DEFECTIVE PAIR CONTROL PLAN

CONTENTS

EXHIBITS

1. GENERAL

1.01 The purpose of this section is to describe a systematic procedure to identify, monitor and reclaim defective cable pairs. A planned program will maximize the benefits of this plan while at the same time minimizing the cost of recovery. Cooperation and coordination among the various departmental groups is absolutely essential.

1.02 Whenever this section is reissued the reason(s) for reissue will be listed in this paragraph.

1.03 Defective cable pairs represent a non-usable capital investment which produces no revenue and results in increased outside plant loop cost. Unidentified defective pairs can also increase operating expense when discovered during installations and cable pair transfer operations.

1.04 Defective pairs are introduced into the outside plant in a number of ways:

- Manufacture Defects
- Exterior Damage (E.G., Lighting, Excavations, Rodents, Power)
- Poor Quality Workmanship
- Daily Work Activities
- Excessive Cable Rearrangements
- Aging and Deteriorating Cables

1.05 The administration of defective cable pairs is a continuing and costly problem. In order to reduce loop cost, there is a need to recover defective pairs on an economically programmed basis. The Conformance Testing of Subscriber Cables Administrative Procedures (BSP 330-300-526), if adhered to, will control the introduction of new defective cable pairs into the loop network. The ongoing control over defective cable pairs is addressed in this practice.

1.06 Annual programs for testing defective cable pairs and updating records to recover known defectives is not profitable, because the average cost of these operations approximately equals the expected benefits. However, the recovery of defective cable pairs to Allocation Areas (AAs) in selected segments of plant can be economical, when there are known service requirements.

2. DISTRICT STEERING COMMITTEE

2.01 The District Steering Committee decision-making members are the third-level managers of the DSE (Distribution Services Engineering), LAC (Loop Assignment Center), CMC (Construction Management Center) and MC (Maintenance Center). Two additional important members of the committee are the FAP (Facilities Analysis Plan) Engineer and the MCA (Maintenance Center Analyst).

2.02 The Steering Committee's involvement in Defective Pair Control is critical. The committee consists of representatives from all affected departments and provides the direction for corrective action. The district level manager of the Distribution Services Engineering organization is responsible for initiating the programmed defective pair recovery. However, it is the responsibility of the District Steering Committee to set the preliminary budget for defective pair testing and recovery, to approve the list of planned recovery work to match this budget, and to evaluate the recovery efforts.

2.03 The Steering Committee in the process of reviewing the areas to be studied must eventually answer the question, "Is the area a high priority candidate for bulk recovery of defective pairs?" If the answer is "No," the MCA becomes responsible for all further investigation of the area and makes the ultimate decision for the appropriate course of action to correct the problem. If the answer is "Yes, the area is a high priority candidate for bulk recovery" the area is then assigned to the FAP Engineer.

2.04 In those AAs designated as high priority areas containing high defective fills, a necessary input into the review process is the District's maintenance budget. This information is provided by the Network Distribution Services staff. The budget will dictate the amount of effort that can be expended on clearing projects. If funding is available for only a limited number of projects, the selection process must be geared toward those areas where the greatest return can be expected.

2.05 The District Steering Committee is also responsible for allocating the resources necessary to complete maintenance projects. The District Manager-Maintenance and District Manager-Engineering will provide the Steering Committee with the number of C&X, M, and R hours and dollars available each quarter. The Steering Committee can then set general parameters and priorities for the work.

2.06 The Steering Committee selects the alternatives presented by the FAP Engineer to best correct the problem areas. The selection is based upon the budget, available manpower, district's "weak spots" in performance, existing maintenance costs, etc.

2.07 The Steering Committee will also assign priorities to the selected clearing projects. These priorities will be used by Distribution Service Engineering (DSE) in the preparation of work authorizations and subsequent scheduling of materials and manpower. The FAP Engineer will prepare and maintain, by AA, a list of areas authorized by the Steering Committee for study.

2.08 It is the responsibility of the Steering Committee in its monthly meetings to review the progress of maintenance projects. If road blocks exist, they should be identified and assigned to one of the committee members for resolution.

2.09 Following the completion of the maintenance project, the Steering Committee is responsible for monitoring the problem area to determine the results. This monitoring is accomplished through FAP tracking reports. The follow-up will reveal whether or not the project accomplished the anticipated results. Maintenance projects that satisfy the projected improvement levels can be termed successful and removed from the Steering Committee's agenda. Projects that are questionable should continue to be monitored until a decision can be made as to their effectiveness. Questionable areas should be reviewed by the FAP Engineer and the MCA to determine if minimal additional effort is necessary to make the project successful.

