

## TROUBLE TICKET

CONTENTS	PAGE
1.0 GENERAL .....	1
2.0 TROUBLE CLASSES (SOURCE) .....	2
3.0 TROUBLE CODES (TYPE) .....	2
4.0 MAKING NON-TSPS TICKET COMPATIBLE .....	3
5.0 DETAILS OF TROUBLE TICKET .....	4

Attachment: 1. Trouble Ticket Format

2. Non-TSPS Trouble Format for Transmission

### 1.0 GENERAL

1.01 A DDD Service Bureau should receive a continuous flow of reports of ineffective call attempts. This Section describes the preparation of a standard trouble ticket which can be used to record the various types of information, and how to merge them for analysis purposes.

1.02 The information is received from various sources and consists of verbal trouble reports, written trouble tickets, punched IBM or trouble recorder cards, and printed lists.

1.03 While the procedures for *receiving* the operator trouble reports will vary, the trouble ticket must be the means (TSPS excluded) used for placing the information into a computer for assembly and listing or for sorting and listing mechanically.

1.04 The ticket is created in one of two ways —

(1.) Operator or Bureau clerk mark sense.

(2.) Mechanically key punched as the report is received from the switchboard.

1.05 Mark sense and punched card optical scanning devices are available for reading either ticket and converting it to data impulses, transmitting it to an assembly point, and merging it with other data for analysis.

1.06 In order to utilize the proposed centralized TSPS computer for the assembly of all input data, the use of standard trouble coding and classifications as mentioned in BSP 660-621-010 is recommended. (See paragraph 2.0 and 3.0)

1.07 Non-TSPS locations can use the same standard coding and input their trouble data into the same assembly point used by TSPS users.

1.08 Standard coding, classifications, and format will allow a central assembly point to merge data from all Bureaus and provide call failure information for each Bureau's prime area.

1.09 Pending the availability of a centrally located assembly point of this type, local arrangements are used for processing of the trouble ticket.

**SECTION 010-401-014**

**2.0 TROUBLE CLASSES (SOURCE)**

**2.01** BSP 660-621-010 specifies that the source codes of trouble reports be identified using the tens digit of a two (2) digit code as follows –

SOURCE CODE	SOURCE	ABBREV.
0	International or Overseas Operator	OVSO
1	Operator Using Tandem Trunk or TSP (S) Operators	OPRT
2	Operator Using Direct Trunk	OPRD
3	Service Observer	SOBS
4*	Dial Service Assistance (Local Assist)	DSA
5	Customer Encountered Troubles Via Operator, PSC, Etc.	CUST
6	Dataphone DTWX and Data Service	DATA
8	TSPS Troubles Identified Toward Calling Customer (Trouble Types 3 and 5 Only)	TSPC
9	Used Locally For Identification of Originating Maintenance Problems	ORIG

\*Collection & analysis of DSA reports by DDD Bureau is optional

**3.0 TROUBLE CODES FOR TROUBLE TYPES**

**3.01** BSP 660-621-010 also specifies that the following units digit be assigned for the trouble codes as shown here –

**THE FOLLOWING TROUBLE TYPES ARE PROPOSED FOR SOURCES 0-6.**

CODE	DESCRIPTION	ABBREV.
0	Wrong Number or Reached Intercept Improperly.	WNO
1	No Ring, No Answer	NRNA
2	Noisy, Crosstalk, or Garble (Note 1)	NXT
3	Can't Hear or Can't Be Heard	CHBH
4	Improper (False) Supervision (Note 2)	FS
5	Cut Off	CTO
6	Reorder or Announcement	RO
7	Ring No Answer or No Operator Answer	RNA
8	(Reserved For Special Studies) (Note 3)	
9	Other	

**Note 1:** For Data Services (Class 6) trouble type 2 will be translated GARB.

**Note 2:** For Data Services (Class 6) trouble type 4 will represent a false busy and will be translated FB.

**Note 3:** For Data Services, (Class 6) trouble type 8 may be used for ring trip no answer and will be translated RTNA.

Optional Class 9 troubles (originating TSPS maintenance problems) should be separately summarized on an originating basis but will not be inter-exchanged since the troubles are known to be of an originating nature. In those locations where this class is used, the following trouble codes are assigned.

#### OBVIOUS ORIGINATING TROUBLES

CLASS	CODE	DESCRIPTION	ABBREV.
9	0	ANI Failure	ANIF
9	1	Positions Crossed	TSPX
9	2	FR Customer Comes In With Coin Indication	FROC
9	3		
9	4		
9	5		
9	6		
9	7		
9	8		
9	9		

**3.02** Where conflicts with existing mark sense or mechanized systems exist reformatting of non-TSPS trouble reports ~~will be~~ required.

