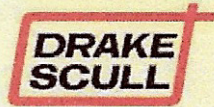
*by Brian M. Roberts, FCIBS, MASHRAE AMIP.,
Chief Engineer, Drake & Scull Engineering Limited.*



Synopsis

This paper looks at the problems of establishing realistic performance tolerances in the specifying and designing of environmental systems, in the selection of equipment, in the regulation of the completed installation during commissioning, and in verification of performance by testing.

*An abridged version of the paper presented at TESCOM 77 (CIBS Testing & Commissioning Symposium, November 1977).

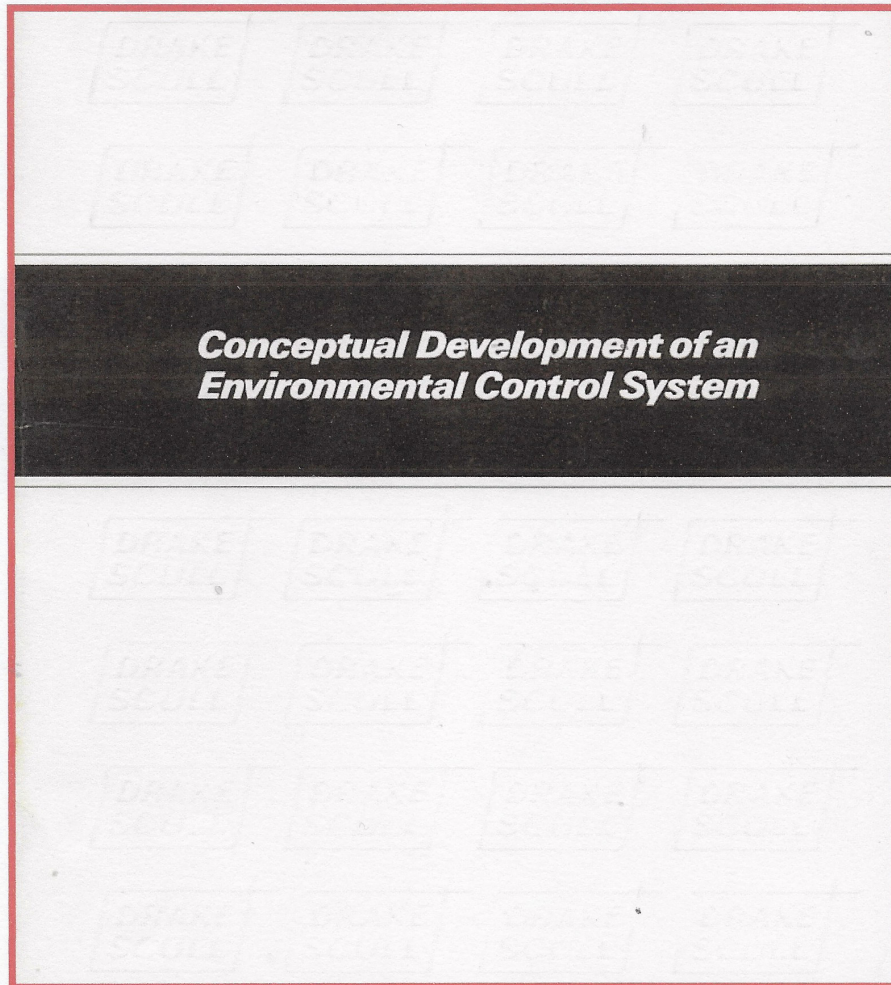


Technical Report



**Building
Automation
Systems**

HONG KONG MASS TRANSIT RAILWAY



In 1976, former Heritage Group Chairman (then Company Chief Engineer for Drake & Scull) headed a design team which produced a study on air conditioning requirements for the Hong Kong MIS (Modified Initial System) the first phase of the Mass Transit Railway.

Working in New York and Hong Kong with PBQD (Parsons, Brinckerhoff, Quade & Douglas) the team used the American SES (Subway Environmental System) Computer Program to simulate train operation, passenger movements, heat loads and tunnel and station airflow patterns. The study also examined train air conditioning systems, tunnel ventilation and smoke control ventilation systems, as well as safety, emergency and control considerations