



Aircraft turnround: the impact of HSG209 and emerging good practice

Prepared by **BOMEL Limited** for the
Health and Safety Executive 2006

RESEARCH REPORT 428



Aircraft turnround: the impact of HSG209 and emerging good practice

BOMEL Limited
Ledger House
Forest Green Road
Fifield
Maidenhead
Berks SL6 2NR

This study is primarily concerned with reviewing the impact of Health and Safety Guidance 'HSG 209 Aircraft Turnround, A guide for airport and aerodrome operators, airlines and service providers on achieving control, co-operation and coordination' which was published by the Health and Safety Executive (HSE) in Autumn 2000. In particular, HSE wish to determine the impact of the guidance in the aviation industry, identify any difficulties and collate current and good practice in aircraft turnround health and safety. A total of 16 interview sessions have been carried out (26 participants) at three airports using a bespoke question set structured according to the issues contained in HSG 209. These interviews involved airport operators, airlines and service providers. The findings of the study are grouped into: awareness of HSG 209; hazards and risks; responsibilities; management factors; attitudes and culture; impact of HSG 209; difficulties with HSG 209; and the need for further information / support. In terms of the impact of HSG 209, around one third of the sample felt that HSG 209 had made little or no difference while another third thought that the guidance had improved discussion and raised the profile of some aircraft turnround issues. It was found that companies are engaged in a number of measures to manage health and safety in aircraft turnround including standard setting, risk assessments and training. A total of seven recommendations are made as a result of the findings from this study.

This report and the work it describes were co-funded by the Health and Safety Executive (HSE). Its contents, including any opinions and/or conclusions expressed, are those of the author alone and do not necessarily reflect HSE policy.

© *Crown copyright 2006*

First published 2006

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the copyright owner.

Applications for reproduction should be made in writing to:
Licensing Division, Her Majesty's Stationery Office,
St Clements House, 2-16 Colegate, Norwich NR3 1BQ
or by e-mail to hmsolicensing@cabinet-office.x.gsi.gov.uk

ACKNOWLEDGEMENTS

The authors are grateful for the cooperation shown by the following companies who took part in this study:

Heathrow Airport Limited
Edinburgh Airport Limited
Prestwick Airport Limited
BMI
KLM Ground Services
Alitalia
Cathay Pacific
Gate Gourmet

Alpha Flight Services
Plane Handling Ltd
Menzies
ICS
Sercon (Scotland) Ltd
AFS
Northair

CONTENTS

	Page No.
1. INTRODUCTION	1
1.1 BACKGROUND	1
1.2 AIMS	2
1.3 STRUCTURE OF REPORT	2
2. APPROACH	3
2.1 AIRPORTS / COMPANIES SAMPLED	3
2.2 METHODOLOGY	4
3. SURVEY RESULTS	5
3.1 AWARENESS OF HSG 209	5
3.2 PERCEPTION OF HAZARDS AND RISKS IN AIRCRAFT TURNROUND	6
3.3 PERCEPTION OF RESPONSIBILITIES	7
3.4 MANAGING HEALTH AND SAFETY IN AIRCRAFT TURNROUND	9
3.5 ATTITUDES AND CULTURE	10
3.6 OVERALL IMPACT OF HSG 209	12
3.7 DIFFICULTIES WITH CONTENT AND APPLICATION OF HSG 209	13
3.8 PERCEIVED GAPS IN SUPPORT / INFORMATION	14
4. CONCLUSIONS AND RECOMMENDATIONS	15
4.1 CONCLUSIONS	15
4.2 RECOMMENDATIONS	18

EXECUTIVE SUMMARY

The Health and Safety Executive (HSE) published HSG 209 on Aircraft Turnround, 'A guide for airport and aerodrome operators, airlines and service providers on achieving control, co-operation and co-ordination' in Autumn 2000. The guidance suggests steps that need to be taken by all those involved in the preparation of aircraft for flight (turnround) to ensure that their activities are controlled and coordinated, and that they cooperate with each other. HSE has anecdotal evidence that some stakeholders have made significant progress with some aspects of the guidance, whilst others have struggled with it or failed to see it as relevant to them. This study has therefore been commissioned to:

- Determine the impact of HSG 209 in the aviation industry.
- Identify industry perception of any difficulties with HSG 209.
- Collate current and good practice in aircraft turnround health and safety.
- Provide information which allows HSE to effectively target areas where HSG 209 is not working.

The study approach involved visiting three UK airports varying in size and all controlled by different operating companies. The main organisation types involved in aircraft turnround were targeted, i.e. airport operators, airlines and service providers. A representative sample of companies were interviewed by spending one day at each airport. The interviewees were a mix of operational managers, safety managers, supervisors and front-line staff. A question set was developed for use in the interviews which was based on the content and structure of HSG 209, in order that the main issues of interest to this study could be captured. The sample was made up of 19% airport operators, 25% airlines and 56% service providers (16 interview sessions, 26 individuals).

The findings of the study are grouped into: awareness of HSG 209; hazards and risks; responsibilities; management factors; attitudes and culture; impact of HSG 209; difficulties with HSG 209; and the need for further information / support. The key findings are as follows.

- Half of the current sample were familiar with the detail of HSG 209 whereas half were either completely unaware of its existence or only vaguely knew of it.
- Time pressure emerged as one of the main risk factors in aircraft turnround.
- Companies are generally aware of their responsibilities but perceptions differ depending on organisation type.
- Companies are engaged in a number of measures to manage health and safety in aircraft turnround including standard setting, risk assessments and training.

- There is a need to standardise the approach taken by different airlines to aircraft turnround.
- There is a very positive reporting culture in airside operations.
- Around one third of the sample felt that HSG 209 has made little or no difference while another third thought that the guidance had improved discussion and raised the profile of some aircraft turnround issues.
- The main criticism of HSG 209 is that it is too generic and not of practical use to the aviation industry.

A total of seven recommendations are made as a result of the findings from this study. These can be found in Section 4.2.

