

MAINSTREAM RESEARCH NEWS



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□ HSE LAUNCHES WEB BASED RESEARCH PROJECTS DIRECTORY

HSE Research Projects Directory is an on-line information resource for HSE's Mainstream Research Programme (including offshore projects). The key objective for the Programme is to implement integrated portfolios of projects that address both specific and generic occupational health and safety issues across the entire spectrum of HSC/E responsibilities as a regulatory body. Results from research projects are used in the development of HSE policy, regulations, codes of practice, standards setting, evaluation of risk control measures, negotiation of international directives, and for ad hoc advice on health and safety issues. The new Directory supersedes the HSE strategic research projects handbook (previously published on the web as a pdf file) and the offshore projects handbook (previously accessed through the Offshore Research Focus website). The Directory can be accessed at www.hseresearchprojects.com and provides details on the background, objectives, associated publications and contact point for over 1100 projects commissioned since 2000. Projects can be searched for using multiple selection criteria, including a free-text search facility. Search reports generated by the directory can be e-mailed to colleagues using the directory mail facility. The directory also has a 'discussion' area for users to submit comments on particular research projects.

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□ WHAT'S NEW?

□ DEVELOPMENT OF THEORETICAL MODEL FOR SIMULATING FORK LIFT TRUCK (FLT) OVERTURN

(Contractor: Frazer-Nash Consultancy Ltd)
Workplace transport is responsible for around 100 fatalities and 2500 major injuries a year. With FLT's, overturns are the most common cause of fatal injury. There is substantial European-wide research being conducted into the overturn of Lift Trucks (LTs), with the current lead on theoretical modeling residing in the UK. Frazer-Nash has already undertaken research for HSE to develop a model to simulate LT overturn. This new work will develop the existing theoretical model for a single type of LT (a fixed geometry vehicle), to take account of the rate of change of steering angle, including the straightening out effect created by Ackerman-type steering, as fitted to many types of truck. If this element of the work is successful, a further stage will then seek to extend the model to cover variable geometry vehicles, so that all types of truck can be evaluated. The model will then be compared with practical test work undertaken at Hamburg University. The model will be used in conjunction with French research to assist with designs to prevent overturning of LTs in use.

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□ OCCUPATIONAL EXPOSURE TO CHEMICALS THROUGH INADVERTENT INGESTION

(Contractor: University of Aberdeen)
To date, exposure assessment for chemicals has mainly concentrated on inhalation and dermal absorption as the most significant routes for exposure. However, for many involatile compounds or materials, inadvertent ingestion must also be considered to be a key contributor to systemic dose. This is of particular importance for pesticides and biocides, where statutory schemes exist to ensure that products are safe when they are made available to the market. Therefore, it is important that a better understanding of the potential for this route's contribution to chemical exposure is developed.

This project will: identify the important workplace and behavioural factors that lead to inadvertent ingestion; characterise the distribution of likely exposure arising through the ingestion route; and will develop, test and refine a conceptual model for use in quantitative risk assessment.

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□ AN ANALYSIS OF THE SIGNIFICANT CAUSES OF FATAL AND MAJOR INJURIES IN CONSTRUCTION IN SCOTLAND

(Contractors: BOMEL Ltd, Glasgow Caledonian University and University of Warwick)

In recent years, the construction industry in Scotland has had a higher fatal and major injury rate to employees than construction employees in the rest of Great Britain. However, this trend is not evident in the all-industry accident rates for Scotland.

Previous research undertaken for HSE by the University of Warwick has shown that differing rates of non-fatal injury between regions in Great Britain can be almost fully explained by the industries, occupations or other characteristics of the working populations. But, this does not explain differences in rates within particular sectors and does not examine differences for small and medium sized enterprises (SMEs).

The aim of this work will be to identify the most significant causes of higher fatal and major injury rates in construction in Scotland, including any specific to SMEs, in order to identify those factors which can be positively influenced by HSE and/or the construction industry.

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□ LAY CONCEPTUALISATIONS OF OCCUPATIONAL DISEASE

(Contractor: University of Nottingham)

The idea for research on this particular topic came about following discussions to consider research needs in the area of cross cutting issues that span work-related ill health. Very little information is currently available on mental schema in relation to particular diseases and how these might drive behaviour. This project was identified to help address this gap in our knowledge.

