INEFFECTIVE ATTEMPTS
REMOTE SWITCHING SYSTEM
NETWORK ADMINISTRATION—SWITCHING
PROCESSOR CONTROLLED AND ANCILLARY SYSTEMS

CONTENTS PAGE

1. GENERAL

1.01 This section describes the measurement of ineffective attempts (IAs) in the Remote Switching System (RSS). An IA is defined as an originating or terminating call that fails to complete due to machine trouble or equipment inadequacies.

1.02 This section is being reissued to update and expand information on Ineffective Attempt Reports.

1.03 The title for each figure includes a number(s) in parentheses which identifies the paragraph(s) in which the figure is referenced.

1.04 References in this section to methods, planning, data requirements, and equipment quantities are based on American Telephone and Telegraph Company recommendations.

1.05 Recommendations for changes to this section should be submitted on Form E3973 as specified in Section 000-010-015, How to Comment on Bell System Practices.

1.06 The RSS is a remote switching facility that operates under software control of an Electronic Switching System (ESS) office. The ESS office is referred to as the ***host office*** and provides to RSS lines a full range of features comparable to lines that have direct access to an ESS.

1.07 The remote unit is designed to serve a small community that cannot economically support an independent stored program machine, such as an ESS. However, under the control of a host office, the RSS can serve up to 1024 lines with a single frame and 2048 lines with a 2-frame installation.

1.08 In order to provide reliable service to a customer, all remote terminal circuitry affecting more than a few subscriber lines are fully duplicated. This includes the data link between the host office and the microprocessor control, memory, and network control at the RSS remote terminal.

1.09 The microprocessor controller interfaces with the host office controller over duplicated data links. This allows the host office to perform

most of the remote terminal tasks, such as custom-calling features and RSS maintenance diagnostics. The microprocessor is self-checking and can be removed from service should a problem occur. Then the duplicated microprocessor can pick up the load.

1.10 Analysis of IAs should be performed at least once a week, using the busiest hour of the busiest day. For RSS, the busiest hour is defined as that hour in which the highest network (total "A" link) usage occurred.

1.11 To properly identify and analyze the cause of an IA, it may be necessary to consult the central office maintenance personnel or to review the plant measurement printouts (PM-01, PM-02, and PM-03). These printouts are available from the local maintenance personnel.

1.12 The IA procedures in this section should also be used to analyze data collected during severe overload conditions caused by snow, rain, civil disorder, etc.

1.13 More detailed IA information may be obtained from the sections that relate to IAs in the host machine. See Section 231-070-755 for detailed information.

2. INEFFECTIVE ATTEMPT (IA) MEASUREMENTS

2.01 IA call failures are classified by phase rather than by call type. For each call phase in which RSS equipment participates, the call failure counts are kept. Some of these phases, along with measurements to be taken, are as follows:

(a) ***RSS Originating Phase (Blocked Dial Tone Peg Count):*** This measurement is pegged each time the host ESS drops an origination due to blockage in the RSS network caused by no path or no channel conditions or blockage in the ESS network. Included with this measurement is an option to print out the RSS line which is being blocked. See the No. 1 ESS input manual for detailed input information.

(b) ***RSS Terminating Phase (Terminating Failure Peg Count):*** This count will be incremented each time a call fails to terminate because of problems with the called-party line or with the ringer. Examples of these problems are low line resistance, no ring current, or power cross failure.

(c) ***RSS Connecting Phase:*** Various call failure counts in this phase are:

(1) ***Call Failures Due to No Bus/No Universal Service Circuit (USC) Count:*** This count will be incremented by all call failures due to no bus or USC being available.

(2) ***Call Failures Due to No Channel Interface Peg Count:*** This count will be incremented whenever a call fails due to no channel interface. Originations which are dropped by a host ESS due to no channel interface do not increment this peg count since such originations are counted in the RSS blocked dial tone peg count. These calls will be reoriginated by the RSS in another attempt to obtain a channel interface.