1. INTRODUCTION

1.1 BACKGROUND

The Health and Safety Executive (HSE) published HSG 209 on Aircraft Turnround, ‘A guide for airport and aerodrome operators, airlines and service providers on achieving control, co-operation and co-ordination’ in Autumn 2000. The guidance suggests steps that need to be taken by all those involved in the preparation of aircraft for flight (turnround) to ensure that their activities are controlled and coordinated, and that they cooperate with each other. HSE has anecdotal evidence that some stakeholders have made significant progress with some aspects of the guidance, whilst others have struggled with it or failed to see it as relevant to them.

HSE has therefore decided to undertake some more formal and balanced research so that its actions can be guided by objective evidence as opposed to anecdote. The intent is not to survey all those companies whose operations come within the jurisdiction of HSG 209 nor is it to develop statistically significant quantitative statements about the extent of adherence to HSG 209. Instead the focus is to be on gathering qualitative insight to the challenges and successes in addressing HSG 209 issues in practice.

Several sources of information have informed the questions which have been asked as part of this study, including the Civil Aviation Authority (CAA) publication *Airside Safety Management CAP 642*, the HSE and CAA *Memorandum of Understanding on Public Transport and Cargo Operations Aircraft*, and meeting minutes from the *Revitalising Health and Safety in Air Transport (RHSAT) Aircraft Turnround Working Group*, which is a cross industry body. Several industry issues with regard to health and safety in aircraft turnround were taken into account in the development and conducting of the current study and in the interpretation of some of the findings. These include:

- A number of turnround plans exist in the industry but not one overall standard.
- There has been resistance to the idea of a turnround coordinator role due to uncertainties about the potential benefits and who would take the responsibility.
- Most incidents in turnround are thought to stem from employees who are breaking their own companies rules.
- Heathrow Airport Limited have already undertaken much work on safety in aircraft turnround, particularly with the development of a turnround plan.
- There may be doubts in the industry with regard to the role of HSE in aircraft turnround health and safety.

1.2 AIMS

The aims of this study were as follows:

1. Determine the impact of HSG 209 in the aviation industry.
2. Identify industry perception of any difficulties with HSG 209.
3. Collate current and good practice in aircraft turnaround health and safety.
4. Provide information which allows HSE to effectively target areas where HSG 209 is not working.

Specific questions were developed to gather information on the first three of these aims. The fourth aim is addressed in the recommendations made from the results.

1.3 STRUCTURE OF REPORT

Section 2 of this report briefly describes the study approach which was adopted. The survey findings can be found in Section 3. Conclusions and recommendations are made in Section 4.

2. APPROACH

2.1 AIRPORTS / COMPANIES SAMPLED

A list of the airports and companies which took part in this study can be found in the Acknowledgements Section near the start of this report. The airports chosen were all different in size and all had different operating companies (although two share the same parent company). The interviewees were a mix of operational managers, safety managers, supervisors and front-line staff. At each airport, it was important to sample the three broad categories of companies which are targeted in HSG 209. These are as follows:

- Airport Operators
- Airlines
- Service Providers (including ground handlers, fuelling, catering, cleaning etc.)

The sample breakdown according to the different company types at each airport is shown in Figure 1. One of the airports was different from the other two in that the airport operator also provided all the ground handling services. This being the case, one person from this company was interviewed from the point of view of airport management with another interviewed in their capacity as a ground handler. For simplicity, the sample should be considered to be made up of 19% airport operators, 25% airlines and 56% service providers (16 interviews).

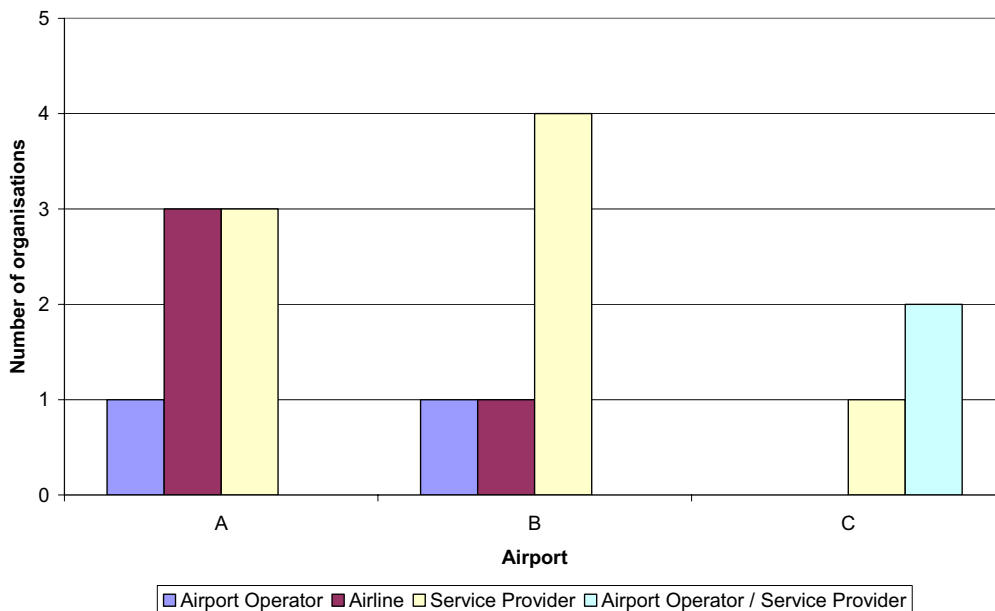


Figure 1 Sample breakdown

2.2 METHODOLOGY

The overall approach was to visit each airport and interview as many different company representatives as possible in one day. As mentioned previously, the interviewees were a mix of operational managers, safety managers, supervisors and front-line staff. Interviews typically lasted between 45 minutes to one hour. All interviews were face-to-face except for one which was conducted by telephone. Interviews were a combination of one-to-one and small groups in order to maximise participation where possible. Therefore, although the number of interview sessions was 16, a total of 26 people took part in the study.

