



IRATA ACCIDENT RETURNS 2004

INTRODUCTION.

For 2004 some 67 companies submitted returns concerning rope access activities plus two others who had done no rope access work and therefore provided nil returns.

These returns have again been generally completed in a reasonably consistent manner although there have been one or two exceptions. However the figures do suggest that where work other than on ropes is carried out then there is less willingness, again in some cases, to provide suitable or any returns. For instance table 2a compares the returns for hours worked on ropes against the hours worked on rope access sites showing that approximately 50% more time was spent on ropes than on other work. However 13 companies gave no returns concerning work off ropes and approximately some 20 others appear to have submitted partial returns for this type of activity. This should be born in mind when considering the accident returns off ropes, especially none reportable accidents. While it is possible that any company who does not record work off ropes may well ignore any none reportable accidents when working off ropes, there is also a possibility that had full returns been submitted then the incident rate for none rope access activity would have been lower.

IRATA WORK PROFILE.

Of the 67 companies that submitted returns 32 of these were involved in off shore work and 61 were involved on shore. Also some 19 companies were involved to some degree in training.

Broadly it appears that the overall work load for IRATA members was slightly down on last year, for instance see table 1 that indicates approximately 200,00 hours less work on ropes than in 2003. This is broadly similar to the returns for other work, other than on ropes, although as can be seen in table 1 fluctuations do occur over the years and that work on ropes by IRATA companies has increased nearly 6 times over the past 16 years.

The tables below show how the total hours worked on site in the course of the year, including rope work, has taken place during which season and broadly the type of companies who have carried out this work.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Very large companies	156,760	257,575	277,854	236,075	928,264
Large companies	242,221	292,494	296,040	275,862	1,106,617
Small companies	50,551	57,233	139,913	75,426	323,123
Very small companies	931	2,575	1,416	1,795	6,717
Totals	450,463	610,077	715,223	589,158	2,364,721

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Totals
Off shore	161,208	209,631	260,539	213,713	845,091
On shore	150,705	167,560	185,076	108,415	611,756
At height	39,719	69,078	84,854	75,930	269,581
Other site work	102,004	161,710	184,246	190,253	638,213
Totals	845,352	613,055	269,723	637,513	2,364,721

REVIEW OF ACCIDENTS AND INCIDENTS.

The incident rates during working on ropes, as shown in table 1, show a fairly steady pattern compared with previous years. On table 1 I have also indicated the incident rate for those accidents that are reportable under RIDDOR tracking these back over the past 16 years. Again it can be seen that these rates are generally low and in many cases none existent.

Table 2a compares the incident rates for work on the ropes as against other none rope working according to the general size of company. There could be several explanations for the varying size of the incident rates for the different sizes of companies. For instance as the overall average suggests that there is an incident every 50,000 hours approximately then the small and very small companies could be expected to suffer an incident once every 5 to 10 years. The difference in the incident rate between the large and very large companies could be due to the latter having more supervisors on site. The staffing levels shown on the returns appears to support this, with the very large companies having one level 3 to less than 2 levels 2 and 1, while the large companies generally having a much larger ratio. However it is not possible to be very positive about this as there is no information concerning how the staff were being used.

Table 2b shows how the incident rate varied through the year. It is hardly surprising that the rate tends to rise in the winter months indicating that additional supervision or more thorough supervision is required at these times.

Table 3a gives the general details of the incidents reported. From this it can be seen that there is a greater tendency to suffer more and more serious accidents off ropes than on ropes. Given that the reported hours worked off ropes is so much less than on ropes, this accounts for the apparent risk of working off ropes being some 3 times greater than on ropes as shown in table 1. However my earlier comments about possible under reporting of the hours off ropes could mean that the difference in risk is a little lower although I would not expect the ratio to alter to any great extent. While the reported hours lost through incidents shows a similar ratio of approximately 3.5 this aspect of the returns is often neglected. Zero hours lost are frequently given, for instance, where operatives had suffered cuts and burns which presumably must have lost time. In this table I have shown the main responsibility for these incidents. This shows that the operative is mostly responsible on the basis that a cut, fall etc. indicates an error on their part. However some of these incidents could perhaps have been prevented by better supervision although I have no information that could pinpoint such cases.

Tables 3b, 3c and 3d give more detail concerning the various incidents. The pattern of how they were caused and the parts of the body injured bears some resemblance to previous years with eyes and hand/fingers being at greater risk. This generally relates to the operative being the person responsible for the incident as presumably most of them are issued this gloves and eye protection. Table 3d shows who those were who suffered an accident. While the high number of incidents involving level 1's is to be expected, that the number of level 3's injured were higher than level 2's is surprising especially as there have been many more level 2's on site. I have no information that could suggest a reason for this except perhaps if level 3's are both working and supervising then all their attention might not be on what they are doing.

Table 4 shows the distribution of class A and class B incidents, class A being those I have judged did or could have resulted in a serious accident, generally these would be through falls or falling objects. The number of class A accidents should be compared with the number of reportable

accidents given in table 3a. In my opinion table 4 gives a better indication of the risks of serious accidents although the classification is very subjective. The ratio of class A incidents compared with the total is 12% which is similar to that in 2003.

