

# FROM THE DOLDRUMS AND BACK UP AGAIN

It has been previously well documented that the all-time low for the Underground was in 1982 with its lowest-ever number of passengers carried on the network as it had been for some years. As a result, the amount of rolling stock was pruned to suit the prevailing conditions. However, this was to be very short-sighted with new and stock required before long. But to suddenly acquire extra rolling stock at short notice is impossible and it took several years to regain some of the ground lost. For London Transport (as it was still then), it began in 1981.

The following notes and tables chart the story of the tube stock fall and rise, stage by stage – it was 1998 before anything like normality was restored but even then the peak services on many lines were still not back up to their former levels. On the other hand, off peak travel rose dramatically with those services increased far beyond what had been seen before on both Mondays to Fridays and at weekends, the latter partly due to longer shopping hours on Saturdays and Sunday trading being allowed on a regular basis<sup>1</sup>.

The last major tube stock programme to be completed before 1981 was the introduction of the 1973 Tube Stock on the Piccadilly Line, which took from 1975 until 1979 and saw the 1956/59 Tube Stock transferred to the Northern Line. In 1980 the rolling stock allocations were as shown opposite:

Things had then become static, but not for long. As will be seen, the changes to rolling stock allocations were many and varied.

However, deep tube OPO was still seven years off (apart from the Victoria Line) and it was another four before it began on the sub-surface lines.

Bakerloo	36x1938	
Central	2x1960	ATO
	87½x1962	
	1x1967	ATO
Jubilee	33x1972	MkII
Northern	3x1956	
	75½x1959	
	½x1962	
	30x1972	MkI
Piccadilly	86½x1973	Excludes 2x3 ETT
Victoria	39x1967	ATO

## 1. SERVICE REDUCTIONS

1938 out of service Bakerloo Line:

10205+11297	SE-WC	15.11.81
10195+11164	SE-RU	17.02.82
10261+11240	SE-RU	02.03.82
10267+11032	SE-NN	16.03.82
10143+11174	SE-NN	16.03.82

Codes used below for stock transfers:

AW – Acton Works	CFB – Booths, Rotherham
GG – Golders Green	RU – Ruislip
NN – Neasden	SE – Stonebridge Park
WC – White City	

## 2. STOCK RATIONALISATION

1938 out of service Bakerloo Line:

10189+11284	SE-NN	05.12.82
10179+11180	SE-RU	28.02.83
10155+11178 †	SE-RU	07.03.83
10207+11186	SE-RU	14.03.83
10299+11242	SE-RU	21.03.83
10197+11254	SE-RU	28.03.83
10255+11216	SE-RU	11.04.83
10258+11250	SE-RU	18.04.83
10219+11156	SE-NN	25.04.83
10211+11208	SE-RU	09.05.83
10168+11220	SE-RU	16.05.83
10181+11050	SE-RU	23.05.83

1938 out of service Bakerloo Line:

1959 Northern to Bakerloo:

1212+1203	GG-SE	05.12.82
1204+1227	GG-SE	14.01.83
1224+1215	GG-SE	16.01.83
1232+1207	GG-SE	16.03.83
1240+1251	GG-SE	23.03.83
1244+1235	GG-SE	30.03.83
1200+1219	GG-SE	13.04.83
1248+1239	GG-SE	20.04.83
1220+1211	GG-SE	27.04.83
1208+1243	GG-SE	11.05.83
1228+1247	GG-SE	18.05.83
1252+1259	GG-SE	25.05.83

1959 Northern to Bakerloo:

<sup>1</sup> For the sub-surface stock, the situation was not so critical and although there was a pruning of services, there was no pruning of rolling stock. In fact, some of the derelict A Stock cars were later rebuilt and returned to service as passenger numbers increased. The D Stock for the District Line was in general a one-for-one replacement and although there was more than sufficient for reduced services, the surplus enabled some engineering projects to be undertaken. For example, there was sufficient D Stock to work the East London Line for the period of time that the A Stock was being converted to OPO. And who would have thought that in the late-1970s, just 16 four-car units were required for Monday to Friday off-peak service on the Metropolitan Line and six four-car units for the East London Line (five for service plus one spare), equated to 11 eight-car trains. In reality this meant that 47 out of the fleet of 58 trains stood idle in the midday period.

