



## *SPAD numbers now level, following increase in February & March.*

### Introduction

This is a four-page summary of the category A signal passed at danger (SPAD) and Train Protection and Warning System (TPWS) activity report for January to June 2008. For further information please refer to [www.opsweb.co.uk](http://www.opsweb.co.uk). All Rail Safety and Standards Board (RSSB) publications are freely downloadable from the RSSB website at [www.rssb.co.uk](http://www.rssb.co.uk).

### Key Facts: January - June 2008

<b>Overall:</b>	170 category A SPADs so far during 2008, which is 33 more than at the same point in 2007. 351 SPADs in the 12-month period ended June 2008, compared to 326 the previous year.
<b>Risk ranking:</b>	45 SPADs were risk ranked 16 or above (eight of which were risk ranked 20+). This compares to 39 in 2007 (of which 11 were risk ranked 20+).
<b>TPWS:</b>	37 TPWS interventions (TPWS applies the brakes before, or in the absence of, driver action), none of which was a 'reset and continue' event. 40 TPWS activations (the driver initiates braking before the system). Four where the TPWS involvement is unknown.
<b>Multi-SPADs:</b>	35 SPADs by multi-SPAD drivers (two or more since qualifying as a driver, inc. this event), 18 of which register within the current five-year period. 30 SPADs at multi-SPAD signals (two or more within the current five-year period). Three of these were at 'Top 22' signals and seven at 'IN' signals

### All category A SPADs

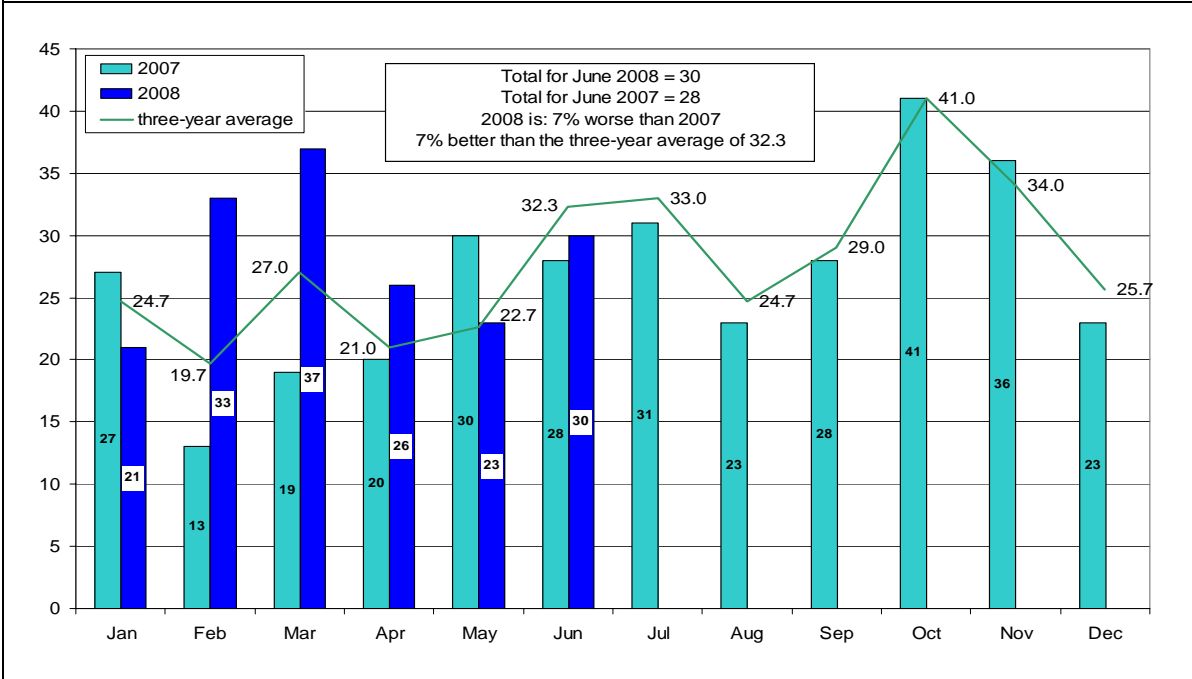
Chart 1 (on the following page) shows that there were 30 SPADs in June 2008. This is two more than for June 2007, which is 7% worse. However, it is 7% better than the three-year average of 32.3. The total for the year to date (January to June) 2008 is 170, which compares to 137 for the same period in 2007, representing an increase of 24%.

