BRITISH RAILWAYS

(WESTERN REGION)

(For the use of Employees only.)

BIRMINGHAM MULTIPLE ASPECT SIGNALLING

COMMENCING AT 10.0 p.m. on SATURDAY, 10th SEPTEMBER, UNTIL 6.0 am. on SUNDAY, 11th SEPTEMBER, OR UNTIL COMPLETION, the Signal Engineer will be engaged in bringing into use a new multiple aspect signalling scheme together with a centralised control panel at Birmingham (Snow Hill Station) as detailed hereunder:

A new Signal Box, to be known as "Birmingham" will be brought into use, situated on No. 5 Platform at the South end of the platform buildings. This new Signal Box is at 129 miles 24 chains.

Birmingham North and Birmingham South existing Signal Boxes will be taken out of use. All Multiple Aspect Signals, Position Light Signals and Points, at present worked from Birmingham North and South Signal Boxes, will be operated from the new control panel (see separate pamphlet—Birmingham Signal Box—Description and Method of Operation of the Signalling Control Panel) as shown on the attached sketch and as described subsequently.

I. Multiple Aspect Colour Light Signalling.

(a) The method of signalling to be adopted is known as "Four Aspect Signalling" and the Signals will generally be capable of displaying any one of four aspects (except where otherwise indicated) in accordance with Rule 43, namely:

Green-Proceed

Double Yellow-Proceed-Pass next Signal at restricted speed.

Yellow—Proceed—Prepared to stop at next Signal.

Red-Stop.

* The following diagram indicates the sequence of aspects which will be encountered:

DOUBLE

GREEN

YELLOW

YELLOW

RED











*—See special note on Sheet 2 concerning the modified aspect sequences on the Down Main Line approaching Snow Hill Station.

The Double Yellow Aspect is equivalent to an Outer Distant Signal at Caution and will always be at full Service Braking Distance from the Signal at Red for the maximum speed of the Line at that point.

The Double Yellow Aspect indicates that at least two Signal sections ahead are clear, and the Green Aspect that at least three Signal sections ahead are clear.

In some instances, where Signals are more closely spaced, more than one Signal in succession will display the Double Yellow Aspect immediately in rear of a Signal at Single Yellow. Furthermore, in certain circumstances dependent on the movement of trains ahead, a succession of Double or Single Yellows may be encountered.

(b) In the case of diverging junctions leading to Goods, Reception, or Yard Lines, the Proceed indication will be given by the illumination of a small Yellow light together with a route indication where provided. These Signals will not be normally illuminated.

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At certain locations subsidiary Signals will be provided in the form of Position Light Signals in accordance with Rule 35 (6) (iii), the normal indication being given by one Red light on the left and one White light on the right in horizontal position and the Proceed indication by two White lights at an angle of 45 degrees. A "Calling-on" Signal is also incorporated with Position Light Signals as and when necessary and is indicated by the normal two light plus a letter "C" in conjunction with M.A.S. route indication.

(c) The centre of the Red light of Multiple Aspect Signals will generally be approximately 12 feet above rail level in the case of straight post structures and approximately $17\frac{1}{2}$ feet in the case of bracket or gantry structures. Except in special circumstances the Signals will be situated immediately to the left hand side or over the Line to which they apply.

In order to give Enginemen a view of a Signal when the engine is standing close up to it, Colour Light Signals are fitted with segments let into the lenses, which cast a beam downwards and outwards towards the engine cab.

No backlights will be provided in any of the Multiple Aspect Signals. The backlights of Ground Subsidiary Signals of the position light form will be permanently alight.

