

#### **SPEAKER'S BRIEF – FREIGHT**

The Level 2 Train Planning workshop is designed to introduce students to the manual training planning skills used before the introduction of computer technology. The aim is that by the end of the 3 days, they can turn a Bid into a validated schedule and prepare a hand-drawn timetable graph. The aim of this spot is to challenge the notion that passenger train always come first and that freight fills in the gaps. Also introduce students to Load Tables and the use of RT 3973 forms to permit the movement of Out of Gauge Loads, large containers, heavy axle-weight vehicles and Nuclear Flasks. There is an opportunity to sell 'freight' to the students!

This is a 60 minute slot (although this could be extended to 80 mins if the presenter believes they have a range of materials with which to engage the delegates. This is clearly not a 'chalk and talk' session. For example talking through the load tables for a simple service then asking them in pairs to find the maximum trailing load for a quite complex journey. Similarly asking if a particular train can be diverted off its booked (RT 3973) route.

Nominally this slot is the first session on the third day; by this time the delegates will have planned a complex passenger railway service. After your session they will go on to plan a pair of class 4 freight trains.



These are the current slides:

**Network Rail**

*RAILWAY INDUSTRY  
TRAIN PLANNING  
LEVEL 2 TRAINING*

Module 10  
Freight Operators & Network Rail

**Network Rail**

What is Freight?

- B – BIG
- H – HEAVY
- S – SLOW

**Network Rail**

What does Freight mean for Train Planners?

- Variety of wagon types, size and shape
- Therefore, must have different dimensions overall
- Carry different commodities
- To a lesser extent, but not so less important, is a variety of locomotive type (primarily Class 66, 57, 60, 47, 37) plus electric (90/92)

**Network Rail**

The Freight Package Overall

- Something that is heavier is slower (consider how we need to develop a timetable)
- Something that is slower will get caught up by something faster (consider headways)
- It could need somewhere to 'get out of way' to let faster things past (utilisation of available asset, loops)
- It could be Out of Gauge (3973)

**Network Rail**

TIME is MONEY

- And it could be mine if we get it wrong, so let's talk to each other, and help each other get it right.

Feel free to suggest changes that would better reflect your message.



These are the Load Tables currently used

## RAILTRACK GREAT WESTERN

### FREIGHT TRAIN LOADS BOOK SECTION 'A' - AUTHORISED LOADS

**(COMMENCING MARCH 2002)**

This information is train specific. All trains in the WTT have an entry which is **ONLY** valid via the WTT route unless specified.  
All regular STP trains also have an entry but will be shown in the remarks column which route applies.  
Other authorised loads will be issued in Railtrack's Freight Train Notice, a copy of which is sent to all TOPS Offices.

These loads must **NOT** be used for any other train on all or part of the same route.  
Note all engineers traffic are based on hauling two axled wagons with a minimum of 34.5t couplings unless specified.

The last two pages are left blank, this is to enable written amendments to be inserted when advised by Railtrack wire.

For coal flows to / from Aberthaw, Didcot, Fifoots & Midlands Power Stations see page A 2, A3 & A4  
(Page A4 for bogie wagons)

RAILTRACK GREAT WESTERN FREIGHT TRAIN LOADS BOOK RE – ISSUED MARCH 2002

A 2

FROM	RA	LL (SLU)	No. of Locos	37/0	37/7	56 58	60	66	REMARKS
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**TO ABERTHAW PS** **NUMBER OF MGR WAGONS**

Avonmouth Nat. Power	7	60	1 2	19 32	24 36#	36#	36#	36#	# - Clear runs, Hallen Marsh Jn to Patchway Jn & through Severn Tnl.
Cwmbargoed / Newport Docks	6	52	1 2	20 36	20 36	36	36	36	
Cwmgwrach / Onllwyn / Parc Slip	6	52	1 2	20 34c	24a 34c	34c	34c	34c	a - 37/4 or /5 c - 36 MGR from Cwmgwrach
Portbury Docks	8	60	1 2	19 32	24 36#	27#	36#	36#	# - Clear run through Severn Tunnel.
Tower Colly	6	52	1 2	19 36		29	36	36	