Category A SPAD numbers during February and March were higher than usual, with April showing a slight increase. The figures for May and June, though, are more in keeping with normal expectations.

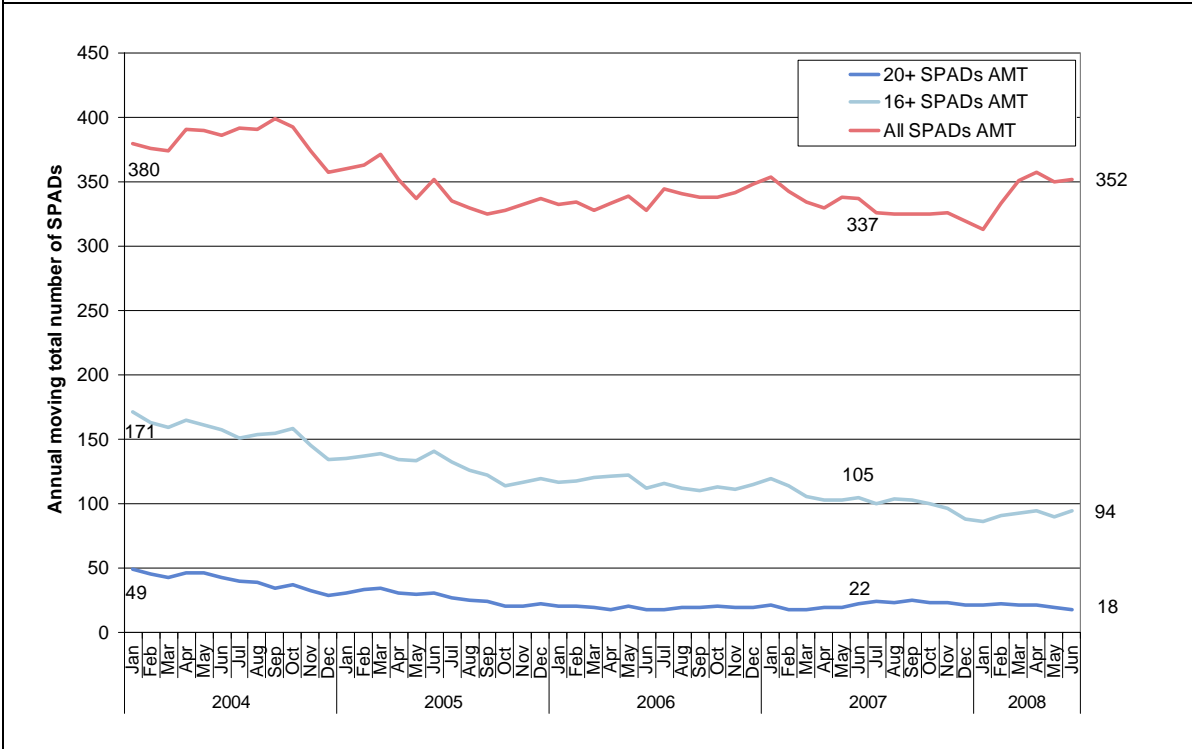
### Overall comparison of annual moving totals

Chart 2 (also on the following page) shows that the annual moving total trend-line for All SPADs, which showed a sharp increase at the start of 2008, has now levelled off. The trend-line for SPADs risk ranked 16+ reflects this, but only marginally, whereas that for those ranked 20+ has remained generally level. This indicates that the increase in SPADs in early 2008 was predominantly from low-risk events.