The work will identify: the types of diseases that lay and expert samples see as occupationally determined (causes, cure, timescale, consequences); the sources of information about occupational disease that are seen as trustworthy; points of congruence and disparity between experts' and novices' models of occupational diseases that can be used to develop educational and training interventions; and identify lay perceptions of the responsibility for occupational disease, which may help explain health protective behaviour as well as litigious behaviour.

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□ WHAT'S NEW?

□ CUSTOMER FOCUS SURVEY: OBSTACLES PREVENTING EMPLOYEES FROM GETTING INVOLVED IN HEALTH AND SAFETY

(Contractor: ECOTEC Research and Consulting Ltd)

In 1999, HSC was asked by the Minister to develop a range of measures to promote employee involvement, including: the harmonization of regulations dealing with safety representatives and committees; a pilot to test the effectiveness of worker safety advisers; and further research to explore the links between employee involvement and business benefits. Employee involvement has traditionally been channeled through trade union forms of representation. Increased employee involvement will depend on the confidence felt by employees to come forward and get involved in health and safety working in organisations that do not recognise trade unions. Employee involvement is a priority for HSE and HSE also aims to be more customer focused. Hence, this topic presents an ideal opportunity, to base strategies for promoting employee involvement on the needs of employees. From this research project, HSE needs to establish what obstacles employees face and what employees need from HSE (and other stakeholders that HSE could work with) to encourage, inspire and give them confidence to get involved as safety representatives.

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□ HYDROCARBON CONTAINMENT – GUIDELINES FOR USE OF ELASTOMERS IN OFFSHORE OIL AND GAS DUTIES

(Contractor: Materials Engineering Research Lab Ltd)

In the harsh environments associated with gas/oil extraction, the correct selection, use and operation of all polymers is critical if acceptable service lives are to be achieved from the various components involved. This particularly applies to elastomers used for seals of all shapes and sizes and manufactured from a variety of elastomer types. It is essential that components used offshore exhibit a long and uneventful service life, so that gas/oil production can proceed efficiently. At the very least, personnel associated with offshore installation design need to know the basic attributes and weaknesses of every type of elastomer utilised in the oil/gas production industry. Oil companies are continually putting the onus of specifying seal type on the valve, seal or elastomer producer/supplier. This does not always represent best practice and there have been occasions where the wrong seal type has been specified. The work to be undertaken on this project aims to develop guidelines for the appropriate use of elastomers on offshore installations. Existing data produced and held by the contractor will be utilised for this. It is intended that the guidelines will help to reduce risks to 'as low as reasonably practicable'.

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□ MEASUREMENTS OF ACOUSTIC SPECTRA FROM LIQUID RELEASES

(Contractor: Health and Safety Laboratory)

Since the Piper Alpha incident in 1998, fixed gas detection systems have proliferated across the North Sea. However, evidence exists to suggest that their contribution to control and mitigation against major hazards is not proportionate to their size or complexity. This assertion is supported by data for hydrocarbon leaks and detection methods in the UK offshore industry over the 9 years from 1992 to 2000 (OTO 200/112, available on HSE's website). Traditional fixed gas detection systems detect only 65% of flammable gas releases, with personnel primarily detecting the remaining 35%. Liquid hydrocarbons are much more difficult than gas to detect remotely. Out of a total of 793 liquid releases, personnel detected 499 via smell, sight, sound or the use of hand held meters. The major implication of this fact is that offshore personnel are entering areas where hydrocarbon releases exit and that detection relies on personnel going into potentially hazardous areas.

Acoustic leak detection (ALD) is being used increasingly in the offshore industry as a means of detecting leaks of flammable substances on offshore platforms. Rather than relying solely on human intervention, or the uncertain and inefficient dispersion of gas to the detectors, ALD detects a leak through the ultrasonic sound produced by the gas jet. These sensors are usually designed to detect leaks of gaseous products and have been shown to perform well under the conditions experienced on offshore platforms.

The purpose of this research project is to characterise the response of ALD devices when exposed to liquid releases from pressurised systems. The work will provide data, which can be used to produce advice to the industry on how best to install and use ALD devices.

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□ WHAT'S NEW?

□ ACOUSTIC MONITORING OF THE HULLS OF FLOATING PRODUCTION, STORAGE AND OFFLOADING FACILITIES (FPSOs) FOR CORROSION AND DAMAGE

(Contractor: Mecon Ltd)

FPSOs can spend long periods of time stationed offshore. There is an ongoing joint industry project to look at monitoring the stress history of FPSO hulls, but there is no established technique for monitoring or measuring the current strength of an FPSO hull.

