HOLD AND TRACE PROCEDURE

1. GENERAL

1.01 This section outlines in general "Hold and Trace" procedure to be used by the DDD Service Bureau (DDD S.B.) personnel and the Central Office Equipment (C.O.E.) man.

1.02 Hold and trace of Operator trouble reports will of necessity be made on a selective basis by DDD S.B. personnel. However, the ideal condition would be to trace all trouble reports - this we cannot do for several reasons; the first being, keeping a customer's line out of service as in transmission failures that occur after the called line has been reached or reaching a wrong number. It would likewise be useless to try and trace cut off reports. This leaves the no-ring, no-answer and no-operator answer reports. These are most productive sources for holding and tracing. We should endeavor to hold and trace as many of these reports as possible in our own number plan area and the first link to the F.N.P.A.

1.03 Some factors to be considered in selecting a particular point for tracing are:

(1) Number and kind of recent reports.

(2) What resulted from recent traces to this point?

(3) Any other data, such as service observing results.

(4) Unusual activity going on:

(a) Trunk rearrangement.

(b) Abnormal plant conditions (cable failure, etc.)

(c) Western Electric activities (should all trouble reports be traced?)

(5) Is an unattended office involved? If so, arrangements should be made to have it manned.

(6) Are other traces in progress to this point and is adequate manpower available at the point in question?

1.04 Traces should be held to short connections which involve only two or three switching points. Usually the connection will be within our own company, although an independent company may be involved in a simple trace.

1.05 Ordinarily trouble reports out of the prime area are not considered for "Hold and Trace". However, trouble reports may be traced to identify the first link involved and then released. First link is the identity of the intertoll trunk group being used between the home NPA and the called NPA. The failure could then be stroked against the toll tandem trunk and the intertoll trunk involved. If the trouble reports warrant, the trace could be continued beyond the first link. In some cases, instead of tracing to the intertoll trunk, a stroke record to the most probable trunk group could be used.

2. PROCEDURE

2.01 Following are the procedures to be followed in a general way when using the "Hold and Trace" method. Paragraphs 2.02 through 2.07 cover the details for tracing within the prime area. Paragraphs 2.08 through 2.09 cover details for tracing to points beyond the prime area.

2.02 Trouble tracing through 4A using operator lockout to end office.

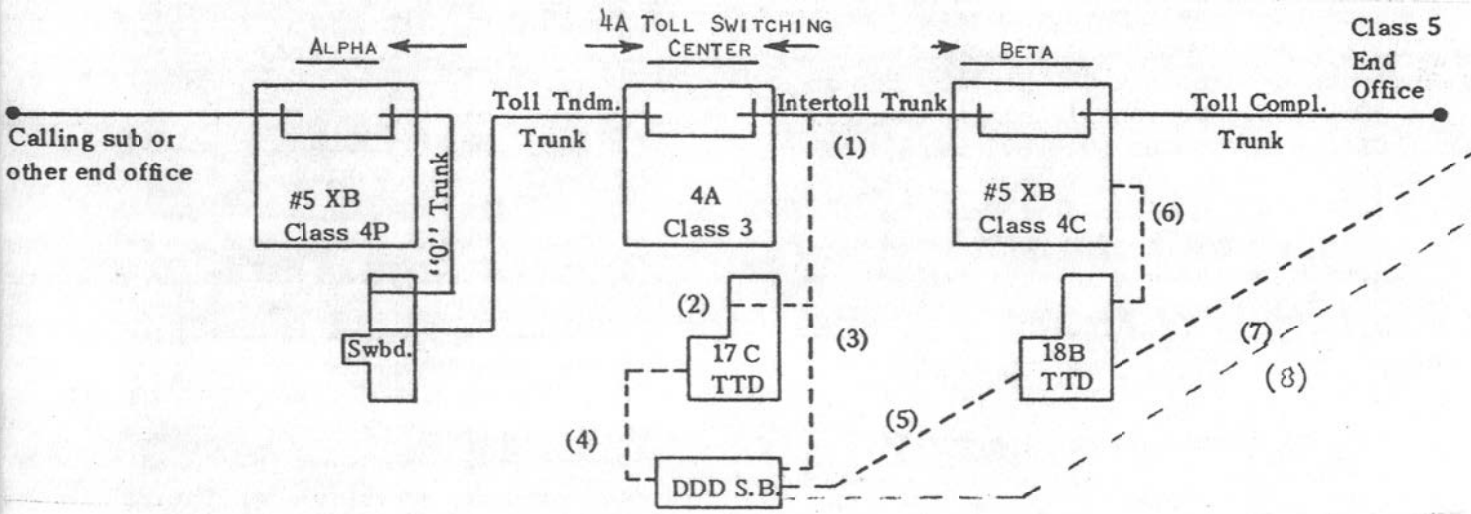


EXHIBIT A

A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code and trunk number. This locks out the intertoll trunk which was seized on the call which encountered trouble.