**Chart 1 All category A SPADs – monthly variation**

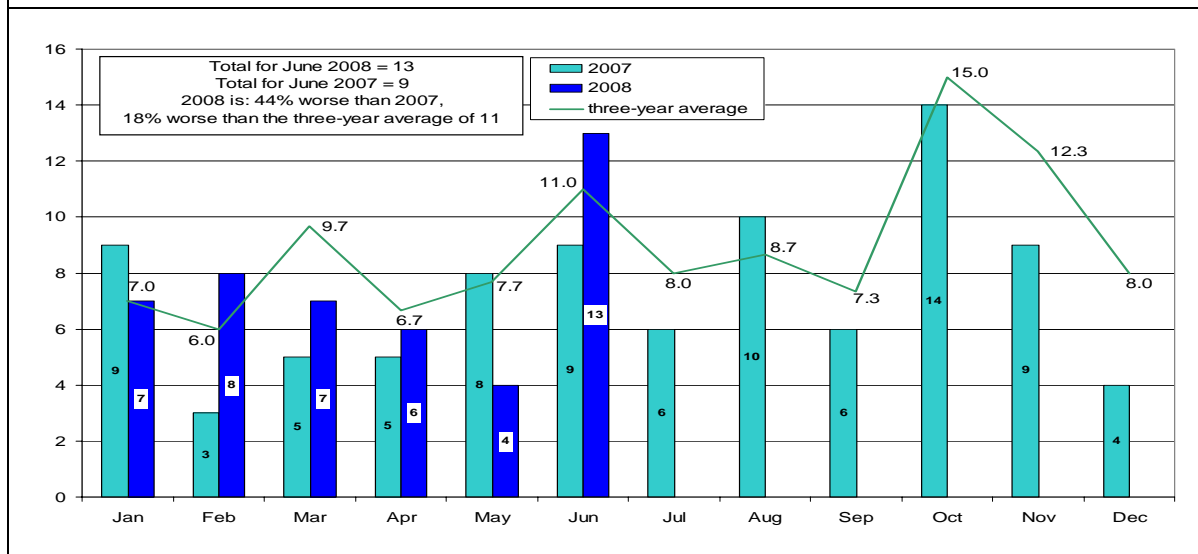


**Chart 2 Annual moving totals – All SPADs, 16+ and 20+**



## SPADs risk ranked 16+

**Chart 3 SPADs with a risk ranking of 16+**



There were 13 SPADs with a risk ranking of 16+ during June, two of which were risk ranked 20+. The total number of 16+ SPADs for January to June was 45 (eight of which were risk ranked 20+). This compares to 39 in 2007 (of which 11 were risk ranked 20+).

## SPAD performance by route

Chart 3 shows the average annual SPAD rate for each route, for both 'all SPADs' and 16+ SPADs, and makes a comparison with June last year. The decreases in 16+ SPADs shown by Anglia (69%) and Sussex (86%) are statistically significant at the 90% confidence level.