#### 4.0 MAKING NON-TSPS TICKET COMPATIBLE

**4.01** The sample trouble ticket shown in attachment #1 has been prepared showing the information which is required for a complete analysis job. The amount of information which can be handled efficiently by a Bureau is determined of course to a great extent by the method used for processing and summarizing the information.

**4.02** Locations preparing trouble tickets mechanically from operator key sets can punch 80 columns of information on the IBM card. Those Bureaus using a mark sense operation will be limited to 27 mark sense columns on each side of a mark sense card. This provides 54 columns of data when the mark sense card is read and reverse punched.

**4.03** Since TSPS reporting is limited to the amount of data available from the base unit, only 34 bytes of information plus control information are available.

**4.04** Non-TSPS input can be arranged on the trouble ticket, using standard codes, so that the information read is in the order recommended for computer input from non-TSPS source. (See Attachment #2)

## SECTION 010-401-014

**4.05** Since only 34 columns of data are used when merging non-TSPS with TSPS data, the 80 column mechanically produced operator trouble ticket can be inserted in a card reader and the proper number of columns read from left to right and transmitted.

**4.06** Mark sense tickets will require marking on both sides and mark sense reading and punching into an 80 column format with 34 columns in the order shown on Attachment #2. (Attachment #1 - Front side shows same information on the bottom columns 2 through 35).

### 5.0 DETAILS OF TROUBLE TICKET

**5.01** To meet the requirements for the exchange of information between all Network Analysis Bureaus and Area Network Service Centers (Long Lines) Attachment #1 represents a typical trouble ticket format. The information is arranged on the ticket to allow merging of non-TSPS data operator reports with TSPS computer input. The various columns contain information which is either written (for local analysis and control) or mark sensed or key punched as follows -

#### FRONT SIDE

- Miscellaneous** - For Local use - serial number etc.
- Time Received** - Time reported to Bureau clerk or recorders.
- Time Released** - Time held connection was released, or decision made not to trace.
- Elapsed Time** - Difference between received and released time - used to calculate and control traces over 30 minutes. If desired, elapsed time could be mark sensed on back of card for machine analysis.
- Operator Position** - To identify location of held connection on traces, and to analyze reports of improper supervision. (Position Troubles)
- Trunk Group and Number** - For identifying inter-toll and toll-connecting trunk reported on traces or lockouts.
- Other** - Other data as required
- Recorded By** - Initials of report receiving clerk - used for accuracy audits.
- Traced By** - Initials of person in Bureau controlling traced - used for training purposes.
- Operator Unit (M.S. Columns #6 & #7)** - Two digit code for switchboard from which report was received. Used for originating listing by switchboards for originating analysis. Used to identify other report sources ie other Bureaus, P.S.C., Employee, etc.
- Trouble Class-Source and Type (M.S. Columns #8 & #9)** - Source and nature of trouble report.
- Number Dialed (M.S. Columns #10 to #19)** - Number as dialed - code compression can be used on HNPA calls. Area not used on DSA reports. On service observing failures show only thousands and hundreds operator code.

**Calling Number** – Calling number if customer report – Trunk Group No. In M.S. Columns #26 & #27 on front and M. S. Columns #1 & #2 on reverse side  
**and Number**  
 (M.S. Columns #20 to #27 #1 & #2)

**REVERSE SIDE**

**Trunk Number** – Number of trunk selected in multiple  
 (M.S. Columns #3 to #6)

**Date** -- Calendar Date  
 (M.S. Columns #7 to #10)

**Time** – 24 Hour Clock Time  
 (M.S. Columns #11 to #14)

**Disposition** – Disposition of trouble report  
 (–M.S. Column #15)

- 0 - Pattern
- 1 - Hold for analysis
- 2 - Abandoned trace
- 3 - NTF – Toll Center
- 4 - TF – Toll Center
- 5 - Abnormal condition
- 6 - Referred Out
- 7 - NTFT – Tributary
- 8 - TFT – Tributary
- 9 - Other

**Result Location** – Destination of report – combined with disposition code to show disposition & location of reports for use on detail of reports & traces. Generally represents maintenance responsibility for toll center in which NNX is located, or foreign Bureau or NPA. Used to accumulate results from toll center to district, to division, area, and company levels. (If more columns are required “remarks” space can be reduced)

**Special Analysis** – To assist in TF & NTF analysis. TF is to show type of trouble found – NTF shows condition found. Examples *Suggested* are as follows –  
 (M.S. Columns #19 & #20)