10316+11236 SE-RU 06.06.83  
 10167+11204 SE-RU 13.06.83  
 10319+11321 SE-RU 20.06.83

1256+1255 GG-SE 08.06.83  
 1236+1231 GG-SE 19.06.83  
 1216+1223 GG-SE 03.10.83

† Car 11178 replaced original 11012 damaged in collision in London Road Depot.

1972 MkII Jubilee to Northern:

3233+3533 NN-GG 17.02.83  
 3231+3531 NN-GG 13.05.83  
 3234+3534 NN-GG 27.05.83  
 3232+3532 NN-GG 17.08.83

1962 Central to Northern:

1744+1747 RU-GG 05.05.83  
 1742+1749 RU-GG 20.05.83



Six views of the 1938 Tube Stock on the Bakerloo Line, that were gradually replaced between 1981 and 1985. At Harrow & Wealdstone (Top Left, Right and Centre Left), and the last day in passenger service on 20 November 1985 (Centre, Right) seen at Harlesden. Mixed 1938 and 1959 Tube Stock at Queen's Park (Lower, Left) and a four-car unit of 1938 Tube Stock awaiting disposal in Ruislip Depot (Lower, Right).

### 3. HARROW EXTENSION

1959 Northern to Bakerloo:

1196+1199 GG-SE 25.01.84

1962 Central to Northern:

1738+1741 RU-GG 24.01.84

#### SUMMARY OF STOCK:

Bakerloo	16x1938 16x1959	
Central	2x1960	ATO
	84½x1962	
	1x1967	ATO
Jubilee	29x1972	MkII
Northern	3x1956	
	59½x1959	
	3½x1962	
	30x1972	MkI
	4x1972	MkII



For the extension of the Bakerloo Line back to Harrow & Wealdstone in June 1984, one extra train of 1959 Tube Stock was required and this was transferred in January 1984. At first, services were peak hours only with an off-peak and Saturday service being introduced in May 1988. Sunday services began a year later. Here, a seven-car train of 1959 Tube Stock departs the reversing sidings in the days that there were two. With the DC lines resignalling from 12 December 1988, one of the sidings was abolished. The Bakerloo Line was operated completely by 1959 Tube Stock from 21 November 1985 after the last of the 1938 Tube Stock was withdrawn.



The 1967 Tube Stock was, in the main, first tested in ATO in passenger service on the Central Line between Hainault and Woodford. After the Victoria Line opened there was enough stock to cover for the first heavy overhaul of the 1960 Tube Stock. When that was completed, one unit worked alongside the 1960 Tube Stock until September 1984 when the Victoria Line had its full complement of trains for the first time. A train is seen in 'mint' condition (Above, Left), in the closing days of working on the shuttle (Left) and pausing at Chigwell (Above, Right).

**4. ARRIVAL OF 1983 (Batch I) TUBE STOCK  
WITHDRAWAL OF 1938 TUBE STOCK  
1959 AND 1972 MkII TRANSFERS**

1983 entered service Jubilee Line:

3607+3609	08.05.84
3610	25.05.84
3611	08.06.84
3613	28.06.84
3614	20.07.84
3615	10.08.84
3617	18.08.84
3616	17.09.84
3627	17.10.84
3626+3628	08.11.84
3629+3630	03.12.84
3619	20.12.84
3618	02.01.85
3620+3621	11.01.85
3622	07.02.85
3606	14.02.85
3602	01.03.85
3601	06.03.85
3608	15.03.85
3604	23.03.85
3623	01.04.85
3605	12.04.85
3624	02.05.85
3625	30.05.85

1938 out of service Bakerloo Line:

