A safer future on rail

Signal 109 is not the only issue

By Mike Crowhurst

After the accident at Ladbroke Grove, I am left reflecting on the utter nonsense I have read in the newspapers and heard on radio phone-ins about rail safety.

While thousands are killed on the roads every year, few people give up car travel even after the worst motorway pile-up.

Nevertheless passengers do have concerns which should be addressed by the various inquiries now under way.

Some facts emerged in the harrowing accounts of the survivors in the first few hours but then got lost in all the corporate damage limitation which ensued.

The one thing which distinguished this accident from Southall, Clapham and almost all others since Taunton over 20 years ago, and was a major factor in the high casualty figure, was fire.

We are all too familiar with the frequency of fire in road crashes but have become almost complacent about the risk of fire on the railway.

Why did fire break out in this case but not in most other recent accidents, and how was it able to take hold so quickly? Some survivors suggested a spark from the overhead lines might have been responsible but I suspect the cause will turn out to be more prosaic, such as metal-to-metal friction.

Any question of a hazard arising from running diesel trains under electric wires needs to be laid to rest, because this practice will be widespread for years – given the slow progress in this country on electrification.

Next what struck me from the survivors' stories was the difficulty many had in escaping from carriages. Lack of means to break open windows, the fact that door locks (internal and external) had all failed closed, the position of fire extinguishers in the lobbies rather than the seating areas and of course poor visibility because of the smoke were mentioned.

More discussion centred on the pros and cons of central door locking which, rather like seat belts in cars, is a lifesaver in more cases than not, and just occasionally presents a hazard.

As so often, the conflicting requirements of safety, security and ease of escape must be balanced.

This is one of the most unpalatable calculations about numbers of lives saved which are so often criticised but have to be made.

Even so, I wonder whether it would not be possible to devise a way of making all central locking systems fail open when the circuitry is ruptured by some trauma.
Likewise a rethink of escape routes seems called for , especially the means of opening windows, and the location of fire extinguishers.

Other ideas that seem worth investigating include hatches in the carriage roof which can be opened by rescuers when the carriage is on its side, and floor-level lighting such as is installed in aircraft for evacuation in smoke. Meantime perhaps we should follow the example of some survivors, and carry our own hammers! One idea which did not impress me was seat belts in trains. Seat belts are viable in cars and other road vehicles because people do not walk about during their journey. On aircraft one is expected to belt up on take-off, landing and when pilots anticipate turbulence. Comparable situations do not arise on trains.

A more serious way of protecting passengers in a crash is to revert to previous practice of using steel rather than aluminium to construct rolling stock which has the strength to survive more crashes and protect the occupants.

Aluminium is lighter so saves fuel and hence costs. Perhaps this is one area where the commercial pressures of privatisation have been allowed to undermine safety considerations.

The first coach of the Thames Turbo was aluminium. In contrast, the strength of late-BR steel stock such as the inter-city 125s has been well-proven.

There have been suggestions that the Great Western coaches were "cut and splice" rebuilds from the Southall crash damaged vehicles. I hope there has not been the equivalent of the more disreputable motor trade practice of welding together halves of vehicles or anything else which would compromise their structural strength.

One final point on the rescue. A survivor was quoted that he thought the rescue had been delayed because of difficulty in gaining access through the adjoining Eurostar depot where permission to breach the security fence was refused. If this was the case, an urgent rethink of security considerations is needed.

Now to the causes of the crash. The immediate trigger was the Thames Turbo going through a red light. But detailed criticism of the signalling and track layout suggests that this was an accident waiting to happen.

Perhaps the most alarming revelation on the layout and signalling front was that the whole redesign of the last two-mile approach to Paddington had been designed on the assumption that Automatic Train Protection would be operational on all services using the route.

As we know, this was not implemented despite pledges by Tory transport ministers after the Clapham crash in 1988.

Which brings us to the issue of ATP versus the Train Protection and Warning System which the present Government wants implemented as soon as possible.

Here again, emotive calculations about the value of lives saved received much coverage. The proper way to look at these calculations is to recognise that in practice there is never a blank cheque. So given a fixed sum of money, how should it be spent to maximise the number of lives saved?

Of course, a major disaster alters the balance of such calculations anyway, but it is never true that money is no object, despite what politicians may say.

They are under immense pressure to make such promises in the emotional aftermath of disasters but it was not true after Clapham and it will not be true today. The Treasury mandarins will see to that!

In John Prescott's case, the effect was in any case rather spoilt by his adding that he foresaw the money coming from within the industry, not the Government.

The likeliest outcome is the gradual introduction of ATP on the main high-speed routes and the busiest commuter lines while the Train Protection and Warning System is brought in for the remainder of the network as soon as possible.

The debate may be overtaken by new transmission-based systems but if ATP had gone ahead after Clapham, it would have cost no more than the sum spent on consultants and reorganisation during privatisation and would have been operational now.

ATP is not entirely without its problems and it might be that more lives would be saved by spending the money on strong steel rolling stock and other protective and escape measures.

ATP on the 125 train would have prevented the Southall crash but would have had to be installed on both the 125 and the Turbo to have prevented the Ladbroke Grove disaster.

It appears that one of the problems with ATP is that it is too effective. It stops the train too often. Not only does this undermine the driver's confidence in the device, it leads to unnecessary delays which affect other services and other operators.

Given the penalty system, this costs the operator money and is thus seen as a commercial liability by some operators.

This is especially the case when other operators are not required to implement the same system.

Inevitably discussion has frequently turned to the role of privatisation. Commercial pressures may have contributed to the reluctance to operate ATP once installed, to build aluminium rather than steel trains and to shorten driver training.

The fragmentation of the industry also seems likely to have made it more difficult to resolve known problems such as signal visibility quickly. It undoubtedly leads to a blame culture and to corporate defensiveness which makes it difficult to identify and rectify causes of accidents quickly.

It has led to public disquiet about aspects of safety being in the hands of a commercially oriented organisation such as Railtrack.

The fragmented structure of the railway has also led to another unfortunate effect - the handling of temporary service arrangements. The solution seems to be to dump passengers on to buses. After Southall, except for the High Wycombe line, the only alternative route was into Waterloo from Reading. Additional services were provided on this route.

After Ladbroke Grove, passengers seem to have been decanted on to buses and Tubes at Ealing to the extent that conditions at Ealing were looking unsafe.

There was one very obvious alternative route available – into St Pancras via the Acton-Cricklewood link. Why was it not used? In the past, every effort would have been made to provide as complete a service as possible. In the immediate future, some change is urgently needed in the structure of the safety regime.

Earlier this year the Government put forward a proposal for a new transport safety authority, responsible for safety and accident investigation on all modes of public transport, modelled on the air and maritime investigation boards. We in RDS welcomed the idea which needs urgent implementation.

We also want to see more openness and speed in publication of the results of accident investigations and less hiding behind legal procedures or commercial confidentiality. We look to the freedom of information legislation for this but latest indications are not encouraging.

There are some things the Government should not be doing, following the disaster.

Is this really the moment to be fragmenting the London Underground and handing a third of it over to Railtrack, without even a promise to build CrossRail in exchange?

Railway privatisation has neither saved the Government money nor brought inceased investment.

Finally Deputy Prime Minister John Prescott has the ability and commitment to sort out the shambles of this country's transport policies. If there are problem areas in government, they are in 10 Downing Street and the Treasury.

Our railways are still the safest mode of transport but they are falling behind comparable systems on the Continent. John Prescott is the best man to stop **the rot.**