The interview question set was primarily designed to gather information which would fulfil the study objectives. There were specific questions on the impact of HSG 209, difficulties with the guidance and how health and safety in aircraft turnround is currently managed (aims 1 to 3). The questions reflected the contents and structure of HSG 209 in order to address the issues of concern. This included the following topics:

- Awareness of HSG 209
- Main hazards and risks in aircraft turnround
- Main responsibilities for health and safety in aircraft turnround
- Management of health and safety in aircraft turnround
- Main difficulties ensuring health and safety in aircraft turnround
- Differences in attitudes and culture with respect to health and safety in aircraft turnround
- The overall impact of HSG 209
- Main difficulties with HSG 209
- The need for further information / support in managing health and safety in aircraft turnround

The survey results are broadly structured according to these topics in the next section.

3. SURVEY RESULTS

3.1 AWARENESS OF HSG 209

Participants were asked how well known they felt HSG 209 was in their organisation. The responses to the question are shown in Figure 2. It can be seen that 37.5% of participants were not aware of the guidance. A further 12.5% said that they knew of the document but did not really know what it contained. The remainder of the respondents (50%) were relatively familiar with the contents of HSG 209. Of the 50% who were either completely unaware of the guidance or were not familiar with the contents, 6 were from service providers and 2 were airlines. All airport operators were familiar with the guidance as well as 2 airlines and 3 service providers. It should be highlighted that one of the airport operators has taken the step of writing its own version of HSG 209 and mandating this at the airport. Awareness of HSG 209 was higher at this airport compared with the other two.

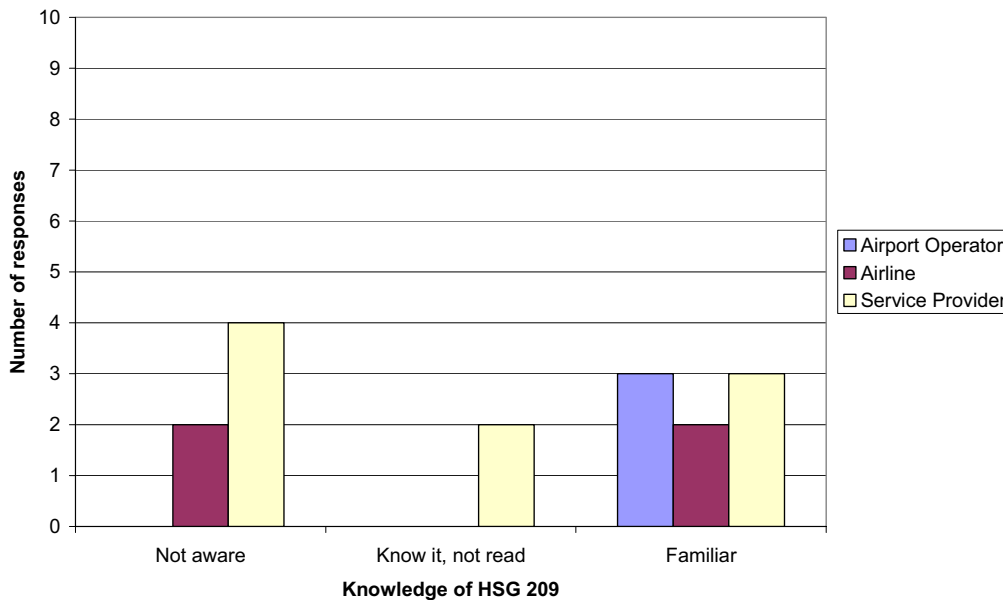


Figure 2 Participants knowledge of HSG 209

It is worth noting that some respondents said that, although they personally were familiar with HSG 209, awareness of the guidance in their organisation was generally low. However, there was a feeling that this is understandable since the guidance has very little direct relevance to people engaged in front line operations. One respondent explained the view that the main topics of HSG 209, i.e. control, co-operation and co-ordination, are management functions, not operational functions. It was felt that awareness of the guidance at all levels is unnecessary, provided that the appropriate managers take account of HSG 209 in company policies and procedures. As an example, at one airport, none of the respondents said that their organisations were familiar with the guidance, other than the airport operator. However, the airport operator

had referred to HSG 209 in the development of its driver training package. Another example came from a service provider employee who had been on a training course at which some of the issues in HSG 209 had been covered but the guidance document itself could not be recalled clearly.

One of the airlines continued the aforementioned theme by stating that it would be inappropriate to issue HSG 209 directly to staff. Instead it is up to senior managers to filter down the issues contained in the guidance. In the opinion of this airline, this was being done in that duty managers are aware of the issues in HSG 209 without being familiar with the guidance document itself.

3.2 PERCEPTION OF HAZARDS AND RISKS IN AIRCRAFT TURNROUND

Figure 3 shows the participants perceptions of the main hazards and risks associated with health and safety in aircraft turnround.