10231+11044	SE-RU	06.08.84
10249+11036	SE-RU	13.08.84
10151	SE-CFB	16.11.84
11262	SE-CFB	23.11.84
10275+11106	SE-RU	03.12.84
10187+11248	SE-RU	24.01.85
10177+11172	SE-RU	21.02.85
10213+11222	SE-RU	16.04.85
10279+11214	SE-RU	10.07.85
10161+11188	SE-RU	11.07.85
10255+11116	SE-RU	06.08.85
10221+11148	SE-RU	03.09.85
10139+11142	SE-RU	11.09.85
10308+11193	SE-RU	01.10.85
10318+11162	SE-RU	15.10.85
10229+11184	SE-RU	29.10.85
10291+11012	SE-RU	05.12.85

1959 Northern to Bakerloo:

1172+1183	GG-SE	08.08.84
1104+1139	GG-SE	15.08.84
1152+1263	GG-SE	21.11.84
1312+1083	GG-SE	05.12.84
1036+1163	GG-SE	22.01.85
1040+1275	GG-SE	20.02.85
1072+1075 ‡	GG-SE	27.02.85
1092+1095 ‡	GG-SE	27.03.85
1048+1051	GG-SE	18.04.85
1032+1043 ‡	GG-SE	05.06.85
1052+1035 ‡	GG-SE	27.06.85
1144+1055 ‡	GG-SE	03.07.85
1304+1283	GG-SE	10.07.85
1044+1103 ‡	GG-SE	17.07.85
1264+1047 ‡	GG-SE	24.07.85
1155 ‡	GG-SE	31.07.85
1064+1315	GG-SE	08.08.85
1284+1143	GG-SE	30.08.85
1184+1295	GG-SE	05.09.85
1292+1175	GG-SE	19.09.85
1164+1135	GG-SE	02.10.85
1132+1303	GG-SE	17.10.85
1192+1195	GG-SE	31.10.85
1272+1063	GG-SE	21.11.85

1959 Bakerloo to Northern:

1224+1207 ‡	SE-GG	26.02.85
1228+1227 ‡	SE-GG	27.03.85
1220+1223 ‡	SE-GG	04.06.85
1212+1199 ‡	SE-GG	27.06.85
1196+1231 ‡	SE-GG	04.07.85
1208+1219 ‡	SE-GG	16.07.85
1216+1259 ‡	SE-GG	25.07.85
1200+1211	SE-GG	29.07.85
1215 ‡	SE-GG	30.07.85

1972 MkII Jubilee to Northern

3263+3563	NN-GG	07.08.84
3262+3562	NN-GG	14.08.84
3261+3561	NN-GG	22.11.84
3236+3536	NN-GG	04.12.84
3238+3538	NN-GG	23.01.85
3239+3539	NN-GG	19.02.85
3237+3537	NN-GG	17.04.85
3235+3535	NN-GG	12.07.85
3242+3542	NN-GG	07.08.85
3240+3540	NN-GG	04.09.85
3241+3541	NN-GG	10.09.85
3244+3544	NN-GG	18.09.85
3245+3545	NN-GG	02.10.85
3243+3543	NN-GG	06.11.85

‡ Like-for-like stock changeover. Other transfers replacement of 1938 Stock fleet.



*The hoped-for order for enough 1983 Tube Stock to operate the complete service on the Jubilee Line did not initially materialise because of service reductions and falling passenger numbers and just 15 six-car trains were ordered – the Jubilee Line was thus operated with a mix of 1972 MkII and 1983 Tube Stock for a time. The first unit to be delivered is seen at Amersham (Above) on 27 August 1983. One of the first trains in service is seen (Below) at West Hampstead.*



## SUMMARY OF STOCK:

Bakerloo	31x1959	
Central	3x1960 84½x1962	ATO
Jubilee	15x1972 15x1983	MkII Batch I
Northern	3x1956 44½x1959 3½x1962 30x1972 18x1972	MkI MkII
Victoria	39½x1967	



For just a few years, the Northern Line had only one three-car unit of 1962 Tube Stock, which was the unit built for the Aldwych branch service on the Piccadilly Line. It is seen here at High Barnet, which was before the fitting of train radio (with no aerial on the front. However, it wasn't to be long before a few more 1962 Stock units were transferred to the Northern Line.

