



When undertaking seismic surveys over difficult terrain such as Yemen, the use of mountaineers to identify routes and help lay cable over cliffs and ravines is not only very important for safety, but it is also cost effective, as it saves using expensive helicopters.

## Remote and Dangerous Locations No Obstacle

**As the search for hydrocarbons moves into increasingly unwelcoming and difficult terrain, a niche market in leading oil and service companies safely through the dangers of a hostile environment has developed.**

Jane Whaley, Associate Editor

What do you do if your proposed wellsite is in the middle of a possible mine field, or your seismic survey grid takes you half way up a mountain? How can you be sure that you can safely transport all your equipment and personnel through the sand dunes and scree slopes of the Libyan desert to your survey area? How can you be sure that there is someone on your rig or seismic vessel with enough knowledge to understand whether that stomach pain a crew member is complaining about is a tummy upset or life-threatening appendicitis?

Exploration Logistics, based in rural Gloucestershire, England, believe they have the answers. "Whether you want someone to guide you safely up a mountain, to clear your potential wellsite of mines and other explosives, or to be on hand with medical advice, we can supply you with the appropriate people," says Mark Hutchings, Operations Director with Exploration Logistics. "This means that the oil companies we work for can concentrate on looking for hydrocarbons securely and efficiently."

Exploration Logistics was established in

1986, and has since become an international leader in the provision of remote site medical and safety solutions throughout the world. It can call on the skills of more than 1,000 medics, consultants, training and field personnel.

### Safety solutions and mountaineers

The mountainous regions of the Middle East, in countries such as Yemen and Oman, offer particular challenges to the running of seismic surveys, with many routes having to cross deep wadis or cover elevation changes over hundreds of metres.

Exploration Logistics provides mountaineering support services to the oil and gas industry. "We have specialist teams throughout the world working in deep ravine and mountainous terrain which is difficult to traverse without risk of damage to equipment or injury to staff. Making detours can be costly, time consuming or just not feasible, so our mountaineers are on hand to offer training and advice, or to assess the environment and devise the best route."

In very difficult terrain they will be required to help carry equipment or lay the cable over cliffs, wadis and scree slopes.

As Mark points out: "not only does the use of mountaineers reduce the risk of potential accidents, but in many countries it proves very cost effective, as it minimises the number of helicopters required and increases efficiency."

Keith Jack, an HSE specialist working for Exploration Logistics, is supporting the drilling department of a petroleum operating company working on 21 rigs some 600 km south-west of Khartoum in Sudan. "One of my biggest challenges is motivating and training a multicultural team," Keith explains. "The crew includes Sudanese, Chinese, Indians and Malays. Most of my work involves rig visits and liaison with contractors, educating them in HSE and monitoring performance through inspections and audits."

While the main reason for having an HSE expert on the crew is to ensure the safety of the whole operation, there is an additional economic benefit, as Mark explains. "The presence of a health and safety advisor supervising our client's local contractors in Algeria resulted in the team achieving three million man-hours of work without a single lost time incident being recorded."

## Desert driving to medical emergencies

"One of the areas of our work which is expanding most rapidly is our driver training service, which is absolutely vital for efficient and safe oil and gas exploration in every country, but particularly in ones like Nigeria and India, where road traffic accidents and fatalities are disconcertingly frequent," Mark continues. "Our trainers teach a range of skills, from instruction in the use of fork lift vehicles to teaching defensive driving to the whole workforce, including local sub-contractors like coach, taxi and heavy goods vehicle drivers. We hope that this will have a knock on effect in countries where poor driving is responsible for many fatalities each year."

Exploration Logistics Driver Trainer, Steve Brown, has also been working in Sudan, where one of the biggest dangers to the international workforce and local community is the steady increase in motorised vehicles on the already crowded roads. Steve has been assisting both oil and exploration companies and humanitarian organisations to improve driver safety. "The roads are congested, not just with motorised vehicles, but with cyclists, drivers, pedestrians, cattle, goats and children. Flooding during the rainy season washes bridges away, leaving drivers no alternative but an off-road route. Potholes cause mayhem, particularly when combined with high speed, something which is generally viewed as a sign of driving prowess rather than something to be checked."

"I also help train land seismic crews in 4-wheel off-road driver training, particularly for use in desert environments like Libya. This covers a whole range of vital skills like vehicle preparation, off-road driving, ascent and descent procedures and recovery and survival techniques," Keith adds.

## Dogs play an active role!

Many countries have resolved internal conflicts or wars and are keen to exploit their natural resources in order to build



Photo: Exploration Logistics

Steve Brown, a Driver Trainer with Exploration Logistics, points out that "having good off-road skills doesn't just mean being able to negotiate a ditch or manage a steep slope without rolling over."

up their economies, but in a number of places the presence of mines and other ordnance makes operations extremely hazardous. Through its mine clearance division, MineTech, Exploration Logistics has built up a high level of expertise in the field of mine detection and removal, undertaking major humanitarian de-mining initiatives in countries like Mozambique, Libya, and Afghanistan, as well as clearance projects for oil and exploration companies.

"We have mechanical ground clearance and detection vehicles and teams of specialist explosives and demining experts, but one of the most important tools in this work are the mine detection dogs," Mark explains. "They are trained to sniff out the presence of explosives, allowing the handlers to mark the location and thus delineate the mine field. An average dog team can work at three times the pace of manual clearance teams."

"And it is not only modern mines which cause potential problems to oil exploration. We have undertaken a number of projects in places like Egypt and Oman, where we have had to clear areas of WWII ordnance before the seismic crews could do their job."

The work of Exploration Logistics in the oil industry is rapidly expanding as the energy hungry world pushes the search for hydrocarbons ever higher, deeper and more extreme. As Mark says, "however remote the environment or tough the challenge, we'll be there."

## All in a day's work....

Bridget Strong has worked as a medic on seismic vessels throughout the world, from the Falklands to the North Sea and the Bay of Bengal.



Photo: Frontier Medical

Bridget Strong always wanted to work on ships, but coming from landlocked Zimbabwe, it was difficult for her to realise her ambition. "So when Exploration Logistics offered me a position as a medic on seismic boats, I jumped at the chance," she says. Bridget is a Registered General Nurse, with additional internationally recognised Life Support qualifications, and previously worked as a consultant for the ambulance service in Zimbabwe.

"Working as an onboard medic is a great life, and I have enjoyed every minute of the four years I have spent doing it," she says. "To a certain extent, you can make what you want of it, but I like to be busy, so I get very involved in the HSE aspects of the boat. I do a lot of first aid training, and I run onboard campaigns on, for example, healthy eating, blood pressure and fitness. Many vessels nowadays have gyms and I can help arrange fitness programmes for individuals as well as team sports and competitions. I've even organised a competition to climb Ben Nevis on a treadmill."

Bridget is usually the lone medic on board, but the responsibility this brings does not worry her. "I've coped with lacerations and amputations after accidents, and illnesses such as malaria and acute internal ulcers. It doesn't bother me that I am the only medic, as I'm trained to cope with these things. If I wasn't comfortable with that, I'd change career."