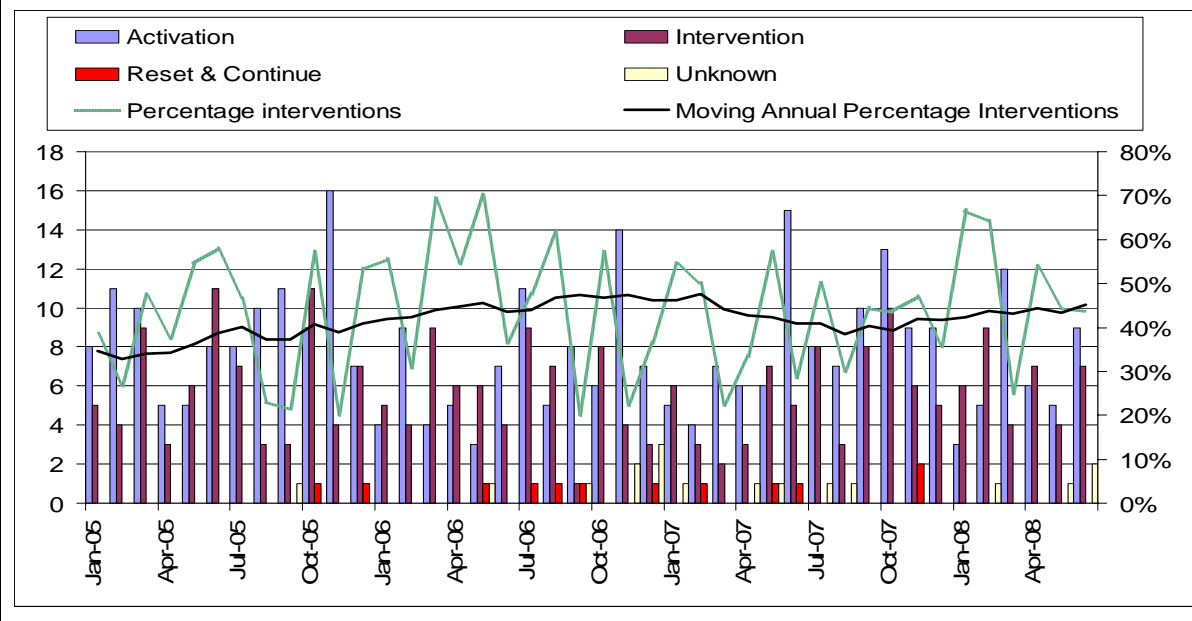
**Chart 4 SPAD performance by route**

AMA	Route	Average annual rate June 2007	Average annual rate June 2008	corresponding difference in annual total	%age change in annual rate	Annual change significant?
All SPADs	Anglia	35	33	-2	-6%	-
	Kent	35	38	3	9%	-
	London North Eastern	61	66	5	8%	-
	London North Western	59	65	6	10%	-
	Midland and Continental	0	3	3	-	-
	Scotland	42	33	-9	-21%	-
	Sussex	19	15	-4	-21%	-
	Wessex	31	37	6	19%	-
	Western	55	62	7	13%	-
16+ SPADs	Anglia	13	4	-9	-69%	Yes
	Kent	8	11	3	38%	-
	London North Eastern	14	15	1	7%	-
	London North Western	22	15	-7	-32%	-
	Midland and Continental	0	0	0	-	-
	Scotland	12	11	-1	-8%	-
	Sussex	7	1	-6	-86%	Yes
	Wessex	13	15	2	15%	-
Western	16	22	6	38%	-	

## TPWS brake demands at category A SPADs

Chart 5 shows the numbers of TPWS activations and interventions at category A SPADs. From this it may be seen that the monthly percentage varies considerably, month on month. The trend line, however, does show a slight upwards trend over time, although there was a slight decrease between February and August 2007.

**Chart 5 TPWS brake demands at category A SPADs**



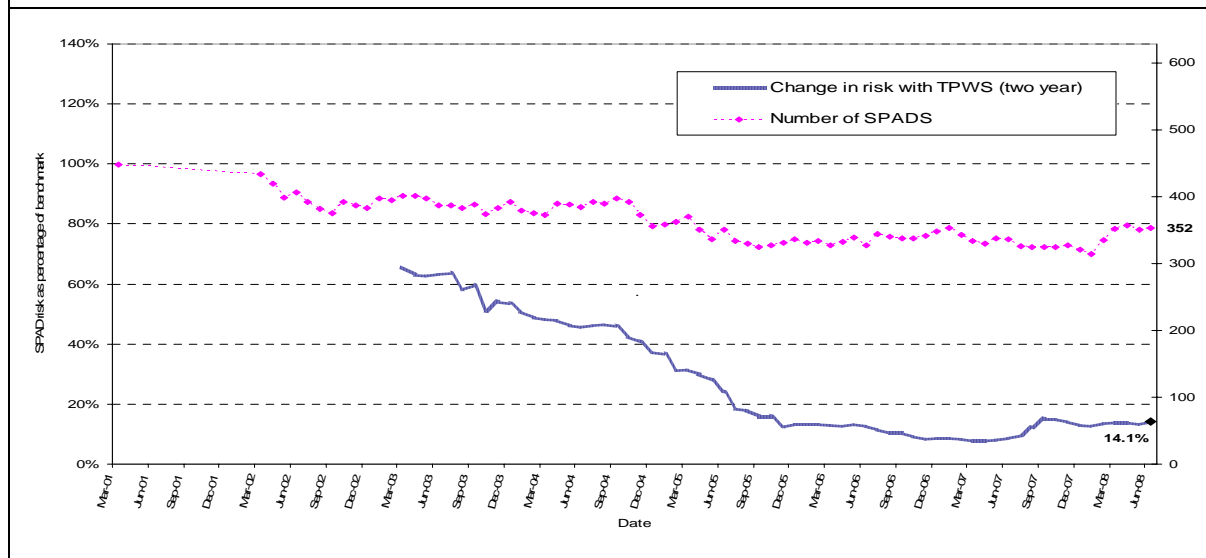
**TPWS ‘reset and continue’ SPADs**

There were no ‘reset & continue’ incidents during January to June 2008. At the end of this period the proportion of the last 50 interventions which were ‘reset and continue’ events stood at 4%.

**SPAD risk**

Chart 6 shows that as at June 2008 SPAD risk stood at 14.1% of the March 2001 benchmark.

**Chart 6 SPAD risk as at 30 June 2008**



**Further information:**

Please refer to [www.opsweb.co.uk](http://www.opsweb.co.uk) for further data. The site contains a spreadsheet containing every SPAD event since 1998, and is updated monthly.

If you would like to discuss any of the material contained in the SPAD report, please contact: Roger Badger, Safety Intelligence Analyst, [roger.badger@rssb.co.uk](mailto:roger.badger@rssb.co.uk)