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## 5. TRAFFIC INCREASES AND STOCK 'FLOAT' FOR OPO CONVERSION

1972 MkII Northern to Bakerloo:			1972 MkII to Jubilee:			1959 Bakerloo to Northern:		
3261+3561	GG-SE	16.05.86	3245	GG-NN	23.01.86	1104+1275	SE-GG	17.05.86
3231+3531	GG-SE	23.05.86	3233+3533	SE-NN	25.07.86	1184+1251	SE-GG	24.05.86
3232+3532	GG-SE	16.06.86	3239+3545	GG-NN	21.10.86	1248+1255	SE-GG	16.06.86
3233+3533	GG-SE	23.06.86	3244+3549	GG-NN	03.11.86	1132+1303	SE-GG	23.06.86
3234+3534	GG-SE	04.07.86	3563	GG-NN	09.11.86	1236+1183	SE-GG	06.07.86
3235+3535	GG-SE	11.07.86	3263+3540	GG-NN	05.12.86	1256+1103	SE-GG	15.07.86
3236+3536	GG-SE	18.07.86				1292+1203	SE-GG	22.07.87
3243+3543	GG-SE	02.08.86				1272+1315	SE-GG	03.08.86
3240+3562	GG-SE	09.08.86				1240+1163	SE-GG	09.08.86
3238+3538	GG-SE	16.08.86				1244+1195	SE-GG	16.08.86
3237+3537	GG-SE	23.08.86				1304+1243	SE-GG	23.08.86
3242+3542	GG-SE	30.08.86				1312+1263	SE-GG	12.09.86
3241+3541	GG-SE	15.09.86				1253+1247	SE-GG	19.10.86
3262+3544	GG-SE	17.10.86						
1962 Central to Northern:			1938 RTS Northern:			1972 MkI O/O/S N'thn for Vic:		
1402+1737	RU-GG	10.10.86	10291+11012		15.09.86	3220	GG-AW	25.09.86
			10205+11297		04.11.86			
			10221+11184		12.11.86			
			10255+11142		08.12.86			
			10229+11116		19.01.87			

## SUMMARY OF STOCK:

Bakerloo	18x1959 13x1972	MkII
Central	3x1960 83½x1962	OPO
Jubilee	20x1972 15x1983	MkII Batch I
Northern	5x1938 3x1956 57x1959 4½x1962 29½x1972	MkI
Victoria	39½x1967	

- Northern Line 1972 MkI Stock includes unit 3203 (overhaul spares) but excludes unit 3220 for Victoria Line conversion.
- Central Line stock totals includes damaged stock.
- 1959 Tube Stock totals Northern and Bakerloo reduced to 75 trains due to 1x4 written off in Kensal Green collision.
- 1972 MkII Tube Stock total on Jubilee Line includes four trains for OPO conversion.
- Victoria Line has full complement of 1967 Tube Stock.
- 1960 Tube Stock on the Central Line converted from ATO to OPO.

O/O/S – Out of service.

RTS – Returned to service.



**Above:** When the 1972 MkII Tube Stock was converted to OPO, the train set number plates were replaced by an electronic display, which meant a change of set number could be done from either cab and display the same number at both ends. DM 3251 is seen at the rear of a northbound train departing from Kensal Green, bearing a Golders Green overhaul logo.