**TO FIFOOT POINT PS** **NUMBER OF MGR WAGONS**

Avonmouth Nat. Power	7	60	1 2	19 32	24 36#	36#	36#	36#	# - Clear runs, Hallen Marsh Jn to Patchway Jn & through Severn Tnl.
Cwmbargoed / Newport Docks	6	52	1 2	20 36	20 36	36	36	36	
Cwmgwrach / Onllwyn / Parc Slip	6	52	1 2	20 34c	24a 34ac	34c	34c	34c	a - 37/4 or /5 c - 36 MGR from Cwmgwrach
Portbury Docks	6	60	1 2	19 32	24 36#	27#	36#	36#	# - Clear run through Severn Tunnel.
Tower Colly	6	52	1 2	19 36		29	36	36	

LOADS SHOWN FOR NUMBERS OF MGR'S WAGONS (47t GLW) LOADED TO POWER STATION AND EMPTY UPON RETURN.

FOR ALL OTHER FLOWS WHICH CONVEY MGR WAGONS PLEASE SEE SEPARATE ENTRY IN LOADS BOOK.

LEVEL 2 TRAIN PLANNING

RAILTRACK GREAT WESTERN FREIGHT TRAIN LOADS BOOK RE – ISSUED MARCH 2002

A 3

FROM	RA	LL (SLU)	No. of Locos	37/0	37/7	56 58	60	66	REMARKS
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**TO DIDCOT PS NUMBER OF MGR WAGONS**

Avonmouth Nat. Power	7	65	1 2	44		32	45	42	via Hullavington or Box or Newbury.
Daw Mill / Toton	8	65 55	1 1			45 27	45 38	45 37	Assisted Landor St (BL) Unassisted Landor St
Parc Slip	6	52	1 2	36	36	36a	36	36	via SWML & Hullavington or Box. a - 32 if via Box.
Portbury Docks	8	65	1 2			32	44	42	via Bath & Chippenham OR Bath. Bradford Jn, Berks & Hants.
Portbury Docks	8	65	1 2			27	36	36	via Filton Jn, Bristol PW, Hullavington & Swindon

**TO TOTON / RUGELEY / IRONBRIDGE NUMBER OF MGR WAGONS**

Avonmouth Nat. Power	7	52	1 2			32	36	36	via Hullavington or Box & Heyford.
Avonmouth Nat. Power	7	52	1 2			32	36	33	via Charfield, Cheltenham & Barnt Green Assisted rear by 2 x 37/0 or Cl.60
Portbury Docks	8	52	1 2			27	36	33	Via Bristol PW, Cheltenham & Barnt Green. Assisted rear by 2 x 37/0 or Cl.60
Portbury Docks	8	65	1 2			32	36	36	via Bath, Chippenham, Swindon, Oxford & Heyford
Portbury Docks	8	65	1 2			27	36	36	via Filton Jn, Bristol PW, Hullavington, Swindon, Oxford & Heyford

LOADS SHOWN FOR NUMBERS OF MGR'S WAGONS (47t GLW) LOADED TO POWER STATION AND EMPTY UPON RETURN.

RAILTRACK GREAT WESTERN FREIGHT TRAIN LOADS BOOK RE – ISSUED MARCH 2002

A 4

FROM	RA	LL (SLU)	No. of Locos	37/0	37/7	56 58	60	66	REMARKS
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**TO ABERTHAW PS NUMBER OF HTA / HHA / JMA WAGONS**

Avonmouth Nat. Power	7	60	1 2			11	20	20	
Cwmbargoed / Tower Colly	6	60	1 2			16	21	19	
Cwmgwrach / Onllwyn / Parc Slip	6	60	1 2			16	21	19	
Portbury Docks	8	65	1			11	20	19	

**TO DIDCOT PS NUMBER OF HTA / HHA / JMA WAGONS**

Avonmouth Nat. Power	7	65	1 2			16	23	23	via Hullavington or Box or Newbury.
Daw Mill / Toton	8	65	1 1						
Parc Slip	6	65	1 2						
Portbury Docks	8	65	1			17	23	23	via Bath & Chippenham OR Bath. Bradford Jn, Berks & Hants.
Portbury Docks	8	65	1			13	20	19	via Filton Jn, Bristol PW, Hullavington & Swindon

LOADS SHOWN FOR NUMBERS OF MGR'S WAGONS (102t GLW) LOADED TO POWER STATION AND EMPTY UPON RETURN.