3. DISTRIBUTION SERVICES ENGINEERING (DSE)

3.01 It is the responsibility of DSE to provide outside plant facilities when and where they are needed and see that these facilities are maintained in an economical manner which results in a proper balance between capital investment and maintenance costs. DSE is responsible for weighing the economics and specifying the course of action to relieve facility problems and to recommend the recovery of defective pairs to solve specific problems. This can be accomplished with the cooperation of the DSPC (Distribution Services Planning Center), the DSDC (Distribution Services Design Center), the FAP Engineer, and the recovery effort directed by the District Steering Committee.

4. DISTRIBUTION SERVICES PLANNING CENTER (DSPC)

4.01 It is the responsibility of the DSPC to develop commitment and/or recommitment strategies for feeder complements which are not likely to result in an increase in defective pair levels and commit existing and new feeder complements through the interface concept (SAC, Rand, FDI, etc.) where economically feasible. Where interfacing is not economical, stabilization of the loop network can be enhances with astute commitment of feeder pairs by the planner and adherence to the Connect Through Plan (BSP 915-350-010).

4.02 It is the responsibility of the planner to identify the AAs where major relief projects/recommitments are in progress or planned within six months and determine the economic benefit, if any, of defective pair recovery using the mechanized tools available. He/she will coordinate with the MCA to obtain realistic cost estimates for use in the economic analysis and provide the FAP Engineer with the strategies determined as economical.

5. THE FAP ENGINEER

5.01 It is the responsibility of the FAP (Facilities Analysis Plan) Engineer to prepare a priority list of wire centers in need of main frame testing for the Steering Committee's consideration. The FAP Engineer will identify AAs that are candidates for bulk recovery of defective pairs after conducting an analysis of the cost and activity data generated from LATIS (Loop Activity Tracking Information System).

5.02 Once the areas are chosen by the Steering Committee for bulk recovery, it is the responsibility of the FAP Engineer to perform the required follow-up action. Furthermore, the FAP Engineer will track all areas involving work authorizations issued by the DSPC and/or DSDC for their impact on reducing defective pairs.

5.03 In addition, it is the responsibility of the FAP Engineer to work closely with the MCA to determine the proper and most economical approach to rectify high levels of customer trouble reports and/or expense being generated by defective pairs in specific locations. When this decision involves bulk recovery of defective pairs, information should be forwarded to the DSDC to aid in the design of authorizations to meet both cost and service problems.

6. DISTRIBUTION SERVICES DESIGN CENTER (DSDC)

6.01 It is the responsibility of the DSDC Engineer to design rehabilitation proposals and prepare the corresponding input for LPIE2 for each AA recommended by the Steering Committee. As an aid in this study, the Design Engineer will use the package of data and analysis developed by the FAP Engineer. (See BSP 917-601-110 for a detailed description of the Design Rehab process.)

6.02 It is the responsibility of the DSDC to issue and schedule work authorizations selected by the Steering Committee to reduce loop cost by the clearing of defective pairs.

6.03 It is also the responsibility of the Design Engineer to make joint field surveys with the OSP Maintenance Supervisor for proposed maintenance projects (replacement of defective plant). The Design Engineer, prior to the field survey, will review the planned work for the cable complements involved, and determine if the identified problems have already been addressed to insure synchronization of plans. The field survey for the proposed maintenance project will conclude with a recommended course of action or a recommendation for further testing. This recommendation will then be forwarded to the MCA.

6.04 It is the responsibility of the DSDC to design and schedule all maintenance projects requiring job authorizations and/or construction work. The Design Engineer shall undertake this work in the priority established by the MCA and/or FAP Engineer and shall keep the MCA informed as to the status of work authorizations. The Design Center shall also forward a copy of all work authorizations to the FAP Engineer for tracking purposes. The Design Engineer will designate and assign conformance testing procedures to all applicable work authorizations (see BSP 330-300-526SW).

6.05 The Design Engineer will design or convert existing or new distribution plant to SAC (Serving Area Concept), FDI (Feeder Distribution Interfacing) or RAND (Rural Area Network Design) where economically feasible to reduce craft activity in both the feeder and distribution plant.

7. OSP MAINTENANCE

7.01 OSP Maintenance, along with Distribution Services Engineering (DSE), are responsible for joint field surveys for proposed maintenance projects. Together, the Design Engineer and the OSP Maintenance Supervisor will recommend the course of action to be taken on the proposed maintenance project and the OSP

Maintenance Supervisor will forward their recommendation to the Maintenance Center Analyst (MCA).