**NO TROUBLE FOUND**

- |   |  |
|---|--|
| 00. 1st. sel. seized – not stepped      | 09. 4th sel. on wrong level                            |
| 01. 1st. sel. on wrong level            | 10. 5th. sel. seized – not stepped                     |
| 02. Aux. 1st. sel. seized – not stepped | 11. 5th. sel. on wrong level                           |
| 03. Aux. 1st. sel. on wrong level       | 12. Connector seized – not stepped                     |
| 04. 2nd. sel. seized – not stepped      | 13. Connector vertical – no rotary (missed last digit) |
| 05. 2nd. sel. on wrong level            | 14. Connector on wrong level                           |
| 06. 3rd. sel. seized – not stepped      | 15. Wrong last digit                                   |
| 07. 3rd. sel. on wrong level            | 16. Reached number and tripped                         |
| 08. 4th. sel seized – not stepped       |  |

## NO TROUBLE FOUND (CON'TD)

- |   |                                |
|---|--------------------------------|
| 17. Reached number and tripped - PBX      | 32. A & D lock-up XBT          |
| 18. Intermediate digit or digits missing  | 33. No cross points XBT        |
| 19. Repeated digit or digits missing      | 34. Stuck sender XBT           |
| 20. Double connection - SXS               | 35. Wrong place XBT            |
| 21. Switch 11th rotary step - SXS         | 36. A & D lockup 1 & 5 XB      |
| 22. Switch not seized                     | 37. No ring 1 & 5 XB           |
| 23. Apparent no release                   | 38. No ring panel              |
| 24. CXR or Trunk came clear               | 39. Independent common control |
| 25. Seized only Common Control            | 40. Independent SXS            |
| 26. Rot. Switch                           | 41. Operator dialing           |
| 27. Traced to reorder                     | 42. Stuck sender SXS           |
| 28. Operator trunks - 121-131-Inf. - Etc. | 43. Stuck sender 1 & 5 XBr     |
| 29. No cross-points - 4A                  | 44. NTF switchboard            |
| 30. Stuck sender 4A                       | 45. Office over load           |
| 31. Wrong place 4A                        |                                |

## TROUBLE FOUND

- |  |  |
|--|--|
| 39. #1 ESS - Defective Trk Unit                                      | 66. SXS-Switch adj. (other than relay)                           |
| 40. #1 ESS Relay Adj.  | 67. SXS-Wiring (equipment only)                                  |
| 41. #1 ESS Phase or Interrupt  | 68. Panel-Dirty contact (relays etc-other than drop equipment)   |
| 42. #1 ESS wiring (Equip.)   | 69. Panel - relay and equipment adj. (other than drop equipment) |
| 43. #1 ESS - Trk. Translation Error                                  | 70. Panel-switch adj. (other than relay)                         |
| 44. #1 ESS Line Translation Error                                    | 71. Panel-Wiring (equipment only)                                |
| 45. #1 ESS - Oth. Translation Error                                  | 72. Manual-relay trouble (dirty or adj.)                         |
| 47. Traffic Operation  | 73. Manual-Switchboard-cords, jacks, lamps etc.                  |
| 48. Man Made Long Lines  | 74. Switchboard-relay trouble, (dirty or adj)                    |
| 49. Man Made W.E.CO.   | 75. Switchboard-other (cords, jacks, lamp etc.)                  |
| 50. Man Made Wis. Tel. Co.   | 76. Defective Equipment replaced                                 |
| 51. Man Made Independent Co.   | 77. Independent Co.-other  |
| 52. 4A - Dirty contacts (relays etc - other than drop equip)         | 78. Trunk equipment Incoming and Outgoing - dirty contacts       |
| 53. 4A-Relay and equipment adj. (other than drop equipment)          | 79. Trunk equipment Incoming and Outgoing - relay adj.           |
| 54. 4A - Wiring - broken, loose (equipment)                          | 80. Trunk equipment Incoming and Outgoing - wiring               |
| 55. 4A - Misc. (tubes, cards etc.)                                   | 81. Signal equipment (SF, CX etc.)-dirty contacts                |
| 56. XBT-Dirty Contacts (relays etc. - Other than drop equip)         | 82. Signal equipment (SF, CX etc.)-relay adj.                    |
| 57. XBT - Relay and equipment adj. (other than drop equipment)       | 83. Signal equipment (SF, CX etc.)-wiring                        |
| 58. XBT - Wiring (equipment only)                                    | 84. Signal equipment (SF, CX etc.) - other                       |
| 59. XBT - Misc. (tubes, etc.)  | 85. Pulse repeating equipment - dirty contacts                   |
| 60. #1 or #5 XB - Dirty contacts (relays) other than drop equip)     | 86. Pulse repeating equipment - relay adj.                       |
| 61. #1 or #5 XB-Relay and equipment adj. (other than drop equipment) | 87. Pulse repeating equipment - wiring                           |
| 62. #1 or #5 XB-Wiring (equipment only)                              | 88. Other toll term equipment -(coils, term sets etc.)           |
| 63. #1 or #5 XB-Misc. (tubes, cords etc.)                            | 89. Operator trunks (121, 131, etc.)-dirty contacts.             |
| 64. SXS-Dirty contacts (relays etc - other than drop equip)          |  |
| 65. SXS-Relay adj. (other than drop equipment)                       |  |