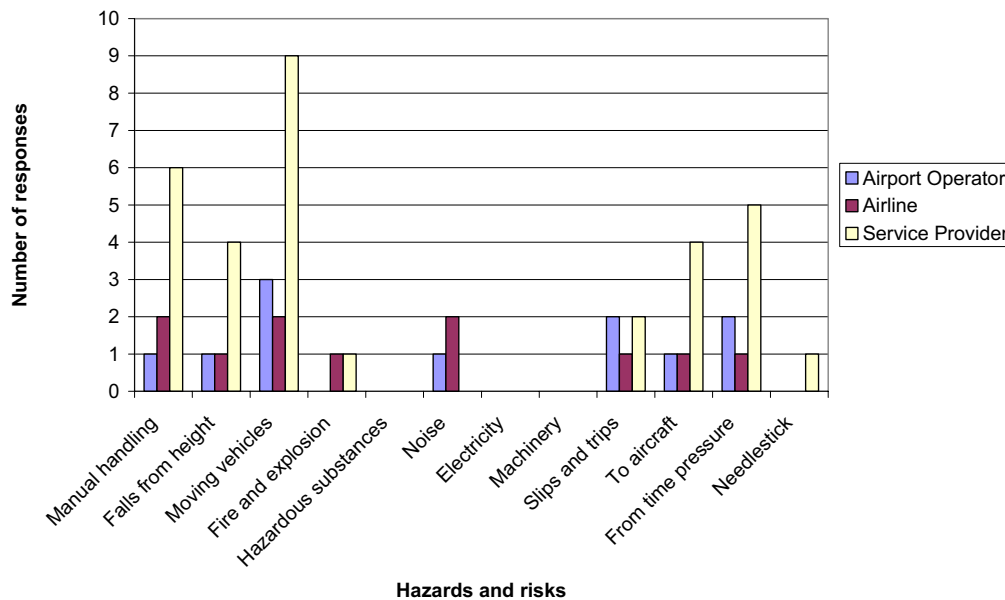


Figure 3 Perceptions of main hazards and risks in aircraft turnround

It can be seen from Figure 3 that the risk most commonly identified by the respondents was from moving vehicles (88%). The next most frequently mentioned risk was from manual handling (56%). All the service providers who were interviewed (n = 9) agreed that one of the main risks for them was from moving vehicles and 6 out of 9 mentioned manual handling. Contrary to what might be expected, none of the service providers highlighted noise as a hazard whereas this was flagged by two airlines and one airport operator. In particular, one airline pointed to the noise created by empty baggage dollies with empty aluminium bins on them. One of the greatest risk factors which emerged, at least in terms of potential consequences, was from damage to the aircraft (38% of responses).

Perhaps of concern is that 50% of the sample were of the opinion that time pressure increases overall risk and that this was raised by members of all three stakeholder groups. A service provider employee gave an example when he said that there was not always enough time to use equipment such as ‘carpet snakes’ which are designed to make manual handling easier. A fuel provider said there was not always time or space to avoid reversing up to an aircraft. Furthermore, it was said that, previously, fuelling would not take place with passengers on board the aircraft whereas this is now common practice due to time constraints. Pressure was said to increase the closer together turnrounds are in time. One service provider suggested that there should be a mandatory minimum turnround time in order to overcome such pressures. Anything less than 30 minutes was thought to be unreasonable.

Other concerns which were raised by participants included the risk to passengers when boarding and disembarking an aircraft and the increasing practice of vehicle reversing without a banks-person. One service provider was most concerned about needle-stick injuries when asked about risk factors.

3.3 PERCEPTION OF RESPONSIBILITIES

Participants were asked what they thought were the main responsibilities associated with ensuring health and safety during aircraft turnround. The results are shown in Figure 4.

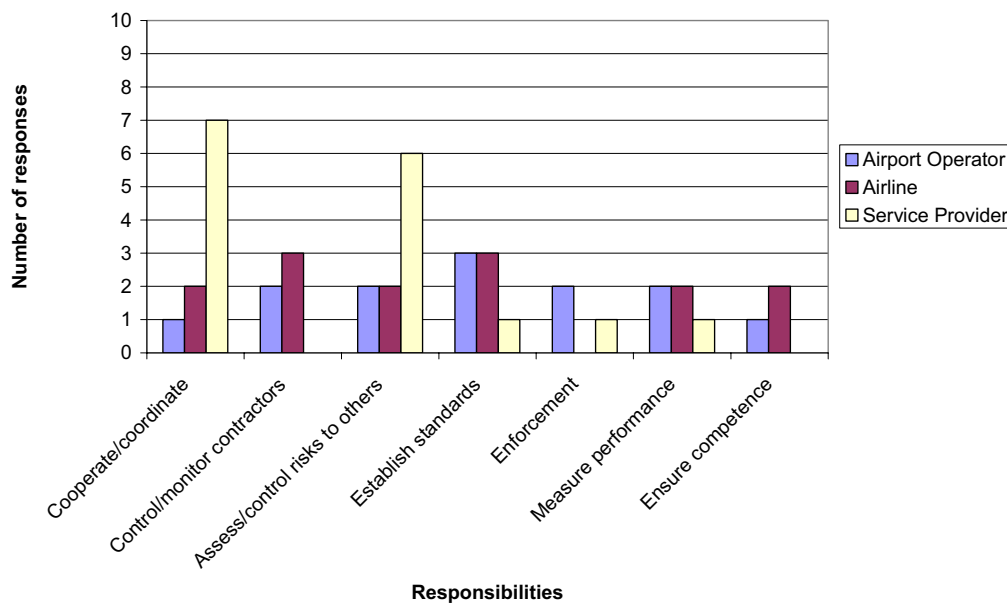


Figure 4 Perceptions of responsibilities in turnround health and safety

Figure 4 shows that the responsibilities most regarded as important are cooperation and coordination (63%) and assessing/controlling risks to others (63%). Looking at the results more closely, 7 out of 9 service providers identified a key responsibility as being cooperation with whoever is in control and coordinating activities with all those involved in turnround. For airlines, controlling contractors and establishing standards appear to be more important.

Finally, the only responsibility which all three of the airport operators mentioned was establishing standards.

The airport operators involved in the study had adopted several responsibilities in relation to health and safety in aircraft turnround. As mentioned previously, one airport operator had developed an aircraft turnround working plan based on HSG 209 and made this mandatory at the airport. Two operators mentioned enforcement as being an important responsibility, for example, running a driving penalty points scheme in conjunction with companies involved in turnround activities. Another airport operator was planning to fine contractors for breaching safety rules and put the proceeds back into airside safety. All operators mentioned setting overall standards as a key part of their responsibility. One airport operator explained that airlines often do things differently but that work must continue to persuade these airlines that a standard approach is best in the interests of safety. This was backed up by several of the service providers.

As already highlighted, in terms of responsibilities, airlines tended to focus on developing standards and managing their contractors. Specific measures mentioned by the airline staff who took part in the survey included regular meetings, passing on instructions/procedures, joint risk assessments, supervision of contractors and ensuring aircraft integrity.

Several service providers said they would do joint risk assessments with airlines in order to effectively identify risks in aircraft turnround. There was also a feeling from service providers that cooperation was required in order to develop common standards which would help to improve safety for everyone. Unfortunately however, there was a view that there is currently not enough dialogue between the different stakeholders. This can sometimes lead to conflicts between organisations. There was a feeling that people tend to forget that everyone is working towards the same goal.