7.02 The OSP Maintenance work group is responsible for testing complements with known high defective levels under consideration for rearrangements. The testing must be completed prior to the issuance of engineering work authorizations. OSP Maintenance is also responsible for the testing defined by conformance testing complement diagrams (see SW 330-900-901). The information obtained is to be relayed to the MCA for use in determining whether further corrective action is required.

7.03 As maintenance projects are issued (bulk recovery of defective pairs), OSP Maintenance should complete the jobs in accordance with the priorities established by the District Steering Committee coordinated through the MCA. Items of plant in the vicinity of the work location should also be observed while in the field and discrepancies should be immediately relayed to the MCA for review and if corrective action is required, the work should be accomplished while the work force is at the location. Normal maintenance procedures regarding adjacent plant should be followed at all times.

8. MAINTENANCE CENTER ANALYST (MCA)

8.01 The MCA will schedule defective pair clearing assignments in accordance with the recommended priorities established by the District Steering Committee. The MCA will determine the appropriate course of action to correct problem areas where bulk recovery of defective pairs may not be economical.

8.02 The MCA should check the F1 facilities cable listings from the Loop Maintenance Operations System (LMOS), the Computer System for Mainframe Operations (COSMOS), the Loop Facilities Assignment And Control System (LFACS), and/or the ECCRs for the pairs to be tested prior to the actual field testing of defective pairs for analysis. The MCA also has the responsibility of reviewing discrepancies while the work force is in the field and determining if corrective action is necessary.

8.03 The MCA coordinates with the FAP Engineer to determine the most economical approach in correcting high level of customer reports and/or expense generated by defective pairs in specific AAs. In addition, the MCA, along with the FAP Engineer will review problem areas where the effectiveness of a maintenance project is questionable to determine if minimal additional effort is necessary to make the project successful.

8.04 The MCA will provide the DSPC Engineer with realistic cost estimates for maintenance of AAs used in economic analysis associated with the FA (Feeder Administration) process.

8.05 The MCA will provide the Loop Assignment Center (LAC) with current defective pair status information for updates of the ECCRs, COSMOS and LFACS data bases when testing is completed. The MCA will provide Centralized Audit Parameter and Error Reconciliation (CAPER) with defective pair status information for updates of the LMOS data base.

9. CONSTRUCTION MANAGEMENT CENTER (CMC) AND OSP CONSTRUCTION

9.01 It is the responsibility of the Construction Management Center's work force to assist in the reduction of defective cable pairs in the loop network through strict adherance to the conformance testing of subscriber cable administrative procedures (see BSP 330-330-526SW). This effort involves splicing and recon forces as well as the CMC.

9.02 Also, while involved in the completion of normal work authorizations, construction is in an ideal position to identify cable complements with high defective fills. This information should then be relayed to the CMC to be coordinated with DSE and the MCA. It may also be advantageous to correct defective pair problems while a splice is open (test point). In addition, normal maintenance procedures regarding adjacent plant should be followed at all times.

9.03 Construction forces shall clear all DC defects in new cables before conformance testing is attempted and prepare a Construction Cable Completion Test Report E6254 (see Exhibit 5), listing all defective pairs tested in new, replaced or extended cable plant.

NOTE: Engineering should be consulted before forwarding E6254 to the Conformance Testing Coordinator. Engineering will decide based on economics whether construction should clear all defectives in new plant.

10. CONFORMANCE TESTER

10.01 Prior to closing out a work authorization, conformance testing is to be done if required by BSP 330-300-526SW. Conformance testing will reflect the condition of the facilities after construction or maintenance work forces have completed their work. If the threshold levels established are not satisfied, construction and/or maintenance may be required to correct the deficiencies prior to the facilities being accepted. The results of the conformance tests should be forwarded to the Loop Assignment Center (LAC) for the updating of the appropriate data base.

11. LOOP ASSIGNMENT CENTER (LAC)

11.01 It is the responsibility of the Loop Assignment Center to notify DSE of complements that are congested or contain numerous defective pairs and/or where known future service order activity may create a congestion condition.

11.02 The LAC is also responsible for promptly posting to the ECCRs or mechanized records the results of the maintenance and rehabilitation work completed by the maintenance and construction forces, as well as posting information generated by the defective pairs reports.

12. PROCEDURE

12.01 The district level manager of the Distribution Services Engineering organization will initiate the programmed defective pair recovery process through the District Steering Committee.