## TROUBLE FOUND (CON'TD)

- |   |   |
|---|---|
| 90. Operator trunks (121, 131, etc.)—relay adj. | 96. Fax trouble — (open wire, cable etc.)                         |
| 91. Operator trunks (121, 131, etc.)—wiring     | 97. Wiring—open, loose, etc. frame equipment<br>cross connections |
| 92. CXR —(transmission)                         | 98. Subscriber line or station trouble                            |
| 93. CXR —signaling                              | 99. Fuse  |
| 94. CXR —other (Hits etc.)                      | 00. Misc. common office equipment (power, ring<br>machine etc.)   |
| 95. CXR —system failure                         |   |

*Remarks* — Used for details of work error — manual collection data.

*TF-NTF* — Name of location — clerk converts to result location code.

*Initial* — Initial of tracer

*CMP Ticket* — Used C.O. review team when auditing CMP.  
*Number*

FRONT SIDE

MISCELLANEOUS	OPER. UNIT	TRBL CLASS		NUMBER DIALED						CALLING NO. OR - TRUNK																																																																					
		SOURCE	TYPE	AREA CODE		PREFIX OR OPR. CODE		NUMBER		NPA	NNX	T	H																																																																		
TIME RECEIVED		OVSO	WNO							GROUP																																																																					
TIME RELEASED		OPRT	NRNA																																																																												
ELAPSED TIME		OPRD	NXT																																																																												
OPERATOR POSITION		SOBS	CHBH																																																																												
TRUNK GRP. & NUMBER		DSA	FS																																																																												
		CUST	CTO																																																																												
		DATA	RO																																																																												
OTHER INFO.		TSPC	RNA																																																																												
RECORDED BY	TRACED BY	ORIG	SPEC																																																																												
		OTH																																																																													
SOM	DATE	TIME	TBL	NUMBER DIALED						CALLING NO. OR TRUNK				CLFL	LE ON	RESUL	SPEC	OPER																																																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

REVERSE SIDE

TRUNK OR CALLING NO	TRUNK	DATE		TIME	DISPOSITION	RESULT	SPEC. ANALY-SIS	REMARKS																																																			
		MONTH	DAY						24 HOUR																																																		
T	U																																																										
GROUP	NUMBER	MONTH	DAY	24 HOUR																																																							
C0	C0	C0	C0	C0	C0	C0	C0	REMARKS—																																																			
C1	C1	C1	C1	C1	C1	C1	C1	ANAL.																																																			
C2	C2	C2	C2	C2	C2	C2	C2	ABAN.																																																			
C3	C3	C3	C3	C3	C3	C3	C3	NTF																																																			
C4	C4	C4	C4	C4	C4	C4	C4	TF																																																			
C5	C5	C5	C5	C5	C5	C5	C5	ABN'M COND.																																																			
C6	C6	C6	C6	C6	C6	C6	C6	REF OUT																																																			
C7	C7	C7	C7	C7	C7	C7	C7	NTFT																																																			
C8	C8	C8	C8	C8	C8	C8	C8	TFT																																																			
C9	C9	C9	C9	C9	C9	C9	C9	OTHER																																																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60

TF-NTF LOCATION INITIAL CMP. TICKET NUMBER

## NON-TSPS TROUBLE REPORT FORMAT FOR TRANSMISSION:

Desc.	SOM	DATE				TIME				SOURCE	TROUBLE	NUMBER DIALED									
		MONTH		DAY		HOUR		MIN				NPA			NNX			STATION			
Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Notes	1									2	3	4			5						

CALLING NO. OR TRUNK											TRUNK NUMBER	CR	LF	EOM		
NPA			NNX			TRUNK GROUP										
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
6			7			8					9			10	10	1

## NOTES:

1. SOM (start of message) and EOM (end of message) are standard non-printing characters on 8-level ASCII equipment.
2. See paragraph 2.0) BSP 660-621-010 Issue 2
3. See paragraph 3.0) BSP 660-621-010 Issue 2
4. HNPA must be recorded on HNPA calls.
5. NNX must be recorded on HNPA calls.
6. Customer's or operator HNPA location must be recorded.
7. Calling NNX if customer report. If operator report can be used for switchboard location code.
8. Station number if customer report. If operator report, may be used for trunk group.
9. Trunk number or name may be entered here for assistance in originating analysis.
10. CR (carriage return) and LF (line feed) are standard control characters for TTY.