- (d) Multiple Aspect Signals will be replaced to Danger by Track Circuits ahead thereof. Generally in the area covered by this notice, Multiple-Aspect Signals will be maintained at Red until the fine is clear up to a point approximately 200 yards in advance of the next Signal. This distance (approximately 200 yards) is known as the overlap. In some instances to facilitate the working, certain Signals will be allowed to exhibit the Single Yellow Aspect when the overlap ahead of the next Signal is occupied, but only after the Track Circuit immediately on the approach side of the Signal has been occupied and the approaching train has been brought to, or nearly to a stand. This form of control is known as "Delayed Yellow Control," and is equivalent in practice to a train having been accepted under the "Warning" in ordinary semaphore signalling. Drivers of trains which have been brought to, or nearly to, a stand at a Signal which is then changed from Red to Single Yellow, must understand that the line is clear only as far as the next Signal ahead, and must regulate the speed of their trains accordingly.
- * SPECIAL NOTE—Drivers' attention is specifically drawn to the modified Aspect sequence approaching Birmingham (Snow Hill Station) on the Down Main Line. Birmingham (Moor Street) Down Main Starting Signal will display Proceed Aspects as follows:
- SINGLE YELLOW WITH NO ROUTE INDICATOR—Be prepared to stop at Birmingham Home Signal B4 at Red.
- SINGLE YELLOW WITH ROUTE INDICATOR 1,5 or M—Line is clear up to Signals B10, B8 or B6 respectively, but the overlap immediately ahead is foul and the Driver will find Birmingham Home Signal B4 at Yellow on sighting it.
- DOUBLE YELLOW WITH ROUTE INDICATOR 1.5 or M—Line is clear up to Signals B10, B8 or B6 and the overlap ahead is clear and Signal B4 is displaying a Single Yellow.
- GREEN WITH ROUTE INDICATION M ONLY—B4 Signal, displaying a Double Yellow or Green aspect and routed to the Down Main.

2. Identification of Signals.

(a) The Multiple Aspect Signals are classified as Controlled Signals.

Controlled Signals are those which will always be under the control of a Signal Box. Where applicable, the Diamond sign (Rule 55, Diagram No. 1) will be affixed thereto.

(b) All Multiple Aspect and Position Light Signals will also be fitted with plates bearing letters and numerals for identification and reference purposes as follows:

Controlled Signals will be identified by the prefix letter of the Signal Box concerned followed by a number. The Signal Box prefix letters will be as follows:

Signal Box Prefix Letters
Birmingham B
Hockley South HS

3. Provision of Telephones.

Telephones giving exclusive communication with the Birmingham Panel Room will be provided as follows:

- (1) At all Multiple Aspect Signals operated from Birmingham and bearing the prefix B on the identification plate.
- (2) Adjacent to all Shunters' Acceptance Plungers.
- (3) At Snow Hill Sidings, Down Sidings North and the Spur.

The above telephones will be incorporated directly into Birmingham Control Panel.

All selective, two button, code ringing, control, four button and exchange circuits at present communicating with Birmingham North and South Signal Boxes will now communicate with the new Panel Room. The Box to Box telephone circuits working between Hockley South and Birmingham North, Birmingham South and Moor Street, will now work between Hockley South and Birmingham Panel, Birmingham Panel and Moor Street. These telephone circuits will be incorporated in a desk type Telephone Concentrator, in Birmingham Panel Room. Provision has been made to link these telephone circuits through to this Control Panel also.

There will be telephones giving exclusive communication with Hockley South Signal Box provided at Signals HS.61 and HS.70. A telephone will not be provided at Moor Street Down Main Starting Signal.

4. Use of Telephones provided at Signals.

For instructions in regard to the use of telephones at Signals, see Notice No. L.K.245.

5. Automatic Warning System.

There will be no new A.W.S. ramps brought into use during the occupation. In the Station area all Colour Light Signals will not be provided with A.W.S. Ramps. The existing A.W.S. Ramps working with existing Multiple Aspect Signals will remain and work at present.

6. Signalling during Fog or Falling Snow.

Fogsignalmen will not be provided at any of the Multiple Aspect Signals referred to in this Notice. A Fogsignalman must, however, be appointed during Single Line Working at a Signal which becomes the Distant Signal for the obstructed line operated from the Box at which the trains are crossed to their proper line and which Signal has to be observed by Drivers travelling over the Single Line in the wrong direction.

A Handsignalman must also be appointed at a Signal which acts as the Distant Signal controlling trains approaching the Single Line to travel over that line in the right direction.

7. Permanent Way Trolleys.

Permanent Way Trolleys cannot be relied upon to operate Track Circuits, and before a trolley is placed on the Line the permission of the Signalman at the nearer Signal Box must be obtained. If the Signalman at the Signal Box in advance is required to give such permission, he must, before so doing, confer with the Signalman at the Signal Box in the rear.

The telephone at a Signal may be used for obtaining the Signalman's permission. Where permission has been given, protection in accordance with Rule 215, must be carried out before the trolley is placed on the line.