12.02 The District Steering Committee will set the preliminary budget for defective pair testing and approve the list of planned recovery work based on a priority list of projects prepared by the FAP Engineer. The committee will also evaluate the recovery effort.

12.03 It is generally uneconomical to clear defective pairs in cable complements where ample spare facilities exist or no growth is expected. However, due to the volatile nature of growth, plant deterioration and workman activity, conditions change. The Loop Activity Tracking Information System (LATIS) monitors a number of activities that are associated with these changes and indicates where excessive costs are being experienced. LATIS publishes this information in Report 34L "Defective Pair Summary" (Exhibit 7). This report identifies wire centers that are in need of main frame testing. Main frame testing is done on all nonworking pairs in wire centers that have high costs associated with incidental discovery of defectives on Service Order Work (SOD) and rearrangement work (ODF) (Other Defective). Discovery of defective pairs should be looked at closely. Report W12L "Annualized Defective Pair AA Report" (Exhibit 4) was designed to support the bulk recovery of defective pairs in the most profitable geographic areas. In addition to providing an economic indicator to trigger economic study of defective pair recovery, it provides fill and trouble statistics.

NOTE: The FAP Engineer needs to update the growth factor for each wire center in the LATIS data base quarterly or semiannually.

12.04 The LATIS outputs (BSP 901-660-104) assist the DSPC Engineer in determining what areas and complements are congested. It also highlights areas experiencing high activity relative to service problems and complements incurring high maintenance expenses and those Allocation Areas where defective pair clearing may be an economical alternative. Engineering, therefore, is in the best position to know which cable complements should be prioritized for defective pair recovery.

12.05 The FAP Engineer should coordinate this effort with the MCA on a quarterly basis when preparing the preliminary Defective Pair Priority List (see Exhibit 2). The FAP Engineer will then present it to the District Steering Committee as a recommended plan of action for the ensuing months.

12.06 The following steps should be taken in preparing priority list:

(a) The LATIS W12L "Annualized Defective Pair AA Report" for each wire center in the area handled by the FAP Engineer should be obtained. On the report each Existing Allocation Area (EAA) in a wire center has a Defective Pair Value and certain EAAs have a flag (*) under the Alert column. The Defective Pair Value is an approximation of the present work or benefits that can be expected from recovering a defective pair. Recovery of defectives may be justified in EAAs in which the Defective Pair Value exceeds the normal cost of recovery. The asterisk (*) flag under the column "Alert," indicates that based on growth estimates the assigned and defective pairs will exceed 95 percent of the available

feeder pairs in the area within the coming year. This is a signal to alleviate cable congestion through cable relief or defective pair recovery. The flag may also appear where there is a high generation rate (%/year). A relatively high generation rate implies rapid plant deterioration. The generation rate is the number of SODs, ODFs and found cable troubles as a percent of assigned pairs in the EAA.

(b) The FAP engineer will underline in red those EAAs where the Defective Pair Value exceeds the normal cost of clearing a defective pair. The cost of recovery per defective pair cleared can be estimated initially using the following System Standard results until additional local data is obtained in the ongoing evaluation process.

A = Engineering Cost = 0.1 hr. X local labor cost

B = Maintenance Cost = 2.8 hrs. X local labor cost

C = Record Updates Cost = 0.01 hrs. X local labor cost

Total Recovery Cost = A + B + C

(c) Refer each W12L Report (with EAAs underlined) to the Feeder Administrator for that Wire Center, obtaining a commitment to respond within a specific time frame. In many cases, the work described below will have already been done as part of the Feeder Administration process.

(d) The DSPC Engineer will first identify those underlined EAAs where a major feeder relief project or feeder recommitment is underway and/or planned for completion within six months and note the W12L appropriately. These EAAs will not be considered candidates for programmed defective pair recovery.

(e) By reviewing the remaining underlined EAAs on the W12L report. The DSPC Engineer will determine the relative economics (Present Worth Savings) of defective pair recovery.

It must be understood that the economics of defective pair recovery is not based solely on operating expenses, but rather on a comparison of bulk recovery costs vs. new feeder expenditures (which can be deferred by bulk recovery). Only by using the Loop Feeder Administration System (LFAS) or the Economic Feeder Administration and Relief (EFAR) program can the Feeder Administrator make this economic comparison. Detailed procedures for this analysis are in OPA-1W267-01 (LFAS) and BSP 901-370-120 (EFAR).