This project proposes to carry out a broad investigation, based around a literature review, to identify previous uses of acoustic techniques for gaining information on structures. HSE has itself sponsored a series of earlier projects, which have looked at the use of acoustic techniques for monitoring the structural health of fixed offshore structures. The work on this project then aims to assess the applicability of different techniques to the problem of FPSO monitoring through theoretical and practical considerations. This will help establish those techniques that are suitable for the task of FPSO hull monitoring, as well as establishing their advantages and disadvantages and their relevant ranking. Techniques will be sought to detect and report both advances of corrosion in hull plates and beams, and acute damage, due to a collision or structural failure.

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□ REVIEW OF THE OCCUPATIONAL HYGIENE IMPLICATIONS OF THE MANUFACTURE AND USE OF NANOPARTICLES

(Contractor: Institute for Occupational Medicine)

Nanoparticles are increasingly being used by industry in bulk sprays, powders and coatings, or for use in sunscreens, cosmetics, scratch-resistant lenses, stain-resistant fabrics, etc. As their name suggests, these particles have a very small size (less than 100nm). Ordinary materials such as carbon, when reduced to the nanoscale, can exhibit novel properties, such as extraordinary strength, electrical conductivity, chemical reactivity or other properties, which are not present when the substance exists in a micro or macro form. Because of their small size and/or changed properties, nanoparticles have the potential to cause adverse health effects.

The purpose of this project is to undertake a review to help scope the extent and nature of the risks posed by nanoparticles. This will inform health and safety policy development. The review will explore: the current use and release of nanoparticles by industry; existing measures used to control exposure and identification of best practice; and the current levels of exposure that are encountered. The review will also identify existing knowledge gaps and how these may be best filled.

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□ FURTHER DEVELOPMENT OF A SLIPS ASSESSMENT TOOL (SAT) FOR USE BY HSE/LA INSPECTORS AND OUTSIDE ORGANISATIONS

(Contractor: Health and Safety Laboratory)

A slips assessment tool (formerly known as the pedestrian slipping expert system) was developed by HSE/HSL, primarily for use by HSE inspectors in the food processing industry. However, the tool was considered to have potential application to a range of other industrial sectors. A number of field trials were carried out by HSE and LA inspectors across a range of work environments and various recommendations for improvements to the SAT were highlighted. This project will review these improvements in order to develop an enhanced version of the tool to be made available to HSE and LA inspectors (to help inform their inspection or enforcement decisions) and the wider health and safety community.

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□ PSYCHOLOGICAL AND SOCIAL PROCESSES COMPROMISING HEALTH AND SAFETY IN SMALL TO MEDIUM SIZED ENTERPRISES

(Contractor: Heriot-Watt University)

This research project is part of HSE's continued attempts to help SMEs deal with work-related health and safety problems. The work intends to target SMEs who have a genuine intention to comply with legislation and promote health and safety, but fall short of known good practice. The project is organised into two phases. Phase 1 entails a review of the literature and a telephone-based survey, that will be representative of the key industrial sectors. Phase 2 comprises a more substantial survey, building on earlier findings to provide a more robust and in-depth consideration of the problems faced by SMEs in compliance with HSE regulation and the user solutions that have been developed.

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□ EXAMPLES OF RECENTLY COMPLETED PROJECTS

□ RECIDIVIST RISK TAKERS WHO WORK AT HEIGHT

(Contractor: Research Institute for Consumer Ergonomics)