8. Working of Diesel Cars.

Diesel Cars Nos. I to 18, inclusive, and Diesel Rail Buses cannot be relied upon to operate Track Circuits and must not work in the Multiple Aspect Signalled areas except under special arrangement.

All other Diesel Cars can be relied on to operate Track Circuits and will be signalled in normal course and the instructions on page 132 of the General Appendix under the headings "Rule 55" and "Instructions to Signalmen" will not apply to these vehicles.

9. Rule 82.

If a driver observes a Signal to be out when it should be illuminated, he must treat it as a Signal giving its most restrictive aspect (Red in the case of a Stop Signal), and report the circumstances to the Signalman at the Box in advance.

The Signalman must arrange for a Handsignalman to be appointed as quickly as possible.

10. Rules 178-181

Colour Light Signals must not be relied upon for the protection of a train stopped by accident, failure, or obstruction, and the train must be protected in the usual way, except that if no other line is affected, it is not necessary for protective purposes for a Guard or Fireman to go back beyond the next Colour Light Signal in rear of the train, provided it is showing "Danger." In the event of it being necessary for a second train or engine to approach from the rear to render assistance, the Guard or Fireman who is protecting his train, must, after advising the Signalman at the Box ahead by telephone of the circumstances, wait at the Signal in rear to pilot the assisting train or engine to the rear of his own train.

Movements after having come to a stand

When a signalled movement comes to a stand, the train must not move off again in either direction unless signalled by means of the fixed Signals because on the train coming to a stand the interlocking is released and opposing movements can be made up to the stationary train.

II. New Signals.

The following new Multiple Aspect Signals will be brought into use:

Form	No. of Signal	Application	Position	Distance from Panel
Profile I	B28	Down Relief. Shunt Down Relief.	Down Side of Down Relief.	580 yards.
Profile 2	B12	 To Down Relief, Down Main, Northwood Street Sidings, No. J New Yard Siding, No. 4 New Yard and Up Siding Route Indicator. (Indications 'R' and 'M' working with Main Signal, indication 'N,' 'Y1',' 'Y4,' and 'U' working with small Yellow Signal.) No. 11 Platform to (a) Northwood Street Sidings via Up Main Loop when off for this route, Position Light Signals 58, 60 and 66 display a Proceed Aspect, route indication N. No. 1 New Yard Siding, when off for this route, Position Light Signals 58 and 60 display a Proceed Aspect, route indication 'Y1.' No. 4 New Yard Siding, when off for this route, Position Light Signals 58 and 60 display a Proceed Aspect, route indication 'Y4.' Up Siding, when off for this route, Position Light Signal 60 displays a Proceed Aspect, route indication 'U.' No. 11 Platform to Down Relief, when off for this route, Position Light Signals 58, 60 and 70 display a Proceed Aspect, route indication 'R' or to Down Main, when off for this route, Position Light Signals 58, 60 and 70, display a Proceed Aspect, route indication 'R' or to Down Main, when off for this route, Position Light Signals 58, 60 and 70, display a Proceed Aspect, route indication 'M.' Shunt Down No. 11 Platform Line to 58 Signal. 	Down Side No. 11 Plat- form Line.	238 yards.
Profile 3	B14	 To Down Relief, Down Main, Northwood Street Sidings, No. 1 New Yard Siding, and No. 4 New Yard Siding, Route Indicator. (Indications 'R' and 'M' working with Main Signal, indications 'N,' 'Y4,' and 'Y1,' working with small Yellow Signal.) No. 10 Platform to Down Relief, route indication 'R' or to Down Main, route indication 'M,' when off for either of these routes, Position Light Signals 58, 60, and 70 display a Proceed Aspect. No. 10 Platform to (a) Northwood Street Sidings via the Up Main Loop, when off for this route, Position Light Signals 60 and 66 display a Proceed Aspect, route indication 'N.' No. 1 New Yard Siding, when off for this route, Position Light Signal 60 displays a Proceed Aspect, route indication 'Y1.' No. 4 New Yard Siding, when off for this route, Position Light Signal 60 displays a Proceed Aspect, route indication 'Y1.' Shunt Down No. 10 Platform Line to 60 Signal. 	Down Side of No. 10 Plat- form Line.	258 yards.