Coordination with the MCA will be necessary to ascertain realistic cost estimates for pair clearing for use in LFAS or EFAR.

(f) The DSPC Engineer will post the following information on Report W12L to the right of each underlined EAA (or on a separate list, if necessary).

- PWE Savings (Or Costs) Of Bulk Recovery
- Date By Which Bulk Recovery Must Be Completed (If Less Than 6 Months Hence)
- Complements And Number Of Pairs To Be Cleared
- Impact On Feeder Relief Scheduling, If Any

The Feeder Administrator will return the posted W12L Report to the FAP Engineer.

(g) The FAP Engineer will consult with the MCA to determine if any complements in "Profitable Bulk Recovery" areas have been identified as having serious defect problems that are affecting customer service.

(h) Using Trouble Report Evaluation and Analysis Tool (TREAT) reports, Cable Repair Administrative System (CRAS) reports and the savings noted on the W12L, the FAP Engineer should prepare a priority list for the district.

(i) This Allocation Area list should be presented to the District Steering Committee for their approval and any input they may have on existing conditions or former results that may affect final selection.

(j) Prior to preparing the final priority list for the Maintenance Center, the FAP Engineer will review each area selected to determine which cable complements have been experiencing high defect activity.

(k) The FAP Engineer will then prepare a final Defective Pair Priority Clearing List by complement on Form E-6286. This list should be prepared to take maximum advantage of testing and location procedures. For example, complements that appear in the same sheath or go to adjacent areas should be combined into a single priority.

12.07 The Maintenance Center Analyst (MCA) will administer the bulk clearing operation to meet the scheduled completion of work, and schedule the work in accordance with the recommended priorities established by the Steering Committee. There will be occasions when single pairs are requested for individual service order reasons, but the majority of the defective pair clearing effort should be on a bulk basis. The LAC and DSE will coordinate with all parties involved in the clearing of single pairs for service orders.

12.08 In general, pairs should be assigned in the complement groups shown on the priority list to provide maximum efficiency. A bulk Defective Pair Dispatch Ticket (Exhibit 3) shall be initiated by the MCA and all defective pairs listed in the complements specified.

12.09 The Bulk Defective Pair Dispatch Ticket should then be routed to the LAC for posting of terminating information. This should be done as close to the expected dispatch date as possible. This is to ensure an accurate reflection of the most recent defective pair status. Upon return of the ticket from the LAC, the defective pairs assigned for clearing should be retested by MC personnel prior to dispatch. The Bulk Defective Pair Dispatch Ticket shall be utilized as a defective pair dispatch form. Other field tickets or local forms may still be required to satisfy time reporting and trouble analysis needs.

12.10 As required during the clearing operation, the LAC should consult with OPE to determine the logistics of recovering pairs in large underground splices or deteriorating cable. If large underground splices are opened, all defective pairs running through that splice should be cleared or verified at that point.

12.11 Copies of the completed Bulk Defective Pair Dispatch Ticket should be sent by the MCA to the LAC and CAPER upon completion of work. The LAC and CAPER forces should post the corrected information as soon as possible in order that immediate service benefits can be derived from the recovered pairs. The LAC and CAPER Centers should return the forms to the FAP Engineer, with date of update indicated, for evaluation and record keeping purposes.

12.12 To analyze and evaluate the effectiveness of the Defective Pair Control Plan, Follow Up Report (Exhibit 6) has been designed for preparation each month by the FAP Engineer. This report indicates the progress being made as the result of an effective Defective Pair Control Plan. Monitoring the major functions which add or remove defective pairs from the cable records as well as individual testing and bulk clearing operations will provide a good indication of the control being exercised by local management and the profitability of the program.

12.13 It is the responsibility of the FAP Engineer to prepare reports monthly, and provide a summary of results on a semiannual and annual basis for presentation to the District Steering Committee. It is the responsibility of the Maintenance Center Analyst to monthly gather the required data on main frame tests, bulk clearing dispatches, and supply the optional support data. It is the responsibility of the Construction Management Center to assemble the required data from cable completion test reports submitted during the month. The information gathered by the MC and CMC should be transmitted each month to the FAP Engineer in time to prepare the report for review by the District Steering Committee at their monthly meeting.

12.14 It is the responsibility of the District Steering Committee to monitor closely the Defective Pair Progress Report and recommend additional required action in those areas where improvements can be made.

13. FORMS

13.01 Defective Pair Test Discrepancy List

This form will be used to record all pairs where the status disagrees with that indicated on the ECCR's or COSMOS printout. The maintenance work force would use this form when performing the Go/No Go test at the MDF (see Exhibit 1) - This form should be reproduced locally.