Around 70 people a year are killed as a result of a fall from height at work and a further 4000 are seriously injured. Whilst the risk is repeatedly recognised, the reduction of accidents is hampered by individuals who acknowledge that they know and comprehend best practice, but fail to apply it in real life. It is highly likely that the majority of accidents could be avoided if individuals followed the safety procedures laid down for their protection. This project has looked at the reasons why individuals take risks when working at height. Its objectives were to evaluate the attitudes of individuals, in particular, whether there is any difference between people who have been involved in a fall from height at work and those who have not. A further distinction was made between people who have had a single fall from height and those who have had multiple falls. As accident involvement has been shown to be an indication of risk taking behaviour, then those who have had multiple falls are considered to be recidivist risk takers who work at height. This project also aimed to consider changes in risk-taking behaviour and safety awareness, along with the motivations that determine whether an individual a) knows safe practices and b) implements them. A series of in-depth interviews with 114 people who worked at height (69 involved in an accident and 45 that had not) was carried out. From the interviews, further analysis of the data enabled a number of intervention strategies to be drawn up. Following their consideration, a single intervention was identified and reactions to it were tested further. The intervention proposed to screen people who work at height to assess their attitude to risk taking. Those identified as risk takers could then be supported with specific safety interventions to minimise their risk of falling, such as: the provision of greater supervision; specific training; or in extreme circumstances, preventing them from working at height. Attitudes to these suggested safety interventions were explored through a series of discussions. These were conducted using the Nominal Group Technique (NGT), a qualitative methodology for obtaining priority ranking on a list of ideas generated by group participants. Five NGT groups, comprising individuals (workers and supervisors) who had worked at heights in a variety of settings, were carried out. The groups generated suggestions that were ranked and analysed for emerging themes. A number of recommendations were suggested as key priorities that need to be addressed when implementing a safety intervention of this type. The full report from this work will be published shortly in HSE's Research Report series.

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□ THE CHALLENGE OF MANAGING UPPER LIMB DISORDERS (ULDs) – HOW CAN HEALTH PROFESSIONALS BECOME MORE EFFECTIVE?

(Contractor: System Concepts Ltd)

This research was commissioned to identify how physiotherapists and occupational health nurses can become more effective in the diagnosis, treatment and overall management of people with ULDs. The objectives of the study were to: identify current basic and post-graduate training provision to occupational health nurses and physiotherapists relating to the management of ULDs; identify the range of management approaches used for ULDs and the evidence that these are based on; investigate practitioners' use of tools and management approaches; establish how confident practitioners are in managing these conditions; identify any discrepancy between current practice and supposed best practice; and identify training needs and barriers to training uptake. The work carried out on this project comprised of three main parts: a review of available literature to establish evidence for best practice; a series of telephone interviews with college representatives; and a questionnaire survey to establish current practice and the views of occupational health nurses and physiotherapists.

In trying to establish best practice from the available literature, it became evident that there was insufficient quality research (such as randomised controlled trials and systematic reviews) that had considered or studied the effectiveness of treatments and management approaches to allow best practice to be determined. Generally, health professionals were aware of the psychosocial issues and favoured keeping the ULD sufferer active and in employment rather than taking sick leave. There was a limited amount of evidence to suggest that this overall approach was favourable. From the literature review, results of the questionnaire and interviews with training providers, a number of recommendations have been produced to assist with the management of ULDs. These include the provision of a variety of training and resources and increasing communication between professionals involved in the rehabilitation of ULDs.

The report from this work has been published in HSE's Research Report series as RR215

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□ EXAMPLES OF RECENTLY COMPLETED PROJECTS

□ MEASURING COMPLIANCE OF THE EMPLOYERS' LIABILITY (COMPULSORY INSURANCE) (ELCI) ACT 1969

(Contractor: Greenstreet Berman Ltd)

Following significant increases in the cost of ELCI premiums during spring 2002, a number of studies were completed indicating that some businesses (8% cited by the Federation of Small Businesses) were trading without ELCI, either because they could not afford it or because they were unable to get cover. However, other sources failed to identify evidence of significant non-compliance. For instance, DWP quoted the broker Aon as reporting that they could secure ELCI for all of their clients. To gain further evidence of the level of compliance with ELCI, this project was undertaken. The work had two main phases: an anonymous and confidential postal questionnaire of a large semi-structured sample of organisations; and a check on numbers of ELCI policies that insurers had in early 2002 and 2003. A survey of 18,000 micro, small, medium and large firms across all sectors and regions of Great Britain was undertaken. Analysis of the 2437 respondents found the following level of self-reported non-compliance: 0.92% of micro firms (1 to 10 employees); 0.37% of small firms (11 to 49 employees); 0% of medium firms (50 to 249 employees); and 0.6% of large firms (250+ employees). From these figures, this equates to 112,559 employees employed in firms without ELCI, equivalent to 0.53% of the total workforce, or 10,000 organisations out of 1.2 million enterprises with employees in the UK, lacking ELCI. For the second part of the study, ELCI insurers were asked to report on numbers of ELCI in force in early 2003 compared with early 2002. Over this period the number of companies in Great Britain had not fallen and the number of ELCI policies should have remained the same. However, data from insurers (representing 80% of the ELCI market) showed a 16% increase in the number of policies in force. This project has concluded that, although the costs of ELCI and difficulties in obtaining cover have become issues, there is no consistent evidence of a compliance problem. Indeed, organisations have responded to ELCI cost pressures by trying to improve health and safety, whilst also (to a lesser extent) reducing operating costs, contesting claims and switching insurers. However, a number of respondents stated that the cost of ELCI had made them think very carefully about recruiting individuals who were prone to injury or ill health. This is of concern given the terms of the Disability Discrimination Act and employment law on discrimination. The report from this work has been published in HSE's Research Report Series as RR 188.