Form	No. of Signal	Application	Position	Distance from Panel
Profile 3	B16	 To Down Relief, Down Main, Northwood Street Sidings, and No. 1 New Yard Siding Route Indicator. (Indications 'R' and 'M' working with Main Signal, indications 'N' and 'YI,' working with small Yellow Signal). \$ No. 9 Platform to Down Relief, route indication 'R' or to Down Main route indication 'M' when off for either of these routes, Position Light Signal 70 displays a Proceed Aspect. No. 9 Platform to (a) Northwood Street Sidings via the Up Main Loop, when off for this route, Position Light Signal 66 displays a Proceed Aspect. route indication 'N.' No. 1 New Yard Siding, route indication 'YI.' Shunt No. 9 Platform to Up Main Loop 66 Signal or to Down Main 70 Signal. 	Down Side of No. 9 Platform Line.	317 yards.
Profile 4	B22	 Shunt No. 4 Platform to Down Relief or to Down Main 70 Signal. No. 4 Platform to (a) Down Relief, route indication 'R.' (b) Down Relief via Down Main, when off for this route, Position Light Signal 70 displays a Proceed Aspect, route indication 'RM.' (c) Down Main, when off for this route, Position Light Signal 70 displays a Proceed Aspect, route indication 'M.' To Down Siding North, Down Relief, Down Relief via Down Main, Spur, Down Main, and Northwood Street Sidings Route Indicator. (Indications 'R,' 'RM' and 'M,' working with Main Signal, indications 'D,' 'S' and 'N,' working with small Yellow Signal). No. 4 Platform to (a) Down Siding North, route indication 'D.' (b) Spur, route indication 'S.' (c) Northwood Street Sidings, route indication 'N.' 	Up Side of No. 4 Platform Line.	319 yards.
Profile 3	B24	 To Down Siding North, Down Relief, Down Relief via Down Main, Spur, Down Main and Northwood Street Sidings Route Indicator. (Indications 'R,' 'RM,' and 'M,' working with Main Signal, indications 'D,' 'S,' and 'N' working with small Yellow Signal). No. 3 Platform to (a) Down Relief, route indication 'R.' Down Relief via Down Main, when off for this route, Position Light Signal 70 displays a Proceed Aspect, route indication 'RM.' Down Main, when off for this route, Position Light Signal 70 displays a Proceed Aspect, route indication 'M.' No. 3 Platform to (a) Down Siding North, route indication 'D.' Spur, route indication 'S.' Northwood Street Sidings, route indication 'N.' Shunt No. 3 Platform to Down Relief or to Down Main 70 Signal. 	Down Side of No. 3 Platform Line.	324 yards.

Form	No. of Signal	Application (Position	Distance from Panel
Profile 5	B26	No. 2 Platform to Down Relief. No. 2 Platform to Down Siding North. Shunt No. 2 Platform to Down Relief.	Down Side of No. 2 Platform Line.	345 yards.
Profile 9	B7	 To No. 7 Platform Line and Up Main Route Indicator. (Indications '7' and 'M,' working with Main and Calling On Signals). No. 8 Platform to No. 7 Platform Line, route indication '7,' or to Up Main, route indication 'M.' Calling On No. 8 Platform to No. 7 Platform Line, route indication '7,' or to Up Main route indication '7,' or shunt to No. 7 Platform Line or to Up Main, no route indications. 	Up Side of No. 8 Platform Line.	238 yards.
Profile 10	В9	 To No. 7 Platform Line and Up Main Route Indicator. (Indications '7,' and 'M' working with Main and Calling On Signals.) Up Main to No. 7 Platform Line, route indication '7' or to Up Main, route indication 'M.' Calling On Up Main to No. 7 Platform Line, route indication '7' or to Up Main, route indication '7' or to Up Main, route indication 'M' or shunt to No. 7 Platform Line or to Up Main, no route indications. 	Up Side of the Up Main Line. -	238 yards.
Profile 11	B8	 To No. 6 Platform Line and Down Main Route Indicator. (Indications '6' and 'M' working with Main and Calling On Signals.) No. 5 Platform to No. 6 Platform Line, route indication '6' or to Down Main, route indication 'M.' Calling On No. 5 Platform to No. 6 Platform Line, route indication '6,' or to Down Main, route indication 'M' or shunt to No. 6 Platform Line or to Down Main, no route indications. 	Down Side of No. 5 Platform Line.	174 yards.
Profile 10	В6	To No. 6 Platform Line and Down Main Route Indicator. (Indications '6' and 'M,' working with Main and Calling On Signals.) Down Main to No. 6 Platform Line, route indication '6' or to Down Main, route indication 'M.' Calling On Down Main to No. 6 Platform Line, route indication '6,' or to Down Main, route indication 'M,' or shunt to No. 6 Platform Line or to Down Main, no route indications.	Down Side of the Down Main Line	174 yards.
Profile 6	BIO	No. I Platform to No. 2 Platform Line. Shunt No. I Platform to No. 2 Platform Line.	Down Side of No. I Platform Line.	153 yards.