FOR ALL OTHER FLOWS WHICH CONVEY MGR WAGONS PLEASE SEE SEPARATE ENTRY IN LOADS BOOK.





LEVEL 2 TRAIN PLANNING

RAILTRACK GREAT WESTERN ZONE FREIGHT TRAIN LOADS BOOK RE - ISSUED MARCH 2002

A 5

FROM	TO	TRAFFIC	RA	LL	No. of Loco	GROSS LOAD INCLUDING LOCOMOTIVE WEIGHT						REMARKS	
						37/0 (105)	37/7 (120)	47/0 (120)	56 (130)	58 (130)	59 / 60 (130)		66 (130)
Aberthaw PS	Cardiff Tidal	EWS / Oil	7	60	1	420	425a		445	445	445#	445#	# - Cl.60. a - 37/4 or /5
	Llanwern SW	EWS / Oil	7	60	1	420	425a		445	445	445#	445#	# - Cl.60. a - 37/4 or /5
Acton TC	Allington	EWS / Oil	8	60	1		1250	1450	1660	1660	2575	2190*	b - assisted Acton Bank. * bogie wagons
	Angerstein Wharf	EWS / Stone	8	52	1		1250		1660\$	1660\$	1980#	1980*	\$ - 2 axled wagons. # - Cl60 * - Bogie wagons.
	Ardingly	EWS / Stone	8	52	1		1365*				1965*	1965*	* - Bogie wagons.
	Avonmouth	EWS / Coal	7	70	1	1105	1120		1130	1130	1130#	1130	# - Cl. 60
	Brentford Tn	EWS / Stone	8	60	1	1435		2260	2275	2275	2275#	2275	
	Crawley FY	EWS / Stone	8	53	1		1365		1660	1660	2270	1980	
	Cliffe Hill	EWS / Stone	8	50	1			660	840	840	1200#		2 axled wagons. # - Cl60
	Cliffe / Grain / Hoo Jn	EWS / Stone	7	60	1		1250	1150	1240	1240	2000#		Bogie wagons # - Cl60
	Dagenham Dock	EWS / Stone	8	70	1						3190		Bogie wagons
	Godstone	EWS / Stone	8	60	1	1415	1660		1645	1580	2680	2680	Bogie wagons
	Harlow Mill	EWS / Stone	8	45	1	1070		1230	1660	1660	2170		
	Hayes Tar	EWS / Stone	8	54	1			1545	1970	1970	2170#	2170	
	Hothfield	EWS / Stone	8	44	1			1000\$	1355*	1355*	1980#*	1980*	\$ - 2 axled wagons. # - Cl60 * - Bogie wagons.
	Lester Humb	EWS / Stone	8	60	1			660	840	840	1200#	1200	
	Old Oak Common	EWS / Eng	8	70	1	1070	1070	1560					
				2	2140	2170							
Purfleet	EWS / Stone	8	68	1		1070	1230	1660	1660	3190*	2000		* - Bogie wagons
				2		2250		3220	3220				