## 6. 1983 BATCH II STOCK, OPO COMPLETION AND SERVICE ENHANCEMENTS

1983 Batch II I/S Jubilee:		1972 MkII Northern to Bakerloo:			1959 Bakerloo to Northern:		
3636 *	27.11.87	3260+3552	NN-SE	22.02.88	1043	SE-GG	25.03.88
3637+3638 *	23.12.87	3259+3547	NN-SE	28.03.88	1144+1063	SE-GG	30.03.88
3640+3641 *	12.02.88	3246+3554	AW-SE	05.04.88	1284+1047	SE-GG	13.04.88
3639 *	12.03.88	3253+3558	NN-SE	11.04.88	1048+1135	SE-GG	22.04.88
3642+3643	28.03.88	3254+3533	AW-SE	19.04.88	1064+1083	SE-GG	05.05.88
3644+3645	28.03.88	3252+3550	NN-SE	19.04.88	1036	SE-GG	06.05.88
3647	18.04.88	3244+3540	NN-SE	01.05.88	1072	SE-GG	20.05.88
3646	22.04.88	3255+3546	AW-SE	05.05.88	1264+1295	SE-GG	02.06.88
3648+3649	12.05.88	3251+3549	NN-SE	15.05.88	1044+1051	SE-GG	09.06.88
3650+3651	09.06.88	3257+3556	AW-SE	16.05.88	1035	SE-GG	23.06.88
3652+3653	08.07.88	3256+3548	NN-SE	05.06.88	1032+1075	SE-GG	10.07.88
3654+3655	27.07.88	3258+3560	NN-SE	10.07.88	1092+1155	SE-GG	18.08.88
3656+3657	08.08.88	3239+3557	NN-SE	31.07.88	1152+1095	SE-GG	08.11.88
3658+3659	01.09.88	3249+3539	NN-SE	14.08.88	1164+1235	SE-GG	05.12.88
3660+3661	13.09.88	3233+3545	NN-SE	04.09.88	1192+1239	SE-GG	31.01.89
3631	06.10.88	3245+3553	NN-SE	25.09.88	1040+1039	SE-GG	06.02.89
3662	07.10.88	3250+3555	NN-SE	27.11.88	1204+1143	SE-GG	19.03.89
3632+3633	20.10.88	3248+3541	NN-SE	07.02.89	1232+1055	SE-GG	23.03.89
3663	04.11.88	3263+3551	NN-SE	17.03.89	1084+1175	SE-GG	30.06.89
3635	08.11.88				1172+1283	SE-GG	07.07.89
3634	23.11.88						

\* The only 1983 Batch II units to operate in crew-operated mode.

1938 O/O/S Northern:		1962 Northern to Bakerloo:			O/O/S Northern for Vic conversion:		
10205	30.11.87	1402+1737	GG-RU	30.10.88	3520	GG-AW	28.06.87

11297	02.01.88	1742+1751	GG-RU	12.05.89	3216+3516	GG-AW	03.04.88
10255+11116	15.04.88				3217	GG-AW	06.05.88
10229+11142	24.04.88				3223+3529	GG-AW	08.06.88
10221+11184	15.05.88				3527	GG-AW	13.07.88
10291+11012	20.05.88				3225	GG-AW	14.07.88

**SUMMARY OF STOCK:**

Bakerloo	33x1972	MkII
Central	3x1960 84x1962	OPO
Jubilee	15x1983 16½x1983	Batch I Batch II
Northern	3x1956 75x1959 2½x1962 25½x1972	MkI
Victoria	43x1967/72	

- Central Line totals exclude damaged stock.
- Northern Line 1972 MkI Stock includes unit 3203 (overhaul spares).

**Below:** The subsequent increase in passenger traffic saw a second batch of 1983 Tube Stock ordered and these arrived in 1987-88. Seen at Stanmore, a brand new train of 1983 Batch II Tube Stock is shown off to the press at Stanmore. The 1983 Stock had a very short passenger-carrying life, the Batch II even less than the Batch I – just 15 and ten years respectively. The last of them languished for some 17 years and weren't finally disposed of until June 2015. They were replaced by the 1996

Tube Stock, instead of being incorporated in them, as was once the plan. With the amount of conversion work that would have been needed on the 1983s, it was deemed more suitable to have just one type of stock instead of a mix of converted and new. Notice also in the photo below the ticket hamper on the platform – until the abolition of guards and the Underground Ticketing System (UTS) had been implemented, it was a daily ritual for ticket hampers to be transported by train from all over the network to and from Harrow-on-the-Hill, where the Ticket Sorting Office was then located.