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□ EVALUATING THE EFFECTIVENESS OF LADDER STABILITY DEVICES

(Contractor: Loughborough University)

In order to provide a factual basis on which to make recommendations regarding safe practice for users, this project has involved an extensive investigation into the issue of performance of leaning ladder stability devices and manual ladder footings. Initial work on the project involved a number of elements, including: a literature review to examine the current state of knowledge; an examination of the relevant standards and legislation; and a market survey to determine the range and nature of ladder stability devices that are available to the UK market. To identify the demands placed on ladders and hence the stability demands which need to be met by auxiliary devices, a range of user trials were conducted. Seven tasks were performed by 52 individuals and each task was replicated for consistency. An additional trial was included to identify what each participant understood by 'footing'. A total of 780 trials were carried out. This data set was used to produce a number of parametrics, to represent the most onerous conditions of reasonable ladder use. These were then used as a basis for developing predictive modelling tools to allow appraisal of the stability performance of any conventional ladder stability device. A simple workshop test was then devised to allow the rapid appraisal of real products. Ladder slip resistance was appraised. Current ladder feet were found to offer adequate slip resistance and further enhancement was found to be unnecessary. Regular maintenance was essential to ensure that the capacity of the feet to offer sufficient grip is retained. Ladder devices, intended to correct for ground slope, and the performance of ladders in this environment, were considered. Ladders were found to work safely on lateral slopes of up to 22°, although 16° was considered a safe limit. The values for back slopes were 12° and 6°, respectively. Additional devices were unnecessary and did not enable safe use at greater angles. Ladder footing was modeled and the effectiveness of different techniques appraised. Applying evenly distributed weight downwards on the ladder using weights or an individual standing on a rung was the most effective method.

The report from this work has been published in HSE's Research Report Series as RR 205