In terms of which stakeholder should have ultimate responsibility, there were differences of opinion depending on which type of organisation was being interviewed. One cleaning contractor felt that the ground handling agent should have the main responsibility for safety in turnround. On the other hand, several views were that the airlines should have the main responsibility since they are at the top of the contractual chain for everyone on the stand and that safety standards should be a part of contractual agreements. However, it was pointed out that airlines often delegate this to the ground handler. One airline respondent was of the opinion that it was up to the airport operator to take overall responsibility.

The issue of a turnround coordinator was discussed by several participants and serves to highlight the different perceptions of responsibility which appear to exist between organisations. There has been resistance from certain parts of the industry to the idea of a turnround coordinator. This appears to be for several reasons including:

- Uncertainty with regard to whether this requires a new post
- Uncertainty with regard to who should take the job and who should pay for it
- Doubts as to whether a person in this position could exert the required authority
- Concerns that people might take less individual responsibility if a coordinator exists

One airport operator uses flight dispatchers as safety coordinators. A representative from this organisation spoke of first hand experience of the difficulty in getting people to accept that this role should have ultimate responsibility. In summary, the benefits of a specific turnround coordinator post are in dispute and current industry attitudes would appear to make the creation of this role unlikely in the near future.

3.4 MANAGING HEALTH AND SAFETY IN AIRCRAFT TURNROUND

Participants were asked what they currently did to manage health and safety in aircraft turnround. The results are summarised in Figure 5. Encouragingly, all companies spoke of a number of measures for promoting safety during turnround although responses differed according to the type of organisation being interviewed. All airport operators said they encouraged communications through airside safety committees and carried out turnround audits to monitor standards. Airlines were more concerned with risk assessments, training and developing procedures as were service providers. In terms of risk assessment, it appears that neither airlines or service providers carry out risk assessments for turnround as an overall activity, but instead have assessments for the individual activities involved in turnround. Although all but one of the service providers had their own procedures, most (7 out of 9) also said they would follow airline instructions or an airport plan if one existed. It seems clear that service providers are looking for some direction, particularly from airlines, which makes it important that airlines take a responsible approach.

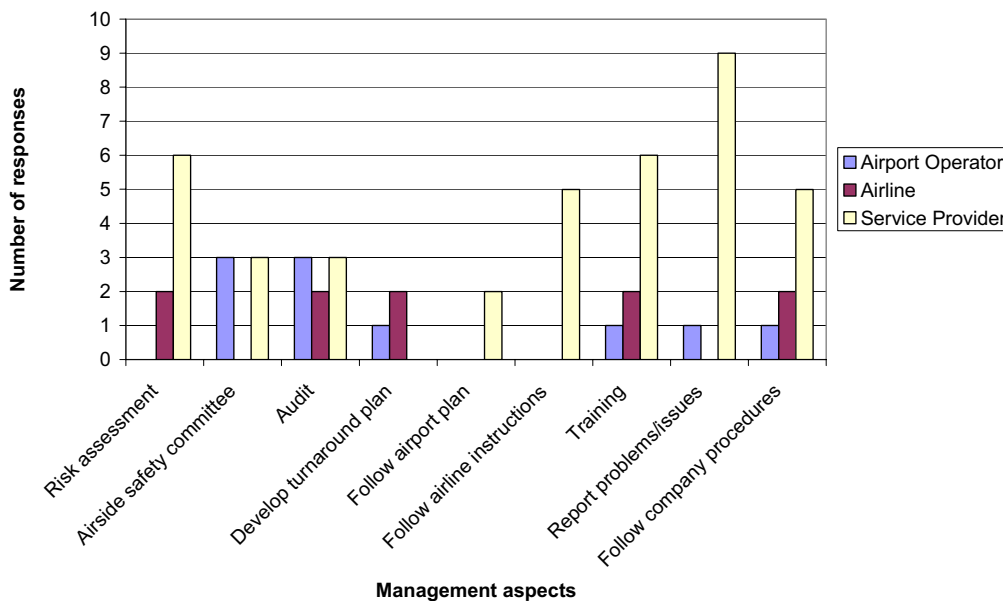


Figure 5 Current management aspects in health and safety in turnround

A specific problem with procedures was described whereby there can be a conflict between airport and airline rules which makes non-compliance inevitable. This would appear to indicate that more collaboration is needed between airport authorities and airlines in such cases. One service provider employee was of the opinion that although written procedures existed for

aircraft turnround, these were not extensively used. An airline representative felt it was not necessary for such procedures to be referred to frequently, but instead, only when someone becomes unsure of what to do. It appears that in many cases, service provider's procedures reflect airline or airport requirements. One service provider said they welcomed intervention from the airport operator because it generally helped to get things done.

In terms of whether or not a formal turnround plan is of use, one service provider representative was of the opinion that an ordering of turnround activity would not work in practice. Any plan would need to be flexible to match the nature of aircraft turnround. An airline representative expressed the view that a specific plan would make little difference and could, in fact, be a distraction, especially if checklists were introduced.

It is positive to note that all service providers said they would report problems and issues in turnround as they arise and several said that they use a near miss system. It is also positive that 3 service providers said they would audit their own safety performance. One service provider had gone to the extent of hiring consultants in order to benchmark and improve behavioural safety. This company explained that safety performance had improved greatly since they introduced ramp safety audits.

With regard to training, one airport operator explained that the Airport Operators Association (AOA) have set up a working group to develop minimum safety competencies. This is with a view to creating a safety passport scheme.

3.5 ATTITUDES AND CULTURE

Figure 6 shows issues that the respondents identified in relation to various aspects of culture which were related to health and safety in aircraft turnround.