New Signals—continued.

Form	No. of Signal	Application Position		Distance from Panel
Profile I	BII	No. 11 Platform to No. 12 Platform Line. Shunt No. 11 Platform to No. 12 Platform Line.	Up Side of No. 11 Platform Line.	105 yards.
Profile 7	B19	 Shunt No. 5 Platform to Up Main. No. 5 Platform to Up Main. No. 5 Platform to Down Sidings South. 	Down Side of No. 5 Platform Line.	33 yards.
Profile 8	B2I	No. I Platform to Up Main. No. I Platform to Down Sidings South. Shunt No. I Platform to Up Main.	Up Side of No. I Platform Line.	51 yards.

New Position Light Ground Signals will be brought into use in the Birmingham Panel area as shown on the attached sketch, which also indicates their number with reference to the new Panel. All existing Position Light Ground Signals at present worked from Birmingham South Signal Box, will now be worked from the new Panel and numbered as shown on the sketch.

now be worked from the new Panel and numbered as shown on the sketch.

The routes of all new and existing Position Light Ground Signals controlled from the new Panel will be as listed below:

Position Light Ground Signals-List of Routes.

No. on Sketch	Route	No. on Sketch	Route
31	(a) 43 Signal. (b) 45 Signal.	69	(a) Snow Hill Sidings. (b) No. 11 Platform Line.
	(c) Up Main. (d) 73 Signal. (e) No. 4 Platform Line. (f) No. 3 Platform Line.	71	(a) 75 Signal. (b) No. 5 Platform Line.
35	(a) 39 Signal (b) 47 Signal.	73	(a) 75 Signal. (b) No. 5 Platform Line.
37	(a) 47 Signal. (b) 41 Signal.	75	(a) Up Main via Crossover nearest Panel. (b) Down Sidings South.
3 9	(a) 45 Signal. (b) No. 8 Platform Line. (c) Up Main.	42	(a) No. I Platform Line (b) No. 5 Platform Line. (c) Down Main. (d) 46 Signal.
41	(a) No. 4 Platform Line. (b) 5 Signal.	44	(a) 54 Signal. (b) No. 11 Platform Line.
43	(a) 59 Signal. (b) No. 8 Platform Line.	46	(a) Down Main. (b) 56 Signal.
45	(a) 59 Signal. (b) No. 8 Platform Line.		(c) 54 Signal. (d) No. 11 Platform Line.
47	(a) 67 Signal. (b) No. 9 Platform Line. (c) 61 Signal. (d) 73 Signal.	48	(a) No. I Platform Line. (b) No. 5 Platform Line. (c) Down Main.
	(e) No. 4 Platform Line. (f) No. 3 Platform Line.	50	(a) No. 12 Platform Line.
49		52	(a) 58 Signal.
47	(a) 73 Signal. (b) No. 4 Platform Line. (c) No. 3 Platform Line.	54	(a) 64 Signal. (b) 62 Signal.

Position Light Ground Signals-List of Routes-continued.

