Highly strung

Investigating stone masonry using rope access looks dramatic but is in fact extremely safe and often the best and most cost effective way of carrying out a survey, says Barry Hunt, of St Albans, Hertfordshire, consultants STATS as he talks about the technique.

Problems with falling stone masonry – one, in Scotland, resulting in a death (see the previous issue of *NSS*) – have thrown a new spotlight on the dangers of failing to inspect buildings regularly.

Fatalities are still very much the exception, but changes in construction practice and the conservation market's increasing desire to retain original fabric would appear to have the potential to increase the risk.

Thorough investigation requires a masonry expert to assess the construction visually at close quarters, pulling, pushing, prodding, tapping and often taking samples.

That is not always easy on a small building, let alone a tall one. But for fast and cost-effective access, experience is beginning to demonstrate that rope can provide the answer.

Of course, not every stone expert is prepared to dangle from a rope secured to the top of a building. What has tended to happen is that rope access experts have been engaged to go down and then report back to the stone expert.

But, fed up with receiving second-hand information, I took the leap and trained in industrial rope access to the requirements of IRATA (see box overleaf).

No spring chicken but not long in the tooth either, friends and colleagues were at first bemused, some even a little concerned. Generally, they thought I was mad. ⇨

Barry Hunt just hanging around inspecting masonry.

However, I believe the decision to be one of my more sane ideas. I do not want to take over the rope access technician's role, but rather direct a team that can report observations and instantly check any curiosities.

Rope access looks dangerous but is, in fact, extremely safe. I would not have done it otherwise.

And having spent many hours dodging around scaffolding, swaying in window cradles, bouncing around in cherry pickers, negotiating the thin strips of wood that often pass for roof ladders and other access methods, I now feel fully qualified to comment.

The problem with most forms of access is that many give the impression they are safe, which encourages the user to take chances, particularly with ladders. The apparent sense of danger with rope access means you never take chances.

In the years since IRATA was formed there has not been a single fatal accident in the UK associated with rope access. Compare that with the weekly deaths in the construction industry from falls, particularly from roofs.

The first time I undertook rope access myself on an actual job was for the investigation of blast affected stone cladding following the bomb in London's Docklands.

Scaffolding was too expensive, considering the size and height of the façades, and the rails for the cleaning cradles were certified unsafe – some sections were not actually bolted to the building.

The façades were dye tested and examined for cracks or other unusual features by two technicians. Any of these features identified by the technicians were then double-checked by myself with respect to both the fixing system employed and the geology of the stone.

Since that first time, the range of jobs I have undertaken has expanded beyond my original expectations. It became clear the investigation of intricate buildings such as churches or those with extensive ornamentation could be carried out most effectively using rope access.

It is also these buildings that are most likely to have pieces of masonry falling off them.

A recent inspection of a building in the Midlands identified where a vein in the stone forming part of a large cornice had failed. The vein isolated a part of the stone, causing it to detach. Fortunately it landed on a lower piece of the structure.

One of the odder requests, currently on-going, involves the assessment of a major public structure in London where a large marble statue appeared to be moving, raising serious safety fears.

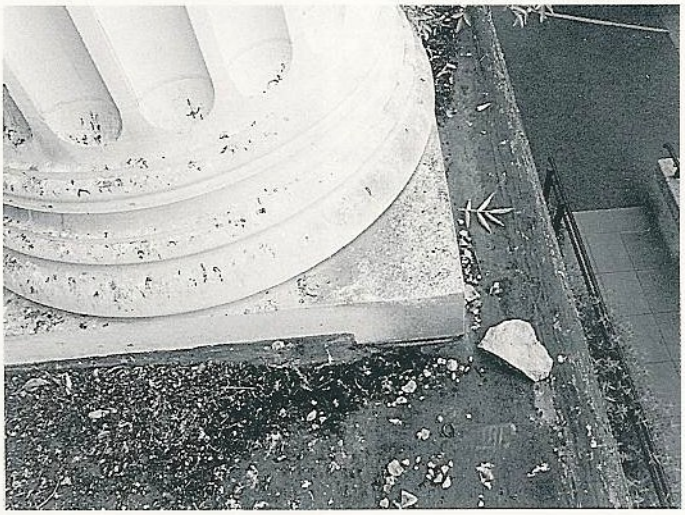
Only rope access was possible to assess closely the masonry around the statue and allow the attachment of inclinometers to monitor possible movements over a long period. So far there are no indications of problems with the supporting masonry.

During these various investigations, additional work such as the use of borescopes to inspect fixings may be undertaken. Being on a rope does not cause any restrictions in this respect.

There are numerous situations where rope access may be employed and it is hoped that my comments here have helped raise awareness of these possibilities.

The construction industry has the second worst health and safety record of any industry in the UK and Deputy Prime Minister John Prescott has singled out construction as having an unacceptably high accident rate "that we must work hard to combat". These comments came in the preface to the latest strategy document *Revitalising targets for reducing work-related Health & Safety.*

Tougher penalties have been recommended, with offending companies 'named and shamed' in a special annual report. Experience would suggest you are unlikely to end up in this report if you use rope access. ■



IRATA

The Industrial Rope Access Trade Association (IRATA) was established 10 years ago to promote the safest and most effective working practice for those carrying out rope access. IRATA has produced two documents, *General Requirements for the certification of personnel engaged in industrial rope access methods* and *Guidelines on the use of rope access methods for industrial purposes.* These documents have been compiled with the full support of the Health & Safety Executive.

Do not confuse industrial rope access with abseiling. Abseiling is effectively descent on a rope, not going sideways, ascending and also knowing methods of rescue, use of pulleys and many other special techniques.

For more information, IRATA is at Association House, 235 Ash Road, Aldershot, Hampshire, GU12 4DD. Tel: 01252 336318. Fax: 01252 333901. E-mail: info@irata.org and website.