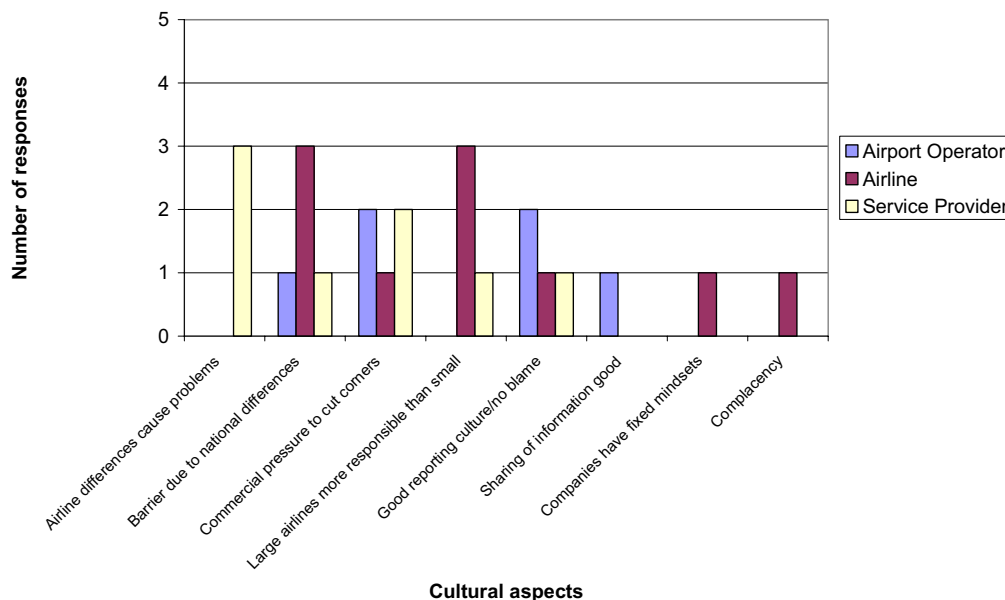


Figure 6 Cultural aspects relating to aircraft turnround

From Figure 6, it can be seen that several service providers felt that problems existed due to the differences between airlines in terms of how they approach aircraft turnround. It is revealing to note that airlines expressed the view that many of the differences between airlines in this respect are as a result of national differences and differences in the size of the airline. The general consensus was that airlines from nations with less developed safety standards will not necessarily adhere to aircraft turnround requirements in the UK. Also, that larger airlines with greater resources are more likely to adopt turnround safety standards compared with smaller airlines on tighter budgets.

Closer examination of the results reveals that there were two cultural factors which were spoken of across all airports and by all organisation types. The first view was that there are significant commercial pressures in the industry which lead to people cutting corners (38%) and, secondly, that there is a good no-blame reporting culture in the industry which helps to improve safety (25%).

The commercial pressures in the aviation industry appear to be a significant factor in terms of turnround safety. As discussed in Section 3.2, 50% of the sample considered time pressure in itself to be an important risk factor in turnround. One airport operator felt that people know the rules but are prepared to bend them in order to get an aircraft out on time. Another airport operator was aware that rules are not always followed. In such cases, it was said to be important to find out why this happens rather than laying blame. This operator uses the findings of such reviews as part of staff development. One airline said that in order to improve compliance, employees are always encouraged to make suggestions on how procedures could be improved and that such suggestions can be anonymous.

It appears that some airlines are likely to introduce penalties if turnround times are not met. One ground-handler explained that a certain percentage of the handling fee is withheld by the airline if the turnround time is not met. It was felt that this can be unreasonable, especially if the airline lets check-in times slip. The company introduced an incentive scheme in order to encourage good performance. Another ground-handler explained that his company told staff not to worry if they could not achieve an unreasonable turnround time. However, this respondent felt there was still a background pressure because such performance may influence whether or not a contract is renewed.

In terms of reporting culture, there was a general feeling that people would always report damage to an aircraft. In order to promote this, one airline described a contractual arrangement with their ground handler which stipulates that employees will not be dismissed if they accidentally damage an aircraft. One service provider said that employees would be disciplined if it was discovered that they did not report an incident. Another service provider participant was of the view that employees would stop work and report an issue if they were unhappy with something. However, this was the view from a fuel provider who were said to be heavily influenced by the safety culture from the oil and gas industry. Another service provider said that employees would always report safety issues at shift handover.

3.6 OVERALL IMPACT OF HSG 209

Participants were asked how they would describe the overall impact of HSG 209 since it was published in 2000. The most common responses are shown in Figure 7. The most common views fell into two main areas. On the one hand, 5 respondents (32%) felt that the guidance has had little or no impact. However, another 5 respondents (32%) felt that the main benefit from the guidance was that it started discussion of turnround health and safety issues, although it did not provide any practical means for addressing these issues. Only one respondent (an airport operator) said that the guidance had provided direct input to safety management.