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□ PROJECT LISTING

NEWLY COMMISSIONED PROJECTS: JANUARY – MARCH 2004		
Project No	Project Title	Project Officer
Block 1 - Priority Programmes		
R33.123	An analysis of the significant causes of fatal and major injuries in construction in Scotland	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R36.197	Development of a theoretical model for stimulating FLT overturn. Rate of steering response – Fixed geometry vehicle	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
S53.206	Falls from height – Additional support work for ladder safety	Ms D Brown. Tel: 0207 717 6037 dorothy.brown@hse.gsi.gov.uk
R55.110	Musculoskeletal disorders (MSD) ergonomics resource pack for the pharmaceutical industry	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk
R64.118	Evaluation of slips roadshow training seminars – Railway personnel	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R72.092	Evaluation of HSE's internet based self assessment tool for farmers	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R72.093	The global perspective in addressing construction risks tool-kit	Mr P Wallis. Tel: 0207 717 6243 paul.wallis@hse.gsi.gov.uk
R72.094	Further development and issue of a software-based slips assessment tool (SAT) for use by HSE/LA inspectors and outside organisations	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
Block 2 - Work in the Major Hazards Industries		
R04.094	Measurements of acoustic spectra from liquid releases	Mr A Jackson. Tel: 0114 291 2453 alan.jackson@hse.gsi.gov.uk
R04.095	UKOOA fire and explosion guidance project - Part 2	Mr D Shuter. Tel: 0114 291 2375 danny.shuter@hse.gsi.gov.uk
R04.096	Ignition probability model	Mr S Connolly. Tel: 0151 951 3144 stephen.connolly@hse.gsi.gov.uk
R31.092	Design and integrity monitoring of mobile installation moorings	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R31.093	Hydrocarbon containment – Guidelines for use of elastomers in offshore oil and gas duties	Mr D Shuter. Tel: 0114 291 2375 danny.shuter@hse.gsi.gov.uk
R31.094	Hydrocarbon containment: Duplex steel integrity	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R33.120	The effect of multiple member failure on the risk of gross collapse over typical inspection intervals	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R33.121	Fatigue damage to offshore structure girth welds from low stresses in the loading spectrum	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R33.124	Guidelines for jack-up rigs	Mr C Ransome. Tel: 0151 951 3866 charles.ransome@hse.gsi.gov.uk
R34.008	Coordinated approach for metocean activities in offshore UK sector	Mr M Birkinshaw. Tel: 0207717 6775 malcolm.birkinshaw@hse.gsi.gov.uk
R39.003	Acoustic monitoring of the hulls of floating production, storage and offloading facilities (FPSOs) for corrosion and damage	Mr A Jackson. Tel: 0114 291 2453 alan.jackson@hse.gsi.gov.uk
R64.113	Impact evaluation of current legislative requirements for the verification of elements critical to the safety of offshore installations	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
R64.117	Containment of GM viruses being developed as potential human vaccines	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
R67.168	Energy Institute staffing level assessment tool – open access web site	Mr A Jackson. Tel: 0114 291 2453 alan.jackson@hse.gsi.gov.uk
R73.028	Operational risk analysis – Total analysis of physical and non-physical barriers	Mr A Jackson. Tel: 0114 291 2453 alan.jackson@hse.gsi.gov.uk
Block 3 - Compliance		
R32.105	Practical guide to the management of ageing pressure systems and related plant	Mr G Wilson. Tel: 0151 951 4674 geoff.wilson@hse.gsi.gov.uk
R43.089	Development of a ventilator test procedure to take account of wind conditions	Mr R Schofield. Tel: 0151 951 4587 roger.schofield@hse.gsi.gov.uk
R51.254	Development of a modeling tool for pesticide spray drift	Mr R Schofield. Tel: 0151 951 4587 roger.schofield@hse.gsi.gov.uk
R51.255	Isocyanate exposure, emission and control in motor vehicle repair premises using spray spaces	Mr R Schofield. Tel: 0151 951 4587 roger.schofield@hse.gsi.gov.uk

□ PROJECT LISTING

NEWLY COMMISSIONED PROJECTS: JANUARY – MARCH 2004		
Project No	Project Title	Project Officer
Block 3 – Compliance (Cont.)		
R56.108	Further investigation of possible musculoskeletal, cognitive deficit and hearing deficit due to welding in divers – identified in the ELTHI Diving Study	Mr R Moss. Tel: 0151 951 3302 richard.moss@hse.gsi.gov.uk
R59.050	Information provided to accompany patients undergoing nuclear medicine procedures	Ms C Elliott-Minty. Tel: 01519514217 celia.elliott-minty@hse.gsi.gov.uk
Block 4 - Mandatory Activities		
R47.024	The development and testing of a system to measure the apparent source size of light emitting diodes	Mr P Wallis. Tel: 0207 717 6243 paul.wallis@hse.gsi.gov.uk
R51.247	Occupational exposure through inadvertent ingestion	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R51.252	Parental exposure to solvents and the risk of childhood cancer	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R51.256	Review of the occupational hygiene implications of the manufacture and use of nanoparticles	Mr A Tsavalos. Tel: 0151 951 5864 alexander.tsavalos@hse.gsi.gov.uk
R59.048	Review of the level of accuracy required and means of demonstrating that accuracy for approval of dosimetry services by HSE	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk
R59.051	Adequacy of dosimetry methods and suitability of dosimeters for varying ionising radiations and fields	Mr P Wallis. Tel: 0207 717 6243 paul.wallis@hse.gsi.gov.uk
R63.069	Promoting health and safety as a key goal of the Corporate Social Responsibility Agenda	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R64.101	Impact evaluation of the HSE publication '5 steps to risk assessment'.	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk
R64.115	The evaluation of the impact and effectiveness of inspection by local authorities in ensuring compliance with health and safety legislation in SMEs	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk
R67.164	Establishment and management of focus groups to establish the optimum methods of communication with a view to encouraging changed behaviour on chemical related health and safety issues	Ms L Jones. Tel: 0207 717 6263 louise.jones@hse.gsi.gov.uk
R67.166	Lay conceptualisations of occupational disease	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R67.167	Psychological and social processes compromising health and safety in the small to medium sized enterprises	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R68.089	Customer focus survey: Obstacles preventing employees from getting involved in health and safety	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk
R72.088	The development of a 'virtual' risk assessment management tool	Mr R Sanger. Tel: 0207 717 6457 ross.sanger@hse.gsi.gov.uk