C. Intertoll trunk is identified by lockout lamp on 17C TTD.

D. Operator gives trouble report to DDD S.B. Clerk.

E. Service Bureau Clerk:

(1) Prepares IBM card.

(2) Requests operator to hold trunk.

(3) Calls 17C TTD and asks for identity of trunk involved. If toll trunk is not locked out, Clerk calls 4A Maintenance Center requesting trace on tandem trunk.

(4) Clerk gives necessary information to 18B TTD and requests trace.

(5) Arranges trace through end office.

F. C.O.E. man finds trouble and makes equipment busy. All information will be reported to DDD S.B. clerk before clearing trouble; this will keep holding time to a minimum.

G. DDD S.B. Clerk records results on IBM card and arranges for release of trunk.

2.03 Trouble tracing through 4A using operator lockout to end office.

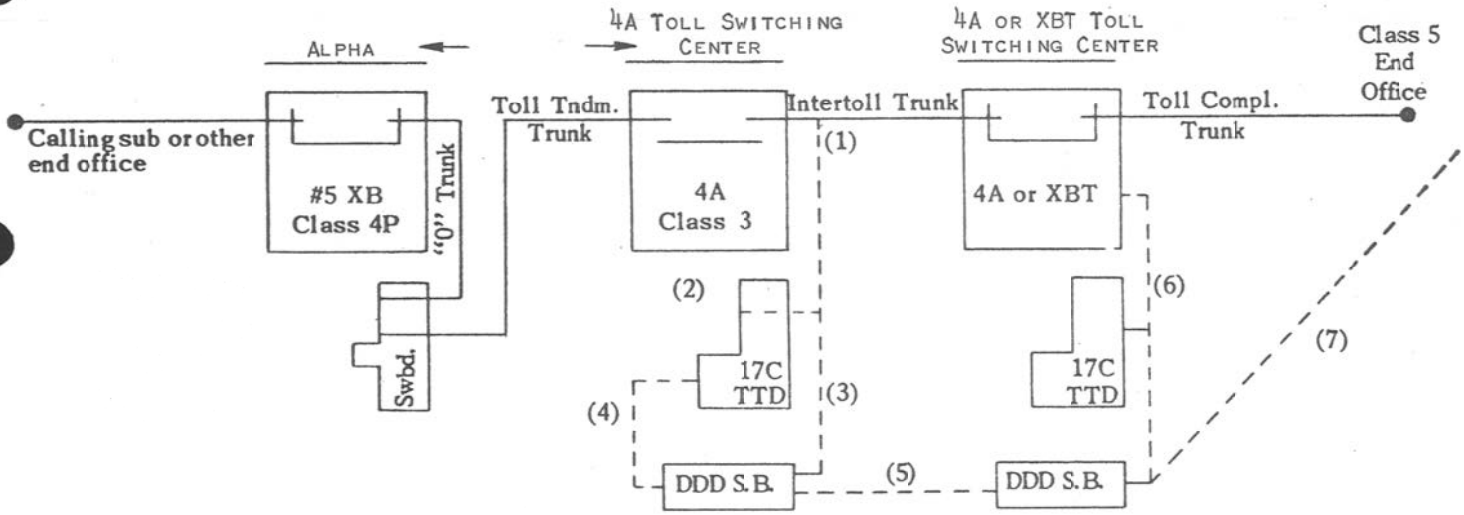


EXHIBIT B

A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code and trunk number. This locks out the intertoll trunk which was seized on the call which encountered trouble.

C. Intertoll trunk is identified by lockout lamp on 17C TTD.

D. Operator gives trouble report to DDD S.B. Clerk.

E. Service Bureau Clerk:

(1) Prepares IBM card.

(2) Requests operator to leave cord in trunk.

(3) Clerk calls 17C TTD and asks for identity of trunk involved. If no toll trunk is locked out, clerk calls 4A maintenance center requesting trace on tandem trunk.

(4) Clerk contacts DDD S.B. in next NPA and gives necessary details of trouble condition on locked out trunk. If desired, the second DDD S.B. will arrange for trace to end office.

(5) It is the responsibility of the originating DDD S.B. to arrange for release of trunk.

2.04 Trouble tracing through XBT using "TONE and HOLD" to end office.