(3) ***Intraoffice (IA0) Matching Loss Peg Count:*** This counter will be pegged every time a matching loss in the RSS network for RSS intraoffice calls occurs. Because of the long holding time associated wih RSS network paths, no retry is done in the case of a failure. This count will include instances where an RSS call was switched back to the ESS network for a service circuit (eg, 3-port conference circuit, etc) and later could not revert to a talking path in RSS. These calls will not be failures since the connection will remain stable in the ESS network until one party hangs up.

(4) ***Terminating First and Final Failure to Match Peg Count:*** The host-RSS final failure to match covers the RSS talking path of an RSS call. If a call fails to match on the first attempt, a new channel interface is chosen. If the call fails to match on the second (final) attempt, the call is failed. Thus, it is necessary to measure first and final failure to match.

(5) ***Reswitch-up Attempts:*** Each time an RSS intraoffice call attempts to reswitch back to the ESS network for a service circuit (eg, 3-port conference circuit, etc), the reswitch-up attempt counter is pegged.

(6) ***Reswitch-up Failure Peg Count:*** Each time a reswitch-up attempt is unable to complete due to no service circuit, no channel-interface, no RSS network path, no ESS network path, etc, the reswitch-up failure counter is pegged.

2.02 In order to ensure that RSS customers are not experiencing an unacceptable dial tone delay, dial tone speed tests are performed for each RSS. A per-call host response time measurement is made. The measurement begins when the line is scanned off-hook. It ends when the RSS path memory is cut through to the selected channel. A computation of the average host response time is made, and a count of all calls where the host response time is over 3 seconds is kept. This is reported as a percentage of calls with dial tone delay greater than 3 seconds. Both measurements are on a D schedule, and only calls with dial tone delay greater than 3 seconds are on the quarter(Q) schedule.

Note: The existing dial tone speed tests on a per-ESS basis will exclude channel interface terminals since host terminals do not represent customer lines.

3. ENGINEERING AND ADMINISTRATION DATA ACQUISITION SYSTEM (EADAS) APPLICATION

3.01 The RSS has two engineered components, the RSS network and the channel interface group interconnecting the host ESS and the RSS. The RSS is engineered by extreme value engineering (EVE) methods. The engineered components are called the key counts while other counts, with the same type measurement code (TMC) as the key count, are known as slave counts. The key counts are total A-link usage and channel interface usage. The data collected by the ESS is accumulated by the hour. Each hour is measured against the preceding hours in a 24-hour period. The hour with the higher measurements is kept while hours with lower measurements are not.

3.02 At 2:30 am the RSS peak counts and their associated slave counts are requested by EADAS as part of the host RSS daily (D) schedule. EADAS receives D schedule data only when the polled binary 1200-baud data interface is used. EADAS does not support the D schedule on the monitored ASCII Electronic Switching System interface.

3.03 Various other traffic counts will be taken in the normal time consistent busy hour manner and will appear on the hourly (H) schedule and the weekly (W) schedule. The RSS counts appearing on the H and W schedules will not affect EADAS traffic data collection or Traffic Data Administation System (TDAS). Network Operations Report Generator (NORGEN) application programs will recognize and process the new data.

3.04 EADAS collection programs are modified to handle RSS data collection. The channel definition program allows the EADAS user to define up to ten D blocks for polled binary No. 1 ESS channels. Previously, only one block of D data could be specified. When defining D blocks, the first block always contains the miscellanous D counts consisting of TC24A, TC24C, and TC24Z data. Any additional blocks specified will contain RSS peak value data. Currently, each RSS has 35 peak value counts, and each host No. 1 ESS can handle up to 31 Remote Switching Systems. Consequently, there can be no more than 1085 RSS counts in the D schedule. The block identifier used to retrieve the RSS data from the host No. 1 ESS is 102 octal.

