## HUB IDENTIFICATION CODING PLAN DIGITAL DATA SYSTEM

## 1. GENERAL

- 1.01 The maintenance and testing of Digital Data System (DDS) multipoint circuits uses a 2-digit code for hub office identification. This code identifies the location of a particular multipoint junction unit (MJU). The code is contained in one byte of data with the format, 0xxxxxx1. The digit 1 is used in the eighth bit position to prevent receiving equipment from interpreting the hub code as a regular test code. Using the six bits (x) available, with octal numbering, 64 codes are possible. At each hub office, the codes are set by strapping options on the MJU shelf assembly (Section 314-917-300).
- 1.02 This section is reissued to update Tables B and C. Revision arrows are used to show the more significant changes.
- 1.03 The selection of the desired hub office (MJU location) in testing of a multipoint line is done in sequence starting with the unit closest to the customer master station. The sequence of operation, in brief, is: (1) a test alert (TA) signal is sent from the multipoint signaling unit (MSU) or KS-21899 data test system at the testing hub, (2) the MJU responds with a repeat of the TA code, (3) an MJU alert (MA) is sent from the MSU, (4) the MJU responds with its identification code, and (5) a branch code is sent out and the MJU cuts through to that branch. The detailed procedure and additional information on the MSU and its operation are given in Section 666-600-100.

## 2. ASSIGNMENT OF CODES

2.01 To facilitate maintenance, four of the possible 64 codes are reserved, leaving 60 assignable

codes. The four maintenance codes and their meanings are listed in Table A. To care for planned network growth beyond 60 hub offices, duplication of codes is necessary. To minimize the effect of this duplication, the following guidelines were used in the initial assignment of the codes:

- (a) The first 23 codes were assigned to regional hub offices or to large sectional hub offices that have the potential of becoming large hub points for multipoint networks.
- (b) The remaining 37 codes were available for all remaining hub offices, both sectional and metro. Each of the 37 codes had two hub offices assigned to it, and the pairings were usually sectional and metro. Due to their greater number, sectional hub offices were sometimes paired.
- (c) The assignment of codes took into account geographical location. Hub offices that are physically adjacent or homed on the same regional hub were not assigned the same code. A list of the assigned codes is given in numerical order in Table B and in alphabetical order in Table C.
- 2.02 The MJU Numbering Plan Coordinator at AT&T Headquarters (Network Services, Facilities Systems Engineering) should be contacted before changes are made in the present numbering plan or when additional hub identification numbers need to be added.
- 2.03 Codes are reserved in this practice for eventual use at all hub locations. However, some smaller hubs may be in service without MJUs. If there is any doubt as to whether the MJUs on a particular circuit are in a given office, the circuit layout record card (CLRC) gives full details.

## NOTICE

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TABLE A

MAINTENANCE CODES

CODE	MEANING					
00	MSU receiving all zeros after TA code					
77	MSU receiving all ones after TA code					
66	MSU receiving continuous TA code					
70	MSU looped (MSU test check)					