No. on Sketch	Route	No. on Sketch	Route
51	(a) 73 Signal. (b) No. 3 Platform Line.	56	(a) 64 Signal. (b) 62 Signal.
	(c) No. I Platform Line.	58	(a) 60 Signal. (b) Up Sidings.
53	(a) No. 4 Platform Line. (b) No. 3 Platform Line. (c) 63 Signal.	60	(a) 70 Signal. (b) 66 Signal. (c) No. I New Yard Siding.
57	(a) 67 Signal.		(d) No. 4 New Yard Siding.
59	(a) 67 Signal. (b) No. 9 Platform Line.	62	(a) 70 Signal. (b) 68 Signal. (c) 66 Signal.
61	(a) No. 8 Platform Line. (b) Up Main.		(d) No. I New Yard Siding.
	(c) 71 Signal. (d) 73 Signal.	64	(a) 70 Signal. (b) 68 Signal. (c) Northwood Street Sidings.
63	(a) No. 2 Platform Line.	66	(a) 68 Signal.
65	(a) 69 Signal		(b) Northwood Street Sidings.
67	(a) 69 Signal. (b) No. 10 Platform Line.	68	(a) Down Main. (b) Up Main Limit of Shunt.
		70	(a) Down Relief. (b) Down Main.

12. Alteration to Existing Signals.

The following Multiple Aspect Signals, at present worked from **Birmingham North** Signal Box will now be worked from the new Panel, will be renumbered, and have alterations as detailed **below**:

Form	New No. of Signal	Application	Position	Distance from Panel
Profile 12	В3	 Route Indicator, aiready in use, will display an additional indication to No. 6 Platform Line (route indication '6') and will also illuminate with new Calling On Signal. Main Signal, already in use, will display an additional Proceed Aspect to No. 6 Platform Line, route indication '6.' New Calling On Signal Up Main to: (a) No. 11 Platform Line route indication '11' (b) No. 10 Platform Line, route indication '10.' (c) No. 9 Platform Line, route indication '9.' (d) No. 8 Platform Line via Up Main Loop, route indication '8L.' (e) No. 8 Platform Line via Up Main, route indication '8M.' (f) Up Main, route indication 'M.' (g) No. 6 Platform Line, route indication '4.' (i) No. 4 Platform Line, route indication '4.' (i) No. 3 Platform Line, route indication '3.' This Signal will also display a shunt Aspect route to: (a) Up Main Loop 45 Signal. (b) Up Main 39 Signal. 	Up Side of Up Main Line.	772 yards.

Alteration to Existing Signals—continued.

Form	New No. of Signal	Application	Position	Distance from Panel
Profile 12	В5	I. Route indicator already in use, and will be unaltered in display but will now also work with new Calling On Signal. 2. Main Signal, already in use. 3. New Calling On Signal Up Relief to: (a) No. 11 Platform Line, route indication '11.' (b) No. 10 Platform Line, route indication '10.' (c) No. 9 Platform, route indication '9.' (d) No. 8 Platform Line, route indication '8.' (e) Up Main, route indication 'M.' (f) No. 4 Platform Line, route indication '4.' (g) No. 3 Platform Line, route indication '3.' This Signal will also display a Shunt Aspect to: (a) Up Main 39 Signal. (b) Down Relief 51 Signal.	Up Side of Up Relief Line.	750 yards.
Profile 13	B18	 New Route Indicator reading to Down Relief and Down Main. (Indications 'R' and 'M.') Main Signal already in use, will now display an additional Aspect of Double Yellow for both Down Relief and Down Main routes. New Shunt Signal routed to Down Main 70 Signal. 	Down Side of Down Main Line.	350 yards.
Profile 14	B20	 New Route Indicator displaying letter 'M' and working in conjunction with Route Indicator No. 2, so as to display, indication 'RM' when Signal off for the Down Relief via Down Main Line. Route Indicator already in use. Small Yellow Signal already in use. Main Signal, already in use, will now display an additional Proceed Aspect to Down Relief, via the Down Main, route indication 'RM.' New Shunt Signal routed to Down Relief or Down Main 70 Signal. 	Down Side of No. 6 Platform Line.	350 yards.

The following Multiple Aspect Signal, at present worked from **Birmingham South**, Signal Box, will now be worked from the new Panel, will be renumbered and have alterations as detailed below:

Form	New No. of Signal	Application	Position	Distance from Panel
Profile 15*	B4	 Route Indicator, already in use. Main Signal, already in use. Calling On Signal will have two additional routes to No. 1 Platform Line, route indication '1' or to No. 5 Platform Line, route indication '5.' 	Down Side of Down Main Line.	268 yards.

^{*—}See special note on sheet 2 concerning the modified Aspect sequences displayed by Moor Street Down Main Starting.

Alteration to Existing Signals—continued

The following Signals, at present worked from **Birmingham South** Signal Box, will now be worked from the new Panel with no alteration in form or application, but will have the following new numbers allocated.