3.05 The miscellaneous D counts are stored in registers 0 through 249. The RSS counts start at register 250. If the last block of RSS is partially filled with valid counts, the remainder of the block will be filled with random data.

3.06 Since each traffic block sent to EADAS from the No. 1 ESS contains 250 counts at most and the RSS can have up to 1085 counts, the RSS daily schedule block must be capable of being continued. Continuation polls for the RSS daily data are handled in the following manner. First, a traffic poll for block 102 is issued to the ESS. The ESS responds by sending a data block containing the first 250 RSS daily counts. If there are more than 250 counts, a continuation flag bit is set in the second byte of header information sent with the block of data. EADAS recognizes the flag bit set and checks its own channel definition parameters to determine if a second block of RSS data has been defined. If not, an error message is printed, and polling for the RSS data is stopped. The channel definition should be corrected so that EADAS register storage will be allocated for the additional RSS data. If the EADAS channel parameters determine that the second RSS block is expected (EADAS has register storage allocated

for it), a continuation poll request of class 3 is sent to the ESS. (Class 3 is explained in paragraph 3.07.) The ESS receives the poll and sends the next block of RSS counts. If still another block containing RSS counts exists, the flag bit will be set in the header of the block of counts just sent. When the last block has been requested, the flag bit will be cleared so that EADAS recognizes that it has collected all data. EADAS tries to collect all RSS blocks using continuation polls and checks its own channel parameters to ensure that data collected are the data the EADAS user specified.

3.07 The class of continuation poll mechanism is used to distinguish the type of data requested. There are currently four types of data requiring continuation polls. Each type has its own class so that continuation polls can be interleaved and the ESS is still able to retrieve the proper data according to the class. Class 0 is for W polls, class 1 is for network management polls, class 2 is for register verification polls, and class 3 is for RSS daily block polls.

3.08 Once the RSS daily counts have been collected, they can be dumped from the EADAS data base. Twenty-four hours later, these counts are overwritten by new D schedule data. NORGEN reports and magnetic-tape writing of the data occurs at the next system period. A Daily (D) Schedule Dump Report (Fig. 1) can be printed at user-defined times. This report will show the latest data collected. The Load Service Summary Report, shown as Fig. 2, is an H schedule report. The Selected Line Usage (SLU) Dump Report, shown as Fig. 3, is a D schedule report.

> ***Note:*** Definitions for the RSS calculations shown in the figures listed in the previous paragraph are shown in Fig. 4.

3.09 New NORGEN application programs are provided to generate reports for the RSS daily data. TDAS identifies RSS daily data using the collected scanner data (CSD) identifier in the header information for each CSD record on the tape. RSS daily counts are uniquely identified by a CSD qualifier code of 61.

3.10 EADAS will incorporate the RSS report into the existing ESS Ineffective Attempt Service Exception Report formats. The formats used are illustrated in Fig. 5. These reports are H schedule reports.