♦TABLE B♦

HUB IDENTIFICATION CODES — NUMERICAL

Maintenance Code	CODE	IDENTIFICATION	CODE	IDENTIFICATION
New York, NY (323 Broadway)*   Washington (3), D.C.*   44   Wilmington, DE† — Little Rock, AR†	01	Boston, MA*	41	Nashville, TN† - Rochester, NY‡
04Washington (3), D.C.*44Wilmington, DE† — Little Rock, AR†05Philadelphia (2), PA*45Allentown, PA† — Shreveport, LA†06Chicago (6), IL*46Harrisburg, PA† — New Orleans, LA†07Los Angeles, CA*47Baltimore, MD† — Jackson, MS‡10Oakland, CA*50Orlando, FL† — Camden, NJ‡11Saint Louis, MO*51Peoria, IL† — Norfolk, VA‡12Cleveland, OH*52Omaha, NE† — Roanoke, VA‡13Detroit, MI*53Buffalo, NY†14Pittsburgh, PA*54Scranton, PA‡ — Des Moines, IA‡15Denver, CO*55Oklahoma City, OK† — Dayton, OH‡17Kansas City, MO*57Cincinnati, OH† — Tulsa, OK‡20Atlanta, GA*60Louisville, KY‡ — Ventura, CA†21Memphis, TN* — Vancouver, Canada*61Davenport, IA† — Mountain View, CA†22Portland, OR* — Montreal, Canada*62Columbia, SC‡ — Salt Lake City, UT†24Sacramento, CA†64Columbia, SC‡ — Salt Lake City, UT†25Richmond, VA† — San Antonio, TX‡65Columbia, SC‡ — Grand Rapids, MI‡26Charlotte, NC† — Inglewood, CA†¶66Maintenance Code27Houston, TX† — Greensiboro, NC‡72Maintenance Code28Houston, TX† — Greensboro, NC‡72Maintenance Code29Hartford, CT‡ — San Francisco, CA†72Maintenance Code31Springfield, MA† — Greensboro, NC‡73Minneapolis, MN‡ — Ana		1 ' '		1
O5 Philadelphia (2), PA* O6 Chicago (6), IL* O7 Los Angeles, CA* O8 Oakland, CA* O8 Oakland, CA* O8 Oakland, CA* O8 Oakland, CA* O9 Oakland, CA* O8 Oakland, C	1			
Chicago (6), IL* Los Angeles, CA* O7 Los Angeles, CA* 10 Oakland, CA* 11 Saint Louis, MO*  12 Cleveland, OH* 13 Detroit, MI* 14 Pittsburgh, PA* 15 Denver, CO* Dallas, TX*  16 Dallas, TX*  17 Kansas City, MO* Atlanta, GA* Portland, OR* — Montreal, Canada* Portland, OR* — Montreal, Canada* Newark, NJ*  18 Sacramento, CA† Richmond, VA† — San Antonio, TX‡ Charlotte, NC† — Inglewood, CA† Richmond, VA† — Greensboro, NC‡ Richmond, CT† — San Francisco, CA† New Haven, CT† — Spokane, WA‡ New Pittsburgh, PA* S2 Omaha, NE† — Noanoke, VA‡ Satramento, NY‡ Scranton, PA‡ — Des Moines, IA‡ Columbus, OH† — Wichita, KS† Oklahoma City, OK† — Dayton, OH‡ Cincinnati, OH† — Tulsa, OK‡ Louisville, KY‡ — Ventura, CA† Davenport, IA† — Mountain View, CA† Akron, OH† — Reno, NV‡ Albuquerque, NM† — Flint, MI‡ Maintenance Code Phoenix, AZ† — Grand Rapids, MI‡ Milwaukee, WI† — Tucson, AZ‡  Mainneapolis, MN‡ — Anaheim, CA† Minneapolis, MN‡ — Anaheim, CA† Lexington, KY‡ — Las Vegas, NV† Chattanooga, TN† — Fort Wayne, IN‡		washington (3), D.C.	44	Willington, DE   — Little Rock, AR
10   Los Angeles, CA*   17   Saint Louis, MO*   18   Saint Louis, MO*   19   Saint Louis, MI*   19	B .	* ' ' '	1	
10 Oakland, CA* 11 Saint Louis, MO* 12 Cleveland, OH* 13 Detroit, MI* 14 Pittsburgh, PA* 15 Denver, CO* 16 Dallas, TX* 17 Kansas City, MO* 20 Atlanta, GA* 21 Memphis, TN* — Vancouver, Canada* 22 Portland, OR* — Montreal, Canada* 23 Newark, NJ* 24 Sacramento, CA† 25 Richmond, VA† — San Antonio, TX‡ 26 Charlotte, NC† — Inglewood, CA† 27 Houston, TX† — Toronto, Canada* 28 Orlando, FL† — Camden, NJ‡ 29 Prindind, OH* 20 Atlanta, GA* 21 Memphis, TN* — Vancouver, Canada* 22 Portland, OR* — Montreal, Canada* 23 Newark, NJ* 24 Sacramento, CA† 25 