Signal	New Number	Distance from Panel
No. 12 Platform Line Starting.	B13	30 yards.
No. 7 Platform Line Starting.	B15	56 yards.
Up Main Home.	B17	34 yards.
Up Main Starting.	B23	271 yards.

The following will also be provided in the Panel area:

Form	Description	Position	Distance from Panel
Profile 16	Limit of Shunt Board applying to movements Down the Up Main.	Up Side of the Up Main Line.	698 yards.
	The Board will be 12 feet in height from rail level.	l	
Profile 17	Stop Lamp applying to movements in the No. I New Yard Siding.	Down Side of No. I New Yard Siding.	488 yards.

Signals to be controlled by two boxes.

Hockley South Up Main Starting Signal will be numbered HS70 and the Double Yellow Aspect will be brought into use, this Signal will also be slotted by Birmingham Panel.

Moor Street Down Main Starting Signal will now be slotted by the Panel and the existing Distant Signal Control from Birmingham South Signal Box will be removed and the Aspects will work automatically. Birmingham South Up Main Starting Signal (B23) will now be slotted by Moor Street Signal Box and the Distant Signal Control removed and the Aspects will work automatically.

Birmingham North Down Main Advanced Starting Signal will be numbered B30 and will now be worked from the new Panel, this Signal will also be slotted by Hockley South, and the Distant Signal Control will be removed and the Aspects will work automatically.

Birmingham North Down Relief Advanced Starting Signal will be numbered B32 and will now be worked from the new Panel, this Signal will be slotted by Hockley South, and the Distant Signal Control will be removed and the Aspects will work automatically.

Hockley South Signal Alterations.

The Double Yellow Aspect on the Up Relief Starting Signal will be brought into use and this Signal will be numbered HS61.

The Green Aspect on the Up Relief Inner Home Signal will be brought into use and this Aspect will be displayed when HS61 is at Double Yellow and the top arm off.

13. Signals to be taken out of use.

The following existing Signals controlled from **Birmingham North** Signal Box, will be taken out of use:

I. Down Relief Starting with Lower Distant for Hockley South.

2. Down Main Starting and Down Main to Down Relief Starting with Lower Distants for

Hockley South (Bracket Signal).

3. Up Main Inner Home with Lower Distant for Birmingham South, Up Main Inner Home to No. 8 Platform Line and the Up Main Inner Home to No. 9, 10 and 11 Platform Lines (Bracket Signal).

4. Up Relief Inner Home with Lower Calling On Arm.

 Down Relief to No. 3 Platform Line Inner Home with Lower Calling On Arm, Down Relief to No. 6 Platform Line Inner Home and Down Relief to No. 2 Platform Line Inner Home (Bracket Signal).

. No. 10 Platform Line to No. 11 Platform Starting, No. 10 Platform Line Starting with Lower Calling On Arm and No. 10 Platform Line to No. 9 Platform Line Starting with Lower Calling

On Arm (Bracket Signal).

7. No. 11 Platform Line Advanced Starting with Lower Calling On Arm and the No. 11 Platform Line to Snow Hill Sidings Advanced Starting (Bracket Signal).

8. No. 11 Platform Line Backing.

9. No. 10 Platform Line Starting with Route Indicator.

No. 9 Platform Line Starting with Route Indicator (Bracket Signal).
 No. 8 Platform Line Backing with Route Indicator (Bracket Signal).

12. Up Main Backing with Route Indicator (Bracket Signal).

13. No. 4 Platform Line Starting with Route Indicator (Roof Mounted Signal).

14. No. 3 Platform Line Starting with Route Indicator.

- No. 2 Platform Line to Down Relief Starting and the No. 2 Platform Line to Down Siding North Starting (Bracket Signal).
- No. 8 Platform Line to No. 7 Platform Line Starting with Lower Calling On Arm, and the No. 8 Platform Line to Up Main Starting with Lower Calling On Arm (Roof mounted Bracket Signal).
- 17. Up Main Starting with Lower Calling On Arm and Lower Inner Distant for Birmingham South Signal Box, and the Up Main to No. 7 Platform Line Starting with Lower Calling On Arm (Bracket Signal).

