

Defence Evaluation and Research Agency

DERA

DISCIPLINES
Most science, engineering and numerate degrees.

WHAT WE CAN OFFER YOU
As the single largest employer of scientists in the UK, DERA provides an exciting and challenging environment in which to work. From day one, you will be entrusted with considerable responsibility and encouraged to use your initiative. Career progression is closely monitored, with outstanding prospects for development. Employees of DERA are members of the Defence Engineering and Science Group (DESG) community. DESG provides an environment which facilitates the exchange of ideas, gives wider career opportunities and promotes a sense of corporate identity. For more information on other DESG opportunities, please telephone 01225 449106.

TRAINING
We provide high-quality, individually tailored training programmes. Our aim being to expand each individual's talents by identifying training needs, developing new skills - including commercial acumen - and ensuring that performance is rewarded. In addition to advice and guidance from your manager, we offer traditional training methods, on-the-job instruction and a variety of flexible learning methods to help fulfil your potential. Study towards further academic and professional qualifications is strongly encouraged.

EQUAL OPPORTUNITIES
DERA is an equal opportunities employer.

The Defence Evaluation and Research Agency provides world-class scientific advice, innovative engineering solutions and a broad range of technical services to both the defence and civilian sectors. It is an umbrella trading fund coordinating four operating divisions: DRA - the Defence Research Agency; DTEO - the Defence Test and Evaluation Organisation; CBDE - the Chemical and Biological Defence Establishment; and the CDA - the Centre for Defence Analysis.

APPLICATIONS PROCEDURE Applications are matched to available positions according to discipline and preferred areas of work. We have a mixture of fixed-term and permanent appointments at our many locations throughout the UK. Shortlisted candidates will be invited for interview, where you will normally meet a section leader from a specialist area relevant to your qualifications and interests.

Locations throughout the UK



HOW TO APPLY

Telephone the hotline for a brochure and application form on 0645 346800 (24-hour answer phone, charged at local rate) or write to:
The Graduate Recruitment Office
DRA Portsmouth
Portsmouth
Hampshire PO6 4AA

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KARL PHILLIPS PhD Geotechnical Engineering



“My work within DRA has given me a proven record of project management.”

CAREER HISTORY
Dr Karl Phillips graduated from Cardiff University with a BSc in Mining and a PhD in Geotechnical Engineering in 1991. Now a Project Officer within DRA's Land Systems Division, he is finding both military and commercial applications for his skills.

“I have found my work with DRA highly rewarding to date - not least because it has presented a stimulating blend of responsibility, diversity and direct liaison with customers. Within one very full year I have been involved in a wide variety of assignments, including project managing an extramural contract worth £150,000. These assignments have included work which will help mobility planning for UN peace-keeping tasks into the next century. There is also a large component of civilian-targeted work, because our organisation is increasingly participating within the commercial sector.

MOBILITY STUDIES

My academic background is in Mining and Geotechnical Engineering - subjects in which I gained a BSc and a PhD respectively from Cardiff University. After having worked for a couple of companies mainly concerned with driving, I joined DRA at Chertsey. Now, I am a Project Officer within the Land Systems Division providing assistance to the Royal Engineers.

In our organisation, engineering provides the means to overcome obstacles and achieve objectives, whether it's used for military or civilian purposes. For example, our participation in global peace-keeping initiatives places ever-increasing demands on equipment and vehicles. They need to be robust enough to deal with a diverse range of harsh terrains, as well as being light enough to be transported easily.

DRA undertakes a great deal of research into developing equipment and vehicles which can perform specified tasks, no matter what the environment or the elements might throw at them - research which often finds a place in civilian life. However, it can also work the

other way. The first project I managed involved testing a commercial product for its military potential.

I am currently developing a computer package which will allow non-specialists to predict the behaviour of a trackway or geotextile surface when vehicles are traversing it. It's a fascinating challenge, which calls on both my numerical modelling and my soil mechanics experience from university.

NEW MATERIALS

Within the DRA, we have one of the largest materials research groups in Europe. Our expertise in this field has involved both the development of new materials and the identification of more cost-effective production methods for existing ones. As well as new fibres and polymers, we have been producing high-strength particulate reinforced aluminium matrix composites which we now sell under licence.

Stronger, lighter materials have an obvious benefit in structural engineering. One of their applications within the Land Systems Division has been in the design, manufacture and testing of bridging structures.

High-strength aluminium alloys and advanced fibre reinforced plastics have played a major part in this work, and DRA bridge research has been connected with some of the largest carbon fibre structures in the world.

My personal involvement in this field has been to carry out bridge corrosion analysis and develop finite element carbon fibre bridge models. These projects gave an ideal overview of some of the work within the Land Systems Division and ran concurrently with my training programme.

MARKETABLE

In addition to on-the-job instruction - such as the computer training I was given to support my numerical and soil mechanics work - I have gained useful commercial skills. After all, we have highly marketable expertise... we have to make sure we make the most of it!

Now, I have a proven record of project management plus the experience of dealing with customers in both the defence and civilian sectors.