Table 3a shows that there have been 3 serious accidents during the year, one fatal and two major. Of these one of the major accidents was while working on ropes where a level 3 received blast injuries to his leg. The other two were while off the ropes and appear to be superficially similar in that both fell some distance after either missing their footing or standing onto an area that was not stable. However in the latter case the level 3 operative appears to have unbolted the structure he was working from and had not realised how it had been put together. From the point of view of this report these serious accidents also show that work on the ropes results in fewer accidents than when working off the ropes. In my opinion this is because operatives are well trained and disciplined in rope work while not necessarily so when off the ropes.

CONCLUSIONS AND RECOMMENDATIONS.

I suspect that there is some under reporting of time off ropes, of hours lost through incidents, and of minor incidents, particularly off ropes. This to some extent reduces the value of this report and may even result in the resulting incident rates being higher than they need be.

While the individual returns submitted give a significant amount of information, equal if not better than most other areas of work, there is still room for improvement. Members should consider why they produce these reports and how they benefit, and could benefit further, from the analysis carried out. I consider that being able to clearly show both how the association performs and how a company performs in relation to this, is a significant feature in negotiating insurance cover, arguing with the Health and Safety Executive and similar bodies, and showing clients the levels of reliability members achieve. I therefore urge members to make the best use of these reports and their own internal analysis of the figures produced. The annex attached to last years return could be of help in doing this.

I consider that despite the steadily increasing workload involving rope access the overall incident rate and the rate for reportable accidents remains at a reasonable steady and low figure. The comparison of this figure with industry in general and construction work in particular is very favourable as noted in last years report.

It also seems clear that the systems of control, training, assessment and auditing adopted by IRATA generally produces low accident figures when the operatives are working on standard rope-work. However it also seems clear that there is a limited carry over of this safe approach when work is done at other types of work place. If operatives can be so well trained and disciplined when working on ropes then presumably there is little reason why these characteristics should not be carried over to work off the ropes. Operatives often carry out rope access work in remote situations where direct supervisory control may be difficult. Persons in these situations have to be reliable, to carefully follow their training procedures. Such a characteristic is valuable both when working on and off ropes. It is therefore important both for individual companies and for the association that general safety, other than on ropes, should be considered during training courses using the same broad principles already developed. I consider that amongst these should be care in preparing for the work, examining the site for hazards and ideally enclosing these as much as possible. The training should deal with the creation of safe access ways and the desirability of marking these. Trainees should learn not to go anywhere unless they are absolutely sure that that area is sound and any risks are well controlled. In addition trainees should be taught always to check that they have suitable protective equipment, including protective clothing before they start work on site.

I recommend that the following measures should be undertaken.

- a. Members should be strongly urged to ensure that they do not under report either hours worked, hours lost through accidents/incidents or none reportable accidents.
- b. The training modules should be extended/revised to deal with general risks when working other than on ropes, particularly in properly reconnoitring the site area and creating safe access ways.

M.James. January 2006.



Accident and incident returns by IRATA companies for the year 2004.

Brief summary of accidents over the sixteen years 1989 - 2004 based on hours worked on ropes.

	No of companies.	Hours on ropes	Dangerous occurrences (D.O's)	None notifiable accidents when on ropes	RIDDOR accidents when on ropes	Incident rate (IR) for D.O's when on ropes	IR for all accidents when working on ropes	IR for RIDDOR accidents.	Total IR when working on ropes
1989	9	267,504	4	8	0	1.5	3		4.5
1990	12	327,645	4	7	0	1.2	2.1		3.3
1991	16	457,928	5	17	0	1.1	3.7		4.8
1992	22	537,920	3	13	1	0.5	2.6	0.19	3.16
1993	23	327,000		21	0		6.42		6.42
1994	32	348,749	1	11	0	0.28	3.15		3.44
1995	32	484,285	8	16	0	1.65	3.3		4.95
1996	26	559,035	5	18	2	0.89	3.58	0.36	4.47
1997	31	699,688	13	11	9	1.86	2.86	1.29	4.72
1998	37	1,006,538	14	23	10	1.395	3.288	0.99	4.67
1999	33	803,365	10	29	3	1.24	3.98	0.37	5.23
2000	34	887,206	6	21	3	0.79	2.70	0.34	3.38
2001	49	999,010	15	25	4	1.5	2.9	0.4	4.40
2002	49	1,225,930	10	12	-	0.82	0.98		1.79
2003	56	1,634,482	1	9	Nil	0.06	0.55		0.61
2004	67	1,457,848	8	22	1	0.55	1.58	0.07	2.17
Totals		12,024,133	107	263	33	0.89	2.46	0.27	3.35

Note: The number of companies submitting returns for each year given above will not be the same as the number of companies members of the association for the relevant years.

Note: RIDDOR accidents are those that are required to be reported under the Reporting of Incidents, Diseases and Dangerous Occurrences Regulations.