LOADA00

31/08/2004

RAILTRACK GREAT WESTERN MAXIMUM LOADS TABLES RE - ISSUED DECEMBER 2000

B. 1

RAILTRACK GREAT WESTERN

FREIGHT TRAIN LOADS BOOK SECTION 'B' - MAXIMUM LOADS

INDEX

Paddington to Fishguard Hbr (inc. W.Wales branch lines)	B. 02	Severn Beach, Barrow Road Branches	B. 10
Fishguard Hbr to Paddington (inc. W.Wales branch lines)	B. 03	Nth Somerset Jn to Dr Days Jn - Both directions	B. 10
Cardiff Central to Bridgend - both directions (Vale of Glamorgan)	B. 04	Nth Somerset Jn to Bristol West - Both directions (via St Phillips Msh)	B. 10
Reading to Taunton - both directions (via Berks & Hants)	B. 04	Reading to Earley - Both directions (inc. Platforms 4A /B)	B. 11
Swindon to Penzance - both directions (via Bath Spa inc Porthead)	B. 05	Old Oak West / Hanwell to Northolt - Both directions	B. 11
Didcot Parkway to Heyford - Both directions	B. 06	Acton Bank & Bicester Branch - Both directions	B. 11
Bristol Parkway to Barnet Green	B. 06	London / Reading Branches - Both directions	B. 12
Bromsgrove to Barnet Green (assisted loads)	B. 06	Kennington to Morris Cowley - Both directions	B. 13
Barnet Green to Bristol PW	B. 07	Sudbrook, Machen Qry, Ebbw Vale SW, Uskmoth & Dock Branches	B. 13
Sharpness, Tytherington & Westerleigh Branches	B. 07	Cardiff Valley Area	B. 13 - B. 15
Swindon to Severn Tnl Jn - Both directions (via Gloucester)	B. 07	Cardiff Central Area	B. 15 - B. 16
Chippenham / Bath Spa to Warminster - Both directions	B. 08	Maesteg to Bridgend / Port Talbot Docks - Both directions	B. 16
Oxford to Hereford - Both directions (via Worcester)	B. 08	Swansea Area	B. 16 - B.17
Abbotswood Jn to Worcester SH - Both directions	B. 09	Central Wales Line - Both directions	B. 17
Worcester SH to Hartlebury / Bromsgrove - Both directions	B. 09	Mendip Quarries	B. 17
Newport to Sutton Bridge Jn - Both directions	B. 09	Exeter to Meldon Qry, Barnstaple & Pinhoe - Both directions	B. 18
Bristol TM to Patchway / Bristol PW - Both directions	B. 09	Heathfield & Paignton Branches	B. 18
Patchway / Bristol PW to Avonmouth BBHT - Both directions	B. 10	Plymouth Area / Looe Branch	B. 19
Filton Jn / Patchway to Filton West Jn - Both directions	B. 10	Cornish Branches	B. 20

THE LOADS SHOWN ABOVE APPLY TO WAGONS WITH 34.5T COUPLINGS STRENGTHS. IF ANY WAGON IN TRAIN FORMATION HAS 23T COUPLINGS, THEN THE ABOVE FIGURE MUST BE REDUCED BY 35 %