> ***Note:*** Definitions for the RSS calculations shown in the figures listed in the previous paragraph are shown in Fig. 4.

```
                    * * * D SCHEDULE DUMP REPORT * * *

ENTITY: XXXXXXXXXXXX      DATE: XX/XX/XX      TIME: XX:XX

LKS MB              = XXXXXXX       LN CONC USG       = XXXXXXX
ORIG TOLL USG       = XXXXXXX       ORIG TOLL ATT     = XXXXXXX
ORIG CALL PC        = XXXXXXX       OUTGOING OFL      = XXXXXXX

AVAIL RC MEMORY:
AUX                 = XXXXXXX       PRI               = XXXXXXX

PERM SIG PC         = XXXXXXX       ADD-ON PC         = XXXXXXX

ABBREV. DIAL PC
1 DIGIT             = XXXXXXX       2 DIGIT           = XXXXXXX

DISC HITS           = XXXXXXX

TRANS. TIMEOUTS:
MF                  = XXXXXXX       DP                = XXXXXXX
RP                  = XXXXXXX       PCI               = XXXXXXX

INTERCEPT PC:
REG                 = XXXXXXX       CHG #             = XXXXXXX
UNASS. #            = XXXXXXX       BLK #             = XXXXXXX
TRO                 = XXXXXXX

BLK DT DEL          = XXXXXXX       BLK DT Q PC       = XXXXXXX

SPEED CALL LST CHG ATT:
POTS                = XXXXXXX       CTX               = XXXXXXX

GENERAL PURPOSE REGISTERS

(  0-  4)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
(  5-  9)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
( 10- 14)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
   .          .         .         .         .         .
   .          .         .         .         .         .
   .          .         .         .         .         .
(XXX-XXX)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX


CN ZONE INIT CHG REGS

(  0-  4)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
(  5-  9)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
( 10- 14)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
   .          .         .         .         .         .
   .          .         .         .         .         .
   .          .         .         .         .         .
(XXX-XXX)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
```

```
RSS # XX

OFFICE PEG COUNTS:
   ORIG             = XXXXXXX       IAO               = XXXXXXX
   CHI-RSS          = XXXXXXX       RSS-CHI           = XXXXXXX
```

Fig. 1—Daily (D) Schedule Dump Report (Sheet 1 of 2) (3.08)

```
CHANNEL INTERFACE MEASUREMENTS:
   PC              = XXXXXXX        OFL              = XXXXXXX
   USAGE           = XXXXXXX        MB USAGE         = XXXXXXX

NETWORK USAGE MEASUREMENTS (CCS):
   A LINK          = XXXXXXX        INTERMOD JCT     = XXXXXXX
   INTRAMOD 1 JCT  = XXXXXXX        INTRAMOD 2 JCT   = XXXXXXX

SERVICE EVALUATION MEASUREMENTS:
   AVG DTD         = XXXXXXX        % DTD > 3 SEC    = XXXXXXX
   BLK DT PC       = XXXXXXX        TERM FAIL PC     = XXXXXXX
   NO BUS/USC PC   = XXXXXXX        NO CHI PC        = XXXXXXX
   IAO ML PC       = XXXXXXX        CHI-RSS 1STFTM   = XXXXXXX
   CHI-RSS FINFTM  = XXXXXXX        RESW UP ATT      = XXXXXXX
   RESW UP FAIL    = XXXXXXX        CALL FAIL DUE RSS = XXXXXXX

DIV. OF REV. MEASUREMENT:
   IAO LN-LN USG   = XXXXXXX

RSS SELECTED LINE CONCENTRATORS (A-LINK USAGE):

                    MOD 0 LINE CONCENTRATOR 0 - 15
( 0- 3)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
( 4- 7)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
( 8-11)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
(12-15)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX

                    MOD 1 LINE CONCENTRATOR 0 - 15
( 0- 3)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
( 4- 7)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
( 8-11)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX
(12-15)   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXXX

* * * * * * * * * * * * * * * * * * * * *
```