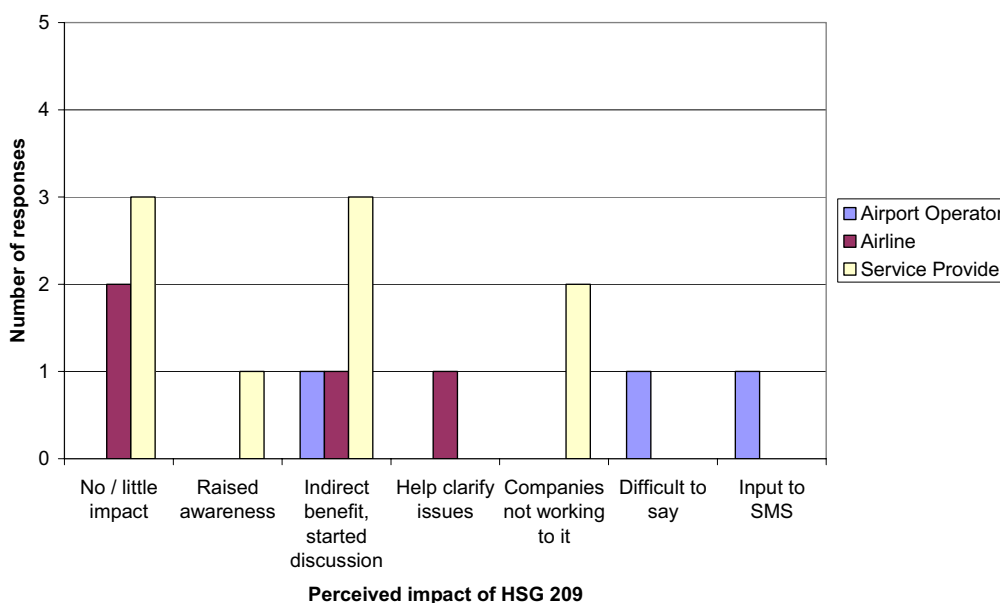


Figure 7 Perceptions of the overall impact of HSG 209

Considering the impact of HSG 209 in more detail, as already mentioned, the document had encouraged one of the airport operators to develop a practical turnround plan. Another airport operator had used HSG 209 as a direct source of input when developing its safety management system. This airport operator found the guidance useful as a pointer to what responsibilities, policies and procedures should cover. The third airport operator was familiar with the guidance but found it difficult to judge the extent to which it had influenced operations. It is perhaps revealing to note that this operator was carrying out turnround audits 2 or 3 years before HSG 209 was published and so probably felt less need for the guidance. One service provider said that HSG 209 was reflected in its procedures.

Some companies explained that they were addressing health and safety in turnround before HSG 209 and felt that their own manuals were much more practical than the HSE guidance. One airline made the point that the topics in HSG 209 were already covered by the airline, therefore its impact could only be low. At least two other respondents felt the impact of HSG 209 had been limited because it is not mandatory and companies see it as optional.

One of the service provider participants felt that the Civil Aviation document CAP 642 is much better known in the aviation industry compared with HSG 209 and that CAP 642 tends to be the main reference source for this company. Furthermore, that it would have been better to develop a specific section in CAP 642 to deal with health and safety in aircraft turnround rather than create a new guidance document in the form of HSG 209. More people would be receptive to this approach since they are already familiar with CAP 642.

3.7 DIFFICULTIES WITH CONTENT AND APPLICATION OF HSG 209

As Figure 8 shows, the main criticism of the content of HSG 209 was that the guidance is too generic (31%), with all airport operators flagging this as a problem. Related to this was the view that the guidance is not of practical use to the aviation industry (13%) and, as one airline mentioned, the guidance lacks industry input. Difficulties with application which were mentioned included that the guidance is seen as optional and that there is a lack of communication between companies on the key issues.

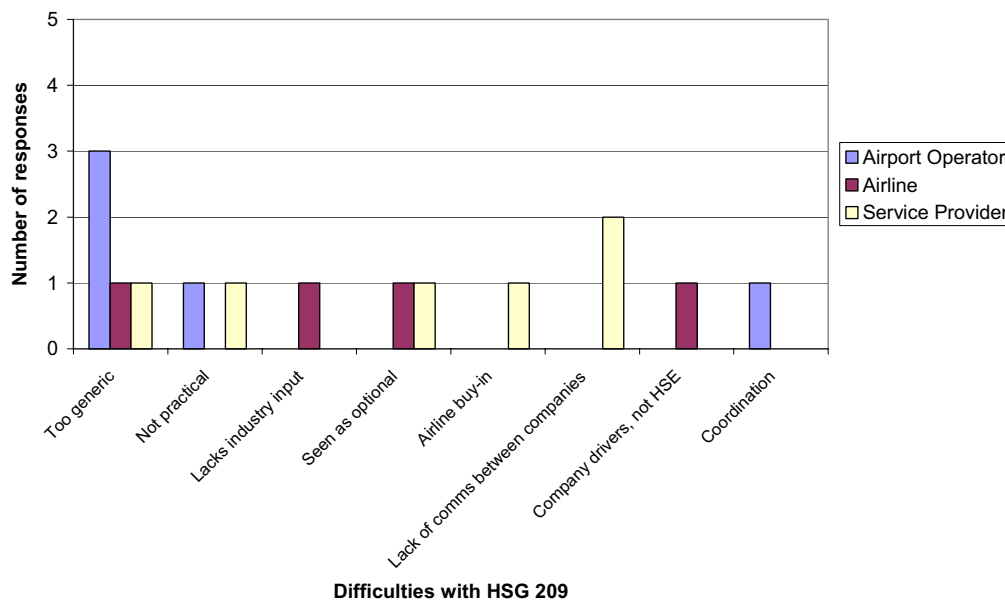


Figure 8 Perceived difficulties with HSG 209

A respondent from one of the airport operators was of the opinion that the greatest challenge to the application of HSG 209 is finding ways to encourage cooperation and coordination between the many different stakeholders who are involved in aircraft turnround. It was felt that HSG 209 does not provide practical advice and that industry must write its own guidance in order to achieve this. Once more airlines have engaged in the process then contractors should follow. When asked about difficulties with HSG 209, one airline representative re-emphasised the point that a lot of work had been done on turnround safety before HSG 209 was published. It was felt that industry drivers are more important for safety improvements than HSE guidance in that people are starting to appreciate that inadequate safety management costs money.

3.8 PERCEIVED GAPS IN SUPPORT / INFORMATION

Participants were asked whether or not they would like more information or support in relation to health and safety in aircraft turnround, from HSE or any other organisation. There was no apparent trend but a variety of responses were received, including those shown below. Some of these are relevant to HSE whereas others may be better addressed by other organisations:

- Early industry input should be made to guidance
- Information on different aircraft types is required
- No further information is required, industry is ahead of HSE
- HSG 209 needs updating
- A business case for improving turnround safety is required
- HSE should endorse industry plans for turnround
- More prescription is required
- Feedback on industry performance is required
- Raise awareness of re-fuelling risks
- Change title of HSG 209 to better describe what the document is intended to provide
- Engagement with the International Air Transport Association (IATA) is required

As a final point, one respondent perhaps neatly summarised industry needs in terms of guidance. The view was the HSE is very helpful for general guidance, such as that on PPE, manual handling, first aid and equipment Regulations etc. which can apply to any industry. However, if aviation specific guidance is required then this needs to come from within the industry itself, not HSE.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

The conclusions from this study are presented in this section, grouped according to the topic areas in the results section:

4.1.1 Awareness of HSG 209

1. Half of the current sample were familiar with the detail of HSG 209, whereas half were either completely unaware of its existence or only vaguely knew of it.
2. It was apparent that there is no need for people at all levels to be aware of HSG 209. It can be just as effective for managers to filter down relevant parts of the guidance to front-line staff.