LEVEL 2 TRAIN PLANNING

RAILTRACK GREAT WESTERN MAXIMUM LOADS TABLES RE - ISSUED DECEMBER 2000

B. 2

FROM	TO	RA	LL	08	MAXIMUM LOAD EXCLUDING LOCOMOTIVE WEIGHT										REMARKS
					20	31	37/0	37/4	37/7	47/0	56 / 58	59 / 60	66		
PADDINGTON TO FISHGUARD HARBOUR (INCLUDING MILFORD HAVEN & PEMBROKE DOCK)															
					(50)	(75)	(110)	(105)	(107)	(120)	(120)	(130)	(130)	(130)	
Paddington	Acton Main Line	8	80	940	1555	1215	2120	2255	2485	1955	2470	3000	3000		
Acton Main Line	Didcot Parkway	8	80	1465	2155	1940	2940	3000	3000	3000	3000	3000	3000	inc. Acton TC	
Didcot Parkway	Bristol Parkway	8	80	1080	1660	1330	2270	2410	2660	2185	2645	3000	3000	via Hullavington	
Bristol Parkway	Severn Tnl Jn	8	60	380	670	515	910	970	1075	885	1060	1475	1475		
Severn Tnl Jn	Pengam Jn	8	70	910	1500	1180	2045	2175	2400	1905	2385	3000	3000		
Pengam Jn	Bridgend	8	60	420	830	570	1135	1205	1335	975	1320	2300	1945	via Pontyclun	
Bridgend	Margam Moors Jn	8	60	1720	2525	2285	3000	3000	3000	3000	3000	3000	3000		
Margam Moors Jn	Llandeilo Jn	8	70	380	800	515	1030	1310	1325	885	1435	1940	1940	Fellin Fran, Not Burrows	
Margam Moors Jn	Llandeilo Jn	7	54	210	465	280	595	780	770	510	945	1330	1065	via Landore	
Llandeilo Jn	Carmarthen Jn	8	60	690	1015	890	1385	1475	1630	1505	1615	2165	2165		
Carmarthen Jn	Whitland	8	60	635	935	820	1275	1360	1500	1385	1485	2005	2005		
Whitland	Clarbeston Road	8	60	425	890	575	1145	1415	1470	980	1550	2080	1960		
Clarbeston Road	Fishguard Harbour	7	60	455	950	615	1215	1405	1550	1040	1540		2070		
Clarbeston Road	Milford Haven	8	60	315	675	425	865	1125	1115	745	1260	1725	1510	inc. Oil Terminals	
Whitland	Pembroke Dock	6	32	200	445	265	570	740	740	490	915	1295	1025		

THE LOADS SHOWN ABOVE APPLY TO WAGONS WITH 34.5T COUPLINGS STRENGTHS. IF ANY WAGON IN TRAIN FORMATION HAS 23T COUPLINGS, THEN THE ABOVE FIGURE MUST BE REDUCED BY 35 %

RAILTRACK GREAT WESTERN MAXIMUM LOADS TABLES RE - ISSUED DECEMBER 2000

B. 3

FROM	TO	RA	LL	08	MAXIMUM LOAD EXCLUDING LOCOMOTIVE WEIGHT										REMARKS
					20	31	37/0	37/4	37/7	47/0	56 / 58	59 / 60	66		
DIDCOT PARKWAY TO HEYFORD															
					(50)	(75)	(110)	(105)	(107)	(120)	(120)	(130)	(130)	(130)	
Didcot Parkway	Heyford	8	80*	715	1275	950	1740	1850	2040	1745	2025	2675	2675	* 63 D.C.L	
Heyford	Didcot Parkway	8	80*	670	1185	895	1615	1715	1895	1475	1880	2495	2495	* 59 D.C.L	
BRISTOL PARKWAY TO BARNT GREEN VIA CHARFIELD															
Bristol PVV	Barnwood Jn	8	70	935	1550	1205	2115	2245	2480	1945	2465	3000	3000	inc. Gloucester Station	
Barnwood Jn	Bromsgrove	8	70	700	1035	910	1410	1500	1655	1530	1645	2200	2200		
Bromsgrove	Barn Green	8	70	140	325	260	490	590	600	530	715	1045	770	unassisted	

FROM	TO	RA	LL	08	MAXIMUM LOAD EXCLUDING LOCOMOTIVE WEIGHT										REMARKS
					20	31	37/0	37/4	37/7	47/0	56 / 58	59 / 60	66		
BROMSGROVE TO BARNT GREEN (ASSISTED LOADS)															
					(50)	(75)	(110)	(105)	(107)	(120)	(120)	(130)	(130)	(130)	
Bromsgrove	Barn Green	8	70		730	600	980	920	925	815	1145	1380	1195	assisted rear by Cl. 37/0	
Bromsgrove	Barn Green	8	70		1170	860	1360	1360	1370	1120	1545	1750	1590	assisted rear by 2 x 37/0 or 60	
Bromsgrove	Barn Green	8	70		985	820	1195	1155	1165	1040	1410	1540	1540	assisted rear by Cl. 66	

THE LOADS SHOWN ABOVE APPLY TO WAGONS WITH 34.5T COUPLINGS STRENGTHS. IF ANY WAGON IN TRAIN FORMATION HAS 23T COUPLINGS, THEN THE ABOVE FIGURE MUST BE REDUCED BY 35 %