Fig. 1—Daily (D) Schedule Dump Report (Sheet 2 of 2) (3.08)

```
        *   *   *    LOAD SERVICE SUMMARY    *   *   *

ENTITY:XXXXXXXXXXXX          DATE: XX/XX/XX          TIME: XX:XX

                  *     OFFICE LOAD VOLUMES     *

                PC        %                 PC        %

ORIG         XXXXX     XXX.X          IAO    XXXXX     XXX.X
INC          XXXXX     XXX.X          TAN    XXXXX     XXX.X
O+I          XXXXX

E-E CYCLES = XXXXXX
((E-E CYCLES AT 0 LOAD)-(E-E CYCLES))/(O+I PC) = X.XXX
LN SCN CMP = XXXXXX

A LK CCS = XXXXXX        SUB HT = XXXXXX        LKS MB = XXXXXX

                  *  TOTAL RSS LOAD VOLUMES  *

TOTAL RSS       PC         %                TOTAL RSS
ORIG         XXXXX     XXX.X†             A LK CCS     =   XXXXX
INC          XXXXX     XXX.X†             CHANNEL CCS  =   XXXXX
O+I          XXXXX                        LN-LN USAGE  = XXXXXXX
IAO          XXXXX     XXX.X†
OUT          XXXXX     XXX.X†

                  *     INEFFECTIVE ATTEMPTS     *

                PC        %                 PC        %

IA           XXXXX     XXX.X          OROUT ML   XXXXX     XXX.X
MISC IA      XXXXX     XXX.X          INC ML     XXXXX     XXX.X
NC           XXXXX     XXX.X          IAO OFL    XXXXX     XXX.X
XMTR OFL     XXXXX     XXX.X          MISC OFL   XXXXX     XXX.X

                                      RSS FAIL   XXXXX     XXX.X†

      *  DIAL TONE RESULTS  *              *  RADR RESULTS  *

          TSTS    DLYS       %                  TSTS    DLYS       %

DP        XXXX    XXXX     XXX.X          MF      XXXX    XXXX     XXX.X
TT        XXXX    XXXX     XXX.X          DP      XXXX    XXXX     XXX.X
TOTAL     XXXX    XXXX     XXX.X          RP      XXXX    XXXX     XXX.X
                                          TOTAL   XXXX    XXXX     XXX.X

BLK DT PC = XXXXX

                  *     NETWORK MANAGEMENT     *

                PC                                PC

PREPG CONT   XXXXX             EMG ANN1   XXXXX
FLEX CONT    XXXXX             EMG ANN2   XXXXX
CODE BLOCK   XXXXX             NC ANN     XXXXX
```

† See Fig. 4 for definitions of these calculations.

Fig. 2—Load Service Summary Report (Sheet 1 of 2) (3.08)

```
                    * RSS LOAD SERVICE SUMMARY *

RSS ID XXXXXXXXXXXX

   * OFFICE LOAD VOLUMES *              * DIAL TONE RESULTS *

             PC       %                          % DTD          AVG DLY†
   ORIG     XXXX     XXX.X†          TT/DP      XXX.X              XXXX†
   INC      XXXX     XXX.X†
   O+I      XXXX
   IAO      XXXX     XXX.X†               * INEFFECTIVE ATTEMPTS *
   OUT      XXXX     XXX.X†
                                  %INEFF ATT = XXX.X   RSS CALL FAIL = XXXX†
   LN-LN USAGE = XXXX
   LN A LK CCS = XXXX
   CHANNEL CCS = XXXX

         * * * * * * * * * * * * * * * * * * * * * * *
```

† See Fig. 4 for definitions of these calculations.

Fig. 2—Load Service Summary Report (Sheet 2 of 2) (3.08)

```
                    ****SLU REGISTER DUMP REPORT****

ENTITY:XXXXXXXXXXXX
FOR 'W' SCHEDULE DATA COLLECTED AT  XX/XX/XX - XX:XX
MEASUREMENT INTERVAL = XXX.X HRS.

          (0)   (1)   (2)   (3)   (4)   (5)   (6)   (7)   (8)   (9)
(  0)    XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX
(  1)    XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX
(  2)    XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX
   .       .     .     .     .     .     .     .     .     .     .
   .       .     .     .     .     .     .     .     .     .     .
   .       .     .     .     .     .     .     .     .     .     .
(XXX)    XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX  XXXX

                  * * * * * * * * * * * * * * * * * *
```

Fig. 3—Selected Line Usage (SLU) Dump Report (3.08)