4.1.2 Hazards and Risks

3. The main risks in aircraft turnround were perceived to be from moving vehicles (88%) and manual handling (56%).
4. Damage to the aircraft emerged as the risk with the highest potential consequence.
5. In total, 50% of the respondents expressed the view that time pressure in aircraft turnround increases risk. The potential consequences of this can be that corners are cut, procedures are compromised and equipment cannot be utilised effectively.

4.1.3 Responsibilities

6. The perceptions of responsibilities for health and safety in aircraft turnround differed according to type of organisation. Airport operators agreed that setting standards was an important responsibility. Airlines flagged monitoring and controlling contractors. Service providers most common perception of responsibilities was that they should cooperate and coordinate.
7. There is a tendency for some companies (across all types of company) to think that the main responsibility for health and safety in aircraft turnround lies with an organisation other than theirs.
8. There are clear differences of opinion on whether or not the industry should adopt an aircraft turnround coordinator. Apart from questions surrounding who should take the role and pay for it, there was also concern that this role might not be able to exert the required authority and that such a role may result in other individuals taking less responsibility.

4.1.4 Current Management Practices

9. The main activities reported to be involved in the management of health and safety in aircraft turnround differed according to type of organisation. Airport operators were more likely to mention airside safety committees and monitoring standards, whereas airlines and service providers were more concerned with risk assessments, procedures and training.
10. Risk assessments are not carried out for turnround as an overall activity, but instead the individual activities involved in turnround are risk assessed.
11. Most service providers have their own turnround procedures but they do look to airlines and airport operators for guidance and instructions.
12. There were some doubts regarding whether a formal turnround plan will work in practice.
13. All service providers said they would report problems and issues in turnround as they arise and several said that they use a near miss system and audit their own safety performance.

4.1.5 Attitudes and Cultural Aspects

14. It is clear that there are differences between airlines in the way in which they approach aircraft turnround which some respondents felt could create problems.
15. One of the most important factors which influences safety in aircraft turnround emerged as commercial pressure. This can potentially result in corners being cut and people not following rules. This situation can be made worse by companies imposing penalties if turnround times are not met.
16. There appears to be a very positive reporting culture in airside operations which is actively encouraged by many of the companies involved.

4.1.6 Impact of HSG 209

17. The most common views on the impact of HSG 209 fell into two main areas; 32% of the sample felt the guidance has had little or no impact whereas 32% felt that it has encouraged greater discussion of turnround safety issues.
18. One airport operator had used HSG 209 to inform the development of a safety management system while the guidance has encouraged another to develop an aircraft turnround plan.
19. There was a feeling that some companies see HSG 209 as being optional. These companies will be slow to act unless guidance becomes mandatory.
20. Some companies pointed out that they were already addressing health and safety in aircraft turnround in more detail than HSG 209 before the guidance was published and so the impact on them could only be low.

21. One company thought that HSG 209 is probably overshadowed by CAP 642 which is much better known in the aviation industry.
22. It is difficult to judge the net impact of HSG 209 because it appears that the guidance has had more of an indirect influence rather than a direct one e.g. encouraging discussion which may have led some companies to take actions which they may otherwise not have.

4.1.7 Difficulties with HSG 209

23. The main criticism of HSG 209 was that the guidance is too generic and not of practical use to the aviation industry.
24. There was a feeling that there should have been more industry input to HSG 209.
25. One of the most significant challenges for the application of HSG 209 was thought to be finding ways to encourage cooperation and coordination between the many companies who are involved.

4.1.8 Perceived Gaps in Support and Information

26. The main input which was thought to be needed from HSE was possible updating of HSG 209, changing the title/better marketing of HSG 209 and endorsement of an industry plan.
27. Some respondents did not feel the need for any more input from HSE on aircraft turnaround, primarily because they thought that industry is ahead of HSE on many of the issues.

4.2 RECOMMENDATIONS

The recommendations from the study are as follows:

1. HSE should consider ways in which it can make it clearer to industry the main purpose of HSG 209, i.e. advice on responsibilities rather than practical management measures.
2. In order to ensure that health and safety obligations are fulfilled, the aviation industry should make sure that proper account is taken of how commercial pressures can influence risk in aircraft turnaround.
3. HSE should re-emphasise the fact that all stakeholders have an important responsibility in ensuring health and safety in aircraft turnaround and that responsibility cannot simply be passed on to another organisation.
4. The aviation industry should consider carrying out risk assessments of aircraft turnaround as an overall activity, as opposed to assessing individual components within turnaround. This should help to identify where interface issues can influence risk and where more cooperation is required.
5. More work should be done on creating a standard approach to aircraft turnaround and encouraging companies, particularly airlines, that this will be of overall benefit.
6. The aviation industry should be encouraged to continue to find ways to improve cooperation and coordination in aircraft turnaround (see Recommendation 4 for example).
7. HSE should be involved in industry initiatives to improve health and safety in aircraft turnaround. HSE should consider endorsing industry plans/standards in order to lend these initiative more authority.



MAIL ORDER

HSE priced and free
publications are
available from:

HSE Books
PO Box 1999
Sudbury
Suffolk CO10 2WA
Tel: 01787 881165
Fax: 01787 313995
Website: www.hsebooks.co.uk

RETAIL

HSE priced publications
are available from booksellers

HEALTH AND SAFETY INFORMATION

HSE Infoline
Tel: 0845 345 0055
Fax: 0845 408 9566
Textphone: 0845 408 9577
e-mail: hse.infoline@natbrit.com
or write to:
HSE Information Services
Caerphilly Business Park
Caerphilly CF83 3GG

HSE website: www.hse.gov.uk

RR 428