Richmond, VA† — San Antonio, TX‡ 26 Charlotte, NC† — Inglewood, CA† 27 Houston, TX† — Toronto, Canada* 30 Providence, RI† — Greensboro, NC‡ 31 Springfield, MA† — Greensboro, NC‡ 32 Hartford, CT‡ — San Francisco, CA† 33 Worcester, MA† — Raleigh, NC‡ 34 New Haven, CT† — Spokane, WA‡ 35 Albany, NY† — Jacksonville, FL‡ 36 Tampa, FL‡ — White Plains, NY† 37 Omaha, NE† — Roanoke, VA‡ 38 Urani, Lt — Norfolk, VA‡ 39 Omaha, NE† — Roanoke, VA‡ 30 Cmaha, NE† — Roanoke, VA‡ 31 Denver, CO* 32 Denver, CO* 33 Mintenance Code 34 Maintenance Code 35 Noriginal MA† — Greensboro, NC‡ 36 Tampa, FL‡ — White Plains, NY† 37 Omaha, NE† — Roanoke, VA‡ 38 Duffalo, NY† 39 Orlando, FL† — Camden, NJ‡ 30 Chaloma, NE† — Roanoke, VA‡ 31 Mintenance Code 32 Maintenance Code 33 Mintenance Code 34 Mintenance Code 55 Columbus, OH† — Tulsa, OK‡ 66 Claurious, OK‡ 67 Phoenix, AZ† — Grand Rapids, MI‡ 67 Milwaukee, WI† — Tucson, AZ‡ 67 Minneapolis, MN‡ — Anaheim, CA† 68 Lexington, KY‡ — Las Vegas, NV† 69 Chattanooga, TN† — Fort Wayne, IN‡ 69 Chattanooga, TN† — Fresno, CA‡	B .			
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22 Portland, OR* — Montreal, Canada*	20	Atlanta, GA*	60	
23 Newark, NJ*  24 Sacramento, CA† 25 Richmond, VA† — San Antonio, TX‡ 26 Charlotte, NC† — Inglewood, CA† 30 Providence, RI† — Greensboro, NC‡ 31 Springfield, MA† — Greensboro, NC‡ 32 Hartford, CT‡ — San Francisco, CA† 33 Worcester, MA† — Raleigh, NC‡ 34 New Haven, CT† — Spokane, WA‡ 35 Albany, NY† — Jacksonville, FL‡  36 Tampa, FL‡ — White Plains, NY†  37 Columbia, SC‡ — Salt Lake City, UT† 68 Albuquerque, NM† — Frint, MI‡ 68 Maintenance Code 69 Phoenix, AZ† — Grand Rapids, MI‡ 67 Milwaukee, WI† — Tucson, AZ‡ 68 Maintenance Code 69 San Diego, CA† — Madison, WI‡ 69 Maintenance Code 69 San Diego, CA† — Madison, WI‡ 69 Maintenance Code 60 San Diego, CA† — Madison, WI‡ 61 Lexington, KY‡ — Las Vegas, NV† 62 Chattanooga, TN† — Fort Wayne, IN‡ 63 Tampa, FL‡ — White Plains, NY† 64 Columbia, SC‡ — Salt Lake City, UT† 65 Albuquerque, NM† — Flint, MI‡ 66 Maintenance Code 67 Phoenix, AZ† — Grand Rapids, MI‡ 67 Milwaukee, WI† — Tucson, AZ‡ 68 Tampa, FL‡ — San Francisco, CA† 69 Phoenix, AZ† — Grand Rapids, MI‡ 69 Maintenance Code 70 Milwaukee, WI† — Tucson, AZ‡ 71 Maintenance Code 72 San Diego, CA† — Madison, WI‡ 73 Minneapolis, MN‡ — Anaheim, CA† 74 Lexington, KY‡ — Las Vegas, NV† 75 Chattanooga, TN† — Fort Wayne, IN‡				
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Charlotte, NC† — Inglewood, CA†¶  Houston, TX† — Toronto, Canada* Providence, RI† — Greenville, SC†  Springfield, MA† — Greensboro, NC‡ Hartford, CT‡ — San Francisco, CA† Worcester, MA† — Raleigh, NC‡ New Haven, CT† — Spokane, WA‡ Tampa, FL‡ — White Plains, NY†  Maintenance Code San Diego, CA† — Madison, WI‡ Minneapolis, MN‡ — Anaheim, CA† Lexington, KY‡ — Las Vegas, NV† Chattanooga, TN† — Fort Wayne, IN‡	24	Sacramento, CA†	64	Columbia, SC‡ - Salt Lake City, UT†
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36 Tampa, FL‡ — White Plains, NY† 76 Indianapolis, IN† — Fresno, CA‡	34			
	35	Albany, NY† — Jacksonville, FL‡	75	Chattanooga, TN† — Fort Wayne, IN‡
	36	Tampa, FL <sup>‡</sup> – White Plains, NY <sup>†</sup>	76	Indianapolis, IN† — Fresno. CA‡
	37	Birmingham, AL† — Cedar Rapids, IA‡		Maintenance Code