RSS CALCULATIONS FOR THE LOAD SERVICE SUMMARY REPORT

Total RSS Load Volumes

$$\% \text{ Originating} = \frac{\text{Total RSS Originating PC}}{\text{Total RSS Orig. + Inc. PC}} \times 100$$

$$\% \text{ Incoming} = \frac{\text{Total RSS Incoming PC}}{\text{Total RSS Orig. + Inc. PC}} \times 100$$

$$\% \text{ IAO} = \frac{\text{Total RSS Intraoffice PC}}{\text{Total RSS Orig. + Inc. PC}} \times 100$$

$$\% \text{ Outgoing} = \frac{\text{Total RSS Outgoing PC}}{\text{Total RSS Originating PC}} \times 100$$

Ineffective Attempts

$$\% \text{ RSS Ineff. Attempts} = \frac{\text{Total RSS Fail PC}}{\text{Total RSS Orig. + Inc. PC}} \times 100$$

RSS Fail PC = The sum of the following:
- Terminating failure PC
- No bus PC or no universal service circuit PC
- No channel interface
- CHI — RSS final failure to match PC

RSS CALCULATIONS FOR THE INEFFECTIVE ATTEMPT SERVICE EXCEPTION REPORT

All calculations are per RSS

$$\% \text{ Ineffective Attempts} = \frac{\text{RSS Call Failure PC}}{\text{RSS Orig. + Inc. PC}} \times 100$$

$$\% \text{ Channel Overflow} = \frac{\text{RSS Channel Interface Overflow}}{\text{RSS Channel Interface PC}} \times 100$$

$$\% \text{ Channel Occupancy} = \frac{\text{RSS Channel Interface Usage}}{\text{No. of Channel Interface Ckts} \times 36} \times 100$$

$$\text{Channel Holding Time} = \frac{\text{RSS Channel Interface Usage}}{\text{RSS Chnl. Interface PC—RSS Chnl. Interface Ovfl.}} \times 100$$

RSS Call Fail PC = The sum of the following:
- Terminating failure PC
- No bus PC or no universal service circuit PC
- No channel interface
- CHI — RSS final failure to match PC

Fig. 4—Definition of Calculations (3.08) (3.10)

```
                    * * * INEFF ATTEMPT SERVICE EXCEPTION * * *

  ENTITY:XXXXXXXXXXXX     DATE:XX/XX/XX     TIME:XX:XX    INTERVAL:XXX.X MIN

* %INEFF ATT = XXX.X      IA PC           = XXXXX   O+I PC=XXXXX   DED OFL=XXXX
                          COM OFL PC      = XXXXX
                          REG OFL PC      = XXXXX
                          RO ANN PC       = XXXXX
                          NC ANN (RI183)  = XXXXX
                          NC ANN (RI180)  = XXXXX
                          EMG ANN1        = XXXXX
                          EMG ANN2        = XXXXX

                          RSS FAIL        = XXXXX

RSS ID XXXXXXXXXXXX
  * %INEFF ATT= XXX.X†    RSS CALL FAIL   = XXXXX   O+I PC  = XXXXX

                      % OFL†       PC      % OCC†     # MB      NCI       HT
 CHANNEL              XXX.X       XXXX     XXX.X      XXX.X     XXX      XXX.X

* %ORIG ML   = XXX.X      ORIG ML         = XXXXX   ORIG PC = XXXXX
                          OUTG ML         = XXXXX   OUTG PC = XXXXX
                          IAO ML          = XXXXX   IAO  PC = XXXXX
                          A LK CCS        = XXXXX

  * %INC ML   = XXX.X     TOT IML         = XXXXX   INC PC  = XXXXX
                          TERM ML         = XXXXX   TERM PC = XXXXX
                          TAN OFL         = XXXXX   TAN PC  = XXXXX
                          A LK CCS        = XXXXX

  * % NO CKT  = XXX.X     TOT TRK NC      = XXXXX   O+I PC  = XXXXX
                          ORIG NC         = XXXXX
                          TAN NC          = XXXXX

 XMTR OFL              % OFL        PC      % OCC      # MB      NCI      HT (SEC)
    MF               * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
    DP               * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
    RP               * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
    PCI              * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X

 MISC SVC
 CKT OFL             * % OFL        PC      % OCC      # MB      NCI      HT (SEC)
 BSY TN              * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 ROH TONE            * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 ROH ANN             * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 PD ANN              * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 VAC CODE ANN        * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 RO ANN              * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 CN OVT ANN          * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 INTC ANN            * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 CTX ANN             * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 IAO TK              * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 AUD RNG(0)          * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 AUD RNG(1)          * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
 AUD RNG(2)          * XXX.X      XXXXX     XXX.X      XXX.X     XXX      XXX.X
```