**7. POST-1989 MOVES PRIOR TO ARRIVAL OF 1992 TUBE STOCK**

1956/59 O/O/S Northern:	1962 O/O/S Central:	1983 O/O/S Jubilee:	1972 MkI N'thn to B'loo
1287 26.07.90	1422 14.02.92	3623 18.11.87	3501 (as 3564) 10.09.92
1000 03.12.91			3203 (as 3264) 16.09.92

**SUMMARY OF STOCK:**

Bakerloo	34x1972	MkI/II
Central	3x1960	OPO

The 24½ trains of 1972 MkI Stock are less the



	83½x1962	
Jubilee	14½x1983 16½x1983	Batch I Batch II
Northern	2½x1956 74½x1959 2½x1962 24½x1972	Mkl
Victoria	43x1967/72	

following units:

4-CAR	3-CAR
3203	3501
3216	3516
3217	3520
3220	3527
3223	3529
3225	



**Left:** A 1983 Tube Stock unit is seen in the Permanent Way sidings of Neasden Depot in withdrawn condition. The first unit to be withdrawn was 3623 in November 1987 after just 2½ years in passenger service and just days before the first Batch II unit entered service. This took the Jubilee Line fleet down to 31 trains which was sufficient for daily service, including spares. For some seven months in 1998, the 1983 Stock ran alongside the 1996 Stock, until the former were withdrawn.

## 8. CENTRAL LINE REPLACEMENT STOCK PROGRAMME

Note that Central Line 1962 Stock withdrawals began in June 1993 after the 1992 Tube Stock began entering service in April 1993.

1956/59 O/O/S N'thn:	1972 Mkl O/O/S N'thn:	1962 Central to Northern:
1004 01.07.93	3204 24.02.94	1514+1751 23.12.93
1007 01.09.93	3224 24.02.94	1683 12.05.94
1123 10.03.94	3526 10.03.94	1428+1605 17.05.94
		1522+1679 04.07.94
		1404+1575 10.08.94

### SUMMARY OF NORTHERN LINE STOCK AS AT AUGUST 1994

1½x1956			
81x1959/62	—————→	1959/62 TUBE STOCK	1962 TUBE STOCK
22½x1972	→	COMPRISE THE	COMPRISE THE
		FOLLOWING TRAINS:	FOLLOWING UNITS:
		4-CAR 3-CAR	4-CAR 3-CAR
		75x1959 73x1959	1404 1575
		6x1962 8x1962	1428 1605
		81 81	1514 1679
		1959/62 TUBE STOCK	1522 1683
		ARE LESS THE	1738 1741
		FOLLOWING UNITS:	1744 1747
		4-CAR 3-CAR	1749
		1052 1071	1751
		1123	
		1287	



**Above:** One of the Central Line's 1962 Tube Stock units at the rear of a northbound train at Hendon Central. This is unit 1404 which was transferred from the Central to the Northern on 10 August 1994. The ravages of graffiti is evident, which was then typical of the Underground at that time, especially on unpainted aluminium trains. **All photos in this article: Brian Hardy**

### 9. NORTHERN LINE STOCK HOLDING PRIOR TO THE 1995 TUBE STOCK ENTERING SERVICE FROM JUNE 1998

1972 Mki O/O/S:	1956/59/62 O/O/S:	75½x1959/62	→	1959/62 STOCK
3505 30.08.95	1260+1207 23.11.94	22½x1972 Mki	→	COMPRISE THE
	1191 23.07.95			FOLLOWING UNITS:
	1087 30.08.95			4-CAR
	1008 10.11.95			70x1959 68x1959
	1003 01.05.96			5x1962 8x1962
	1011 21.05.96			75 76
	1738 02.11.97			
	1235 18.11.97			
	1299 08.01.98			
	1276 14.01.98			
	1244 23.02.98			
	1160 23.03.98			
	1152 31.03.98			
				NO CHANGE TO
				1972 Mki STOCK –
				OVERBALANCE OF
				+1 THREE-CAR
				UNIT FROM
				PREVIOUS LIST

### 10. ANNUAL TOTALS OF NEW STOCK IN SERVICE AS IN 2001

1992 TUBE STOCK		1995 TUBE STOCK		1996 TUBE STOCK	
End-1993	36 trains	End-1998	27 trains	End-1997	1 train
End-1994	80 trains	End-1999	96 trains	End-1998	42½ trains
End-1995	85 trains	End-2000	105 trains	End-1999	56½ trains
		End-2001	106 trains	End-2000	58½ trains
				End-2001	59 trains