The following existing Signals controlled from **Birmingham South** Signal Box, will be taken out of use:

- Down Main Starting with Lower Calling On Arm and with Lower Inner Distant for Birmingham North, and Down Main to No. 6 Platform Line Starting with Lower Calling On Arm (Bracket Signal).
- No. 5 Platform Line to No. 6 Platform Line Starting with Lower Calling On Arm and No. 5
 Platform Line to Down Main Starting with Lower Calling On Arm (Roof mounted Bracket
 Signal).

All the existing Ground Disc Signals, at present worked from both Birmingham North and Birmingham South Signal Boxes, will be taken out of use.

14. Permanent Way.

There will be no permanent way alterations in this area. However, all Points at present worked from both Birmingham North and Birmingham South Signal Boxes will now be electrically worked from the new panel and will be renumbered.

To facilitate the hand operation of Points during any failure handcranks for the whole of the Panel area will be kept in the new Panel Room, in all other respects there will be no change in the hand working of Points.

15. Shunters' Acceptance Plungers.

Shunters' Acceptance Plungers will be provided at certain Sidings where shunting occurs, as listed below. It will not be possible to set a route and clear a Signal into any of these Sidings until the shunter has pressed the plunger and so given a release to the Panel. The shunter must first ensure that all conditions are set for the movement of the complete train into the Siding before giving the release. For every movement into the Siding the shunter must give a separate release as each release is effective for one movement only.

Siding
Down Sidings South.
No. I New Yard Siding.
No. 4 New Yard Siding.
Up Siding.

Position of Plunger
Adjacent to 48 Position Light Signal.
Adjacent to 5top Lamp.
Adjacent to 57 Position Light Signal.
Adjacent to 65 Position Light Signal.
Opposite 31 Position Light Signal.

16. Track Circuits.

New Track Circuits will be brought into use and existing Track Circuits rearranged in accordance with the attached sketch.

17. Block Telegraph Arrangements.

Northwood Street Sidings.

The existing Block Sections Hockley South—Birmingham North—Birmingham South—Moor Street, will be taken out of use and the section of line Hockley South—Birmingham Panel—Moor Street will be worked in accordance with Track Circuit Block Regulations. (See circular LK245.)

A new four-character Train Describer will be brought into use and will operate in conjunction with the new Control Panel. (See separate pamphlet Western Region Four-Character Train Describer—Description and Method of Operation.) This Train Describer will be operated by the Panel Signalmen and will be used for the identification of trains within the Panel Control area only.

At this stage, Tyer's Pattern Train Describers as at present in use, and block bells will be provided for inter-box train description for the Up and Down Main and Relief Lines to Hockley South and Up and Down Main Lines to Moor Street.

The Line Clear releases on Hockley South Up Main and Up Relief Starting Signals and on Moor Street Down Main Starting Signal will be removed.

18. Occupation.

Occupation of the Locking Frames at Hockley South and Moor Street will be required for the

purpose of altering and testing the locking.

During the time the work is in progress, all Multiple Aspect and Position Light Signals at present controlled from Hockley South, Birmingham, and Moor Street, and those due to be brought into use in accordance with this notice, will not apply and trains will be handsignalled. Trainmen must keep a sharp lookout for Hand Signals and must ignore any Aspect which may be displayed by any of the Colour Light Signals, in the area affected.

ABSOLUTE Occupation of all lines between Birmingham (Moor Street) and Hockley South will be continuous between the hours of 12.45 a.m. and 6.0 a.m. on Sunday, 11th September, 1960, or until

the work is completed.

During the time the work is in progress, Hockley South Up Main and Up Relief Distants and Moor Street Down Main and Down Relief Distants will be disconnected and maintained at Caution.

INSPECTOR GILLETT to make all arrangements for the safe working of the line, including the appointment of Handsignalmen in accordance with Rule 77.

ACKNOWLEDGE RECEIPT

D. L. PRIDE,

District Traffic Superintendent.

BIRMINGHAM (S.H.)
7th September, 1960.

Profile No.	Profile	Profile No.	Profile
No.	♦ 0000 2 1	5	2 00 3 8
2	3000	6	2
3	- 2 3 4	7	2 3
4	2 3 4	8	1 2 3

Profile No.	Profile	Profile No.	Profile
9	23 000 000	14	3 2 5
10	P	15)
11	23	16	LIMIT OF SHUNT
-	2 2 3	17	S-Op
13	1 000 3		-d-a