†See Fig. 4 for definitions of these calculations.

Fig. 5—Ineffective Attempt (IA) Service Exception Report Forms (Sheet 1 of 2) (3.10)

```
* % MISC IA  = XXX.X      MISC IA        = XXXXX    O+I PC  = XXXXX

  CALL PROC REGS     % OCC      % OFL       PC      HT(SEC)    NCI
     DET AMA         XXX.X      XXX.X     XXXXX     XXX.X      XXX
     CALL FWD        XXX.X      XXX.X     XXXXX     XXX.X      XXX
     OPER TRK        XXX.X      XXX.X     XXXXX     XXX.X      XXX
     HOTEL           XXX.X      XXX.X     XXXXX     XXX.X      XXX
     REV CALL        XXX.X      XXX.X     XXXXX     XXX.X      XXX
     BL SR           XXX.X      XXX.X     XXXXX     XXX.X      XXX
     AMA ANNEX       XXX.X                                     XXX

  XMTR TIMEOUTS       % TO        TO
     MF               XXX.X     XXXXX
     DP               XXX.X     XXXXX
     RP               XXX.X     XXXXX
     PCI              XXX.X     XXXXX

                * * * * * * * * * * * * * * * * * * * * * *

                      * * * DTS SERVICE EXCEPTIONS * * *

  ENTITY:XXXXXXXXXXXX    DATE:XX/XX/XX    TIME:XX:XX    INTERVAL:XXX.X MIN

            %DTD          TSTS          DLYS
*  TT      XXX.X          XXXX          XXXX
*  DP      XXX.X          XXXX          XXXX

  CDR GRPS      % OFL       PC      % OCC      # MB       NCI       HT
*   COM  #       XXX.X     XXXXX     XXX.X     XXX.X      XXX      XXX.X
*    TT  #       XXX.X     XXXXX     XXX.X     XXX.X      XXX      XXX.X
*    DP  #       XXX.X     XXXXX     XXX.X     XXX.X      XXX      XXX.X

  ROB Q PC   =    XXX        ROB OCC     =  XXX.X     ROB QTY  =  XXXX

  RSS ID XXXXXXXXXXXX

             % DTD†        AVG DLY
*  TT/DP     XXX.X†          XXXX

            ORIG PC = XXXX              LN-LN USAGE = XXXX

              % OFL†        PC      % OCC†     # MB       NCI       HT
  CHANNEL     XXX.X†       XXXX      XXX.X     XXX.X      XXX      XXX.X

  E-E CYCLES  = XXXXXX        LN SCAN COMP = XXXXXX
  ORIGPC      =  XXXXX        INC PC       =  XXXXX    A LK CCS =  XXXXX
  BLK DT DEL  =  XXXXX
  BLK DT Q PC =  XXXXX
  POB OCC     =  XXX.X        POB OFL      =  XXXXX

# NOTICE:  THE OVERFLOW REGISTER FOR THIS CDR GRP APPEARS TO HAVE RECYCLED
           % OFL AND HT COMPUTATIONS HAVE BEEN ADJUSTED

                      * * * * * * * * * * * * * * * * * * *
```

† See Fig. 4 for definitions of these calculations.

Fig. 5—Ineffective Attempt (IA) Service Exception Report Forms (Sheet 2 of 2) (3.10)