RECENTLY COMPLETED PROJECTS: JANUARY – MARCH 2004		
Project No	Project Title	Project Officer
Block 1 - Priority Programmes		
R33.101	Refurbishment of structures involving demolition work	Mr B Neale. Tel: 0151 951 4632 brian.s.td.neale@hse.gsi.gov.uk
R33.115	Peer review of analysis of specialist group reports on the causes of construction site accidents	Mr P Wallis. Tel: 0207 717 6243 paul.wallis@hse.gsi.gov.uk
R36.192	Interactive CD-ROM project to assess the competence of workplace transport operators	Mr K Jewitt. Tel: 0207 717 6059 kevin.jewitt@hse.gsi.gov.uk
R36.196	Mathematical modelling of the stability of passenger carrying, tandem seat, all-terrain vehicle (ATV)	Ms D Kahlon. Tel: 0207 717 6174 debo.kahlon@hse.gsi.gov.uk
R44.035	Practical solutions to noise problems in agriculture	Mr N Black. Tel: 01159 712800 nigel.black@hse.gsi.gov.uk
R53.187	Evaluating the effectiveness of ladder stability devices	Mr M Holden. Tel: 0161 952 8200 martin.holden@hse.gsi.gov.uk
R54.091	Personnel today – Work related stress survey	Dr C Mackay. Tel: 0151 951 4565 colin.mackay@hse.gsi.gov.uk
R55.097	Further development of the usability and validity of the quick exposure check (QEC)	Mr C Quarrie. Tel: 0151 951 3052 chris.quarrie@hse.gsi.gov.uk

□ PROJECT LISTING

RECENTLY COMPLETED PROJECTS: JANUARY – MARCH 2004		
Project No	Project Title	Project Officer
Block 1 - Priority Programmes (cont.)		
R55.102	Effective management of upper limb disorders	Ms D Brown. Tel: 0207 717 6037 dorothy.brown@hse.gsi.gov.uk
R62.093	Recidivist risk takers who work at height	Mr M Holden. Tel: 0161 952 8200 martin.holden@hse.gsi.gov.uk
R63.058	Real time evaluation of the impact of health and safety management systems in the NHS	Ms K Clayton. Tel: 0151 951 4445 karen.clayton@hse.gsi.gov.uk
R64.089	Health and safety in construction – Phase 2: Depth and Breadth	Mr T Allan. Tel: 0207 556 2211 trevor.allan@hse.gsi.gov.uk
Block 2 - Work in the Major Hazards Industries		
R02.061	Ignition hazard from conveyor idler rollers	Mr M Williams. Tel: 0151 951 4866 mansel.williams@hse.gsi.gov.uk
R04.088	Ignition and flame spread due to grinding sparks on work clothing	Mr A Tyldesley. Tel: 0151 951 4769 alan.tyldesley@hse.gsi.gov.uk
R04.090	Acoustic leak detection (ALD) sensors for liquid releases	Mr A Jackson. Tel: 0114 291 2453 alan.jackson@hse.gsi.gov.uk
R05.106	Separation distances around explosive stores	Mr A Miller. Tel: 0207 717 6345 andy.miller@hse.gsi.gov.uk
R64.073	Evaluation of COMAH, gas, offshore and rail charging regimes	Mr B Tomkins. Tel: 0207 717 6454 bill.tomkins@hse.gsi.gov.uk
R64.094	Evaluation of railways safety case regulations	Ms P Stenhouse. Tel: 0151 9513888 pauline.stenhouse@hse.gsi.gov.uk
R75.052	Evaporation of droplets produced in two-phase releases	Mr D Carter. Tel: 0151 951 4570 dave.hid.carter@hse.gsi.gov.uk
3374	Safety issues in surveying and navigating directional wells	Ms M Copland. Tel: 01224 252500 margaret.copland@hse.gsi.gov.uk
3751	Review of low cycle fatigue behaviour (ISO code for offshore structures)	Mr A Stacey. Tel: 0207 717 6774 alex.stacey@hse.gsi.gov.uk
3811	Stress redistribution in damaged structures	Mr A Stacey. Tel: 0207 717 6774 alex.stacey@hse.gsi.gov.uk
3849	Preparation of JIP on well engineering competency/experience trends	Ms M Copland. Tel: 01224 252500 margaret.copland@hse.gsi.gov.uk
3876	Effects of dynamic loading on structural integrity assessments	Mr A Stacey. Tel: 0207 717 6774 alex.stacey@hse.gsi.gov.uk
3897	Survey of offshore inspector's human factors needs	Mr R W Miles. Tel: 0207 717 6685 bob.miles@hse.gsi.gov.uk
3909	Training simulation for offshore crane operators	Mr A Dixon. Tel: 0151 951 3468 alan.dixon@hse.gsi.gov.uk
3977	The relationship between depth, cognitive function and metacognitive awareness	Mr D Tee. Tel: 0207 717 6923 david.tee@hse.gsi.gov.uk
4003	Web-based database relating to cranes by type and installation	Mr J MacFarlane. Tel: 01224 252500 jim.macfarlane@hse.gsi.gov.uk
4004	Approaches for the integration of advanced structural analysis and structural reliability analysis	Mr C De Souza. Tel: 0207 717 6776 conrad.de souza@hse.gsi.gov.uk
4007	Structural reliability framework for FPSOs/FSUs	Mr C De Souza. Tel: 0207 717 6776 conrad.de souza@hse.gsi.gov.uk
4044	Drafting of proposed standard for umbilical supplied diving apparatus	Mr M Harwood. Tel: 0207 717 6760 mike.hid.harwood@hse.gsi.gov.uk
Block 3 - Compliance		
R31.077	Critical evaluation of ultrasonic TOFD technique for search scanning	Mr H Bainbridge. Tel: 0151 9514651 harry.bainbridge@hse.gsi.gov.uk
R38.034	The application of the IEC 61508 standard to industrial boiler installations	Mr G Hawkins. Tel: 0151 951 4522 glyn.hawkins@hse.gsi.gov.uk
R45.080	Control of whole body vibration exposures for drivers of quarrying vehicles	Mr P Brereton. Tel: 0151 951 4824 paul.brereton@hse.gsi.gov.uk
R53.194	The asbestos worker protection directive and UK quarrying	Ms H Turner. Tel: 02920 263000 helen.turner@hse.gsi.gov.uk
Block 4 - Mandatory Activities		
R36.193	Risk estimation and safety integration level (SIL) allocation for safety-related control functions at machinery	Mr S Shaw. Tel: 0151 951 3815 steven.nsd.shaw@hse.gsi.gov.uk