13.02 Defective Pair Priority Clearing List

This form establishes a clearing priority list; the report is generated by the FAP engineer and is presented to the District Steering Committee. The committee reviews the list before approving and may add any input which may enhance the bulk recovery process (see Exhibit 2).

13.03 Bulk Defective Pair Dispatch Ticket

The Maintenance Center Analyst will issue a Cable Trouble Ticket (CTT) for clearing defective pairs on a bulk basis, (see Exhibit 3).

14. REPORTS

14.01 Latis Report W12L

Annualized Defective Pair AA Report is designed to support the bulk recovery of defective pairs in the most profitable geographic areas. In addition to providing an indicator to trigger an economic study of defective pair recovery, it provides fill and trouble status, (see Exhibit 4).

14.02 Latis Report D34L

This Report identifies wire centers that are in need of main frame testing. The testing is performed on all nonworking pairs in wire centers that have high costs associated with accidental discovery of defectives on Service order Work (SOD) and rearrangement work (ODF), (see Exhibit 7).

(12/83)

Defective Pair Test
Discrepancy List

Page Of

District	WC	SA	RT
Cable	Count	Serial No.	Order No.

Cable	Pair	Original Listing	Current Status	Cable	Pair	Original Listing	Current Status

Prepared By	Date	Records Updated By	Date

FCC Item No. 101

Exhibit 1

DEFECTIVE PAIR PRIORITY
CLEARING LIST

SHEET ___ of ___

TO (1) _____ REPAIR SERVICE BUREAU (2) _____

DISTRICT (3) _____ AREA/DIVISION (4) _____

Listed below are those cable complements in which an attempt should be made to recover defective pairs.

They are listed *in order of priority.*

	Central Office (5)	Cable (6)	50 Pair Complement (7)	Remarks (8)
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.				

Date (9) _____

(10) _____

District Manager Outside Plant Engineering

Exhibit 2

EXHIBIT 2

(Page 2 of 2)

DEFECTIVE PAIR PRIORITY CLEARING LIST

The following information should be recorded on the Defective Pair Priority Clearing List. The numbers listed below correspond to the numbers on the list as shown:

(1) To: Name of district level supervisor responsible for Phase Three.

(2) Maintenance Center: Name of the Maintenance Center in which the Defective Pair are to be recovered.

(3) District: Name of District in which the Maintenance Center is located.

(4) Area/Division: Name of Area and/or Division in which District is located.

(5) Central Office: Name of Central Office associated with cable and pair complement.

(6) Cable: Number of cable associated with the Central Office and pair complement.

(7) Complement: Complement associated with respective Central Office and cable.

(8) Remarks: Indicate pertinent information about cable complement to be cleared (e.g., 4 held orders, high rearrangement activity rate; 4 drops W.O.L. etc.).

(9) Date: The month, day, and year list is signed by the district level Distribution Service Engineer initiating the list.

(10) District Manager: Signature of the district level Distribution Service Engineering.

(11) Sheet _____ of _____: For use if 2 more than one sheet is required.

Exhibit 3

Bulk Defective Pair Dispatch Ticket

(12/83)

Page ____ Of ____

District	Wire Center	SA	RT
Serial No.	Order No.	Due Date	

Cable	Pair	Defect	MC Test	X Conn Term	In	Out	Serving Terminal	BP Clr CD	Final Disposition

Originated By	LAC Information By	MC Tested By	Field Cleared By	Records Purified By
Date	Date	Date	Date	Date