<sup>\*</sup> Regional hub (class 1)

<sup>†</sup> Sectional hub (class 2)

<sup>‡</sup> Metro hub (class 3)

<sup>§</sup> Hamilton Square

<sup>¶</sup> Los Angeles 07

♦TABLE C♦

HUB IDENTIFICATION CODES — ALPHABETICAL

IDENTIFICATION	CODE	IDENTIFICATION	CODE	IDENTIFICATION	CODE
Akron, OH†	62	Huntsville, AL‡	42	Philadelphia, PA*	05
Albanby, NY†	35	Indianapolis, IN†	76	Phoenix, AZ†	67
Albuquerque, NM†	65	Inglewood, CA†¶	26	Pittsburgh, PA*	14
Allentown, PA†	45	Jackson, MS†	47	Portland, OR*	22
Anaheim, CA†	73	Jacksonville, FL‡	35	Providence, RI†	30
Atlanta, Ga*	20	Kansas City, MO*	17	Raleigh, NC‡	33
Austin, TX†	63	Knoxville, TN‡	43	Reno, NV‡	62
Baltimore, MD†	47	Las Vegas, NV†	74	Richmond, VA†	25
Birmingham, AL†	37	Lexington, KY‡	74	Roanoke, VA‡	52
Boston, MA*	01	Little Rock, AR†	44		41
Buffalo, NY†	53	Little Rock, AR	-	Rochester, NY‡	41
	†	Los Angeles, CA*	07	Sacramento, CA†	24
Camden, NJ‡	50	Lousiville, KY‡	60	Saint Louis, MO*	11
Cedar Rapids, IA‡	37	Madison, WI‡	72	Salt Lake City, UT†	64
Charlotte, NC†	26	Maintenance Code	00	San Antonio, TX‡	25
Chattanooga, TN†	75	Maintenance Code	66	San Deigo, CA†	72
Chicago, IL*	06			8-7	
		Maintenance Code	71	San Francisco, CA†	32
Cincinnati, OH†	57	Maintenance Code	77	Scranton, PA‡	54
Cleveland, OH*	12	Memphis, TN*	21	Seattle, WA†	42
Columbia, SC‡	64	Miami, FL‡	40	Shreveport, LA†	45
Columbus, OH† Dallas, TX*	55 16	Milwaukee, WI†	70	Spokane, WA‡	34
Dallas, 17	<del> </del>	Minneapolis, MN‡	73	Springfield, MA†	31
Davenport, IA†	61	Montreal, Canada*	22	Syracuse, NY†	40
Dayton, OH‡	56	Mountain View, CA†	61	Tampa, FL‡	36
Denver, CO*	15	Nashville, TN†	41	Toledo, OH†	63
Des Moines, IA‡	54	Newark, NJ*	23	Toronto, Canada*	27
Detroit, MI*	13	New Haven, CT†	34	Trenton, NJ†§	43
Flint, MI‡	65	New Orleans, LA†	46	Tucson, AZ‡	70
Fort Wayne, IN‡	75	New York, NY (323 Broadway)*	03	Tulsa, OK‡	57
Fresno, CA‡	76	New York, NY (811 10th Av)*	02	Vancouver, Canada*	21
Grand Rapids, MI‡	67	Norfolk, VA‡	51	Vancouver, Canada Ventura, CA†	60
Greensboro, NC‡	31	Oakland, CA*	10	Washington, D.C.*	04
	<del> </del>			White Plains, NY†	36
Greenville, SC†	30	Oklahoma City, OK†	56	,	
Harrisburg, PA†	46	Omaha, NE†	52	Wichita, KS†	55
Hartford, CT‡	32	Orlando, FL†	50	Wilmington, DE†	44
Houston TX†	27	Peoria, IL†	51	Worcester, MA†	33

<sup>\*</sup> Regional hub (class 1)

<sup>†</sup> Sectional hub (class 2)

<sup>‡</sup> Metro hub (class 3)

<sup>§</sup> Hamilton Square

<sup>¶</sup> Los Angeles 07