□ PROJECT LISTING

RECENTLY COMPLETED PROJECTS: JANUARY – MARCH 2004		
Project No	Project Title	Project Officer
Block 4 - Mandatory Activities (cont.)		
R51.106	Teratological hazards associated with chemical exposure	Dr R Elliott. Tel: 0151 951 3835 richard.elliott@hse.gsi.gov.uk
R51.194	Interdepartmental group on health risks from chemicals	Dr S Fairhurst. Tel: 0151 951 3509 steve.fairhurst@hse.gsi.gov.uk
R51.245	CHIP database – Updates for the 29 th ATP of the Dangerous Substance Directive (DSD)	Mr D Fletcher. Tel: 0207 717 6004 david.fletcher@hse.gsi.gov.uk
R56.100	A review of the occupational health and safety of Britain's ethnic minorities	Dr S Clarke. Tel: 0151 951 3832 simon.clarke@hse.gsi.gov.uk
R73.027	Measuring compliance of the Employers' Liability (Compulsory Insurance) (ELCI) Act 1969	Mr J Grant. Tel: 0207 717 6096 john.grant@hse.gsi.gov.uk

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RR 200	TEMPSC structural design basis determination Part 3 – event levels and safety margins
RR 201	Recidivist risk takers who work at height
RR 202	Psychosocial aspects of work and health in the North Sea oil and gas industry
RR 204	Health and safety in refurbishment involving demolition and structural instability
RR 205	Evaluating the effectiveness of ladder stability devices
RR 207	Review of low cycle fatigue resistance
RR 208	The effects of dynamic loading on structure integrity assessments
RR 211	Further development of the usability and validity of the Quick Exposure Check
RR 212	Practical solutions to noise problems in agriculture
RR 215	The challenge of managing upper limb disorders – How can health professionals become more effective?
RR 217	The development of a health and safety management index for use by business, investors, employees, the regulator and other stakeholders

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