FCC Item No. 101

DISTRICT: MANCHESTER UNIT
H.C.: MANCHESTER

LATIS REPORT:H12L PAGE: 1
VRSN:2.1B 07/17/84 14:27

ANNUALIZED DEFECTIVE PAIR AA REPORT
JULY 1983 - JUNE 1984

EAA	MO	PAIRS AVAIL	---FILL-- %A	%DF	GROWTH RATE	ISO	---- DEF PRS GENERATION -- SOD	ODF	1-6	7A	7B	8-9	GEN RATE %/YEAR	FAC MOD	DEF PR VALUE	ALERT
1103		925	66	7	2.1	93	0	0	3	1	14	9	4	2	227	
1112		1225	75	9	0.5	88	0	0	10	2	41	18	7	4	240	
1116		900	75	7	0.1	57	0	0	3	6	32	7	7	0	0	
1304		1500	69	8	1.2	113	0	0	7	7	25	29	6	16	334	
1426		1850	80A	8A	7.1	128	0	0	10	12	70	34	8	21	106	
2101		900	73	11	0.5	194	0	0	4	6	25	8	6	3	448	
2124		1900	74	9	1.9	350	0	0	9	2	49	12	5	38	578	
2125		1250	91	3	0.6	354	0	0	11	4	41	25	7	11	132	
2208		1850	82	5	0.6	144	0	0	7	4	61	26	6	30	366	
2212		2500	73	8	2.3	225	0	0	19	20	64	44	8	49	363	
2226		600	80	14	1.1	36	0	0	5	5	19	15	9	2	24	
2309		850	81	12	2.3	99	0	0	6	7	28	23	9	11	64	
2313		500	85	11	0.5	39	0	0	8	3	11	14	8	4	-	*
2318		850	79	5	2.1	92	0	0	3	3	21	17	6	8	290	
2325		1300	68	3	0.6	153	0	0	4	2	3	1	1	14	476	
2327		1725														
2329		425	78	8	2.1	15	0	0	0	2	3	3	2	5	123	
2608		1900	82	8	2.6	201	0	1	19	21	116	71	14	30	137	
2707	+	1350	82A	12A	18.9	599	0	0	21	22	103	76	19	99	22	*
2711		750	85	7	1.4	60	0	0	5	2	22	3	5	5	67	
2716		1000														
3106		900	76	7	3.0	98	0	0	2	1	5	2	1	5	181	
3113		900	83	2	0.9	113	0	0	6	5	45	23	10	13	481	
3124		250	62	9	22.0	22	0	0	4	4	10	9	17	4	309	
3138		500														
3304		700	83A	5A	3.6	117	0	0	2	14	9	10	6	19	300	
3410		1275	30A	4A	14.0	76	0	0	3	0	6	3	3	3	179	
3502	+	1200	83A	5A	8.8	179	0	0	9	6	38	25	7	14	126	*
3506		75														
4102		900	67	5	2.2	41	0	0	1	0	6	2	1	12	189	
4111	+	1750	79A	4A	1.4	394	0	0	12	8	56	16	6	13	459	
4119	+	1450	68	5	4.5	193	0	0	19	13	49	21	10	20	427	
4127	+	1350	74	3	0.6	107	0	0	8	1	12	11	3	16	370	
4131		500	81	9	5.3	92	0	0	3	4	7	2	3	8	108	
4133		600	61	10	5.0	100	0	0	3	2	8	3	4	8	584	
4136		600	80	7	6.1	68	0	0	2	0	4	5	2	6	151	

Southwestern Bell Telephone

Exhibit 5

Retention Period - 1 Year

CONSTRUCTION CABLE COMPLETION TEST REPORT

JOB ORDER/ESTIMATE NO. _____ AREA/DIVISION _____

DISTRICT _____ C.O. _____ CABLE NO. _____

ALL NEW CABLE ☐ CABLE COUNT _____

EXTENSION OF EXISTING PLANT ☐ TOTAL PRS. TERM. _____

REPLMT. OF EXISTING PLANT ☐ % DEFECTIVE PAIRS _____

REF: DEFECTIVE PAIR ADMINISTRATION PLAN

		LIST OF DEFECTIVE PAIRS		
PAIR NO.	DEFECT	REMARKS	POSTED DEF. PAIR FILE	POSTED ECCR

CONSTRUCTION SUPERVISOR _____ APPROVED _____

DATE _____ DATE _____

Official File Copy if red, retention _____

EXHIBIT 5

(Page 2 of 3)

CONSTRUCTION CABLE COMPLETION TEST REPORT

E6254

Southwestern Bell Telephone

FORM E-6254
(12-72)

CONSTRUCTION CABLE
COMPLETION TEST REPORT

JOB ORDER/ESTIMATE NO. (1) AREA/DIVISION (2)
DISTRICT (3) C.O. (7) CABLE NO. (8)
ALL NEW CABLE ☐ (4) CABLE COUNT (9)
EXTENSION OF EXISTING PLANT ☐ (5) TOTAL PRS. TERM. (10)
REPLMT. OF EXISTING PLANT ☐ (6) % DEFECTIVE PAIRS (11)

REF: DEFECTIVE PAIR ADMINISTRATION PLAN

		LIST OF DEFECTIVE PAIRS		
PAIR NO.	DEFECT	REMARKS	POSTED DEF. PAIR FILE	POSTED ECCR
(12)	(13)	(14)	(15)	(16)

CONSTRUCTION SUPERVISOR (17) APPROVED (19)
DATE (18) DATE (20)

Duplicate Copy - Administrative Retention Only

EXHIBIT 5

(Page 3 of 3)

E6254 INFORMATION

Information to Record on Form E-6254

Construction Cable Completion Test Report

The following information should be recorded on the Construction Cable Completion Test Report. The numbers listed below correspond to the numbers on the log as shown:

(1) Job Order/Estimate Number: Indicate number of job triggering the work.

(2) Area/Division: Indicate Area and/or Division in which job is located.

(3) District: Indicate District in which job is located.

(4) All New Cable: Mark "X" in box if job is all new cable. Includes complete replacement of existing plant.

(5) Extension of Existing Plant: Mark "X" in box if job is extension of existing plant.

(6) Replacement of Existing Plant: Mark "X" in box if job partially replaces existing cable.

(7) C.O.: Name of Central Office in which cable and count is located.

(8) Cable Number: Indicate number designation of cable covered by completion report. Use separate Completion Test Report for each cable number designation involved on the job.

(9) Cable Count: Indicate cable count corresponding to cable number designation.

(10) Total Pairs Terminated: Indicate total conductor pairs terminated or involved on this job.

(11) % Defective Pairs: Total number of defective pairs listed on report divided by total pairs terminated, multiplied by 100.

(12) Pair Number: Number designation of defective pair.

(13) Defect: Type of defect associated with defective pair (e.g., x'ed, short open, etc.)

(14) Remarks: Descriptive details of defect if available (e.g., open in section between MH 22 and MH 23, etc.)

(15) Posted Defective Pair File: Month, day, and initials of employee posting information to Defective Pair File.

(16) Posted ECCR: Month, day, and initials of employee posting information in ECCR.

(17) Construction Supervisor: Signature of second level construction supervisor responsible for the job.

(18) Date: Date of signature in Item 17.

(19) Approved: Signature of district level Outside Plant Engineer responsible for design of job.

(20) Date: Date of signature in Item 19.

EXHIBIT 6
(Page 1 of 2)

FOLLOW UP REPORT

FOLLOW UP REPORT

Maintenance Center	District	Report Period

		Feeder	Distribution
	Defective Pairs Input During Report Period		
(1)	Service Order Changes		
(2)	Maintenance Changes And Throw And Rewire Changes		
(3)	Main Distributing Frame Testing		
(4)	Cable Completion Test Reports		
	Other		
	Total Period Input		
	Defective Pairs Cleared During Report Period		
(5)	Main Distributing Frame Testing		
(6)	Bulk Clearing Dispatch		
(7)	Service Order Dispatch		
(8)	Cable Completion Test Reports		
	Other		
	Total Period Removed		
	Optional Defective Pair Support Data		
	Total Defective Pairs Cleared During Period		
	Total Defective Pairs Came Clear During Period		
	Total Hours Defective Pair Dispatch During Period		

EXHIBIT 6
(Page 2 of 2)

FOLLOW UP REPORT

The numbers below correspond to those on Exhibit 6.

(1) Service Order Changes: Identified on LATIS Report D32M.

(3)(4)(5) The defective pair testing and clearing information is determined from the Defective Pair Test Discrepancy List.

(6) Bulk Clearing Dispatch: Identified on the Bulk Devective Pair Dispatch Ticket.

The FAP engineer contacts the Construction and Maintenance Centers to complete the remainder of the follow-up information.

(2) Maintenance Changes and Throw and Rewire Changes: Supplied by the MC.

(7) Service Order Dispatch: Supplied by the MC.

(8) Cable Completion Test Reports: Supplied by the Construction Center.

EXHIBIT 7

LATIS REPORT D34L

DISTRICT: HUDSON VALLEY
R.: EASTERN BELL

LATIS REPORT:D34L PAGE: 1
VRSN:4.0 01/09/84 14:22

DEFECTIVE PAIR SUMMARY
JANUARY 1983 - DECEMBER 1983

--WIRE CENTER--	--FILL-- %A	%DF	GRWTH %	ISO	FAC MOD	GEN %/YR	DISCV COST /PR/YR
MAPLE AVE	64	7	9.9	8690	745	9	1.66
NORTH RIVER	59	6	9.8	909	65	7	1.60
WEST BEND	57	8	9.9	3665	165	9	1.62
HOLMDALE	0	8	0.0	332	15	0	0.00
HUDSON VALLEY	61	7	9.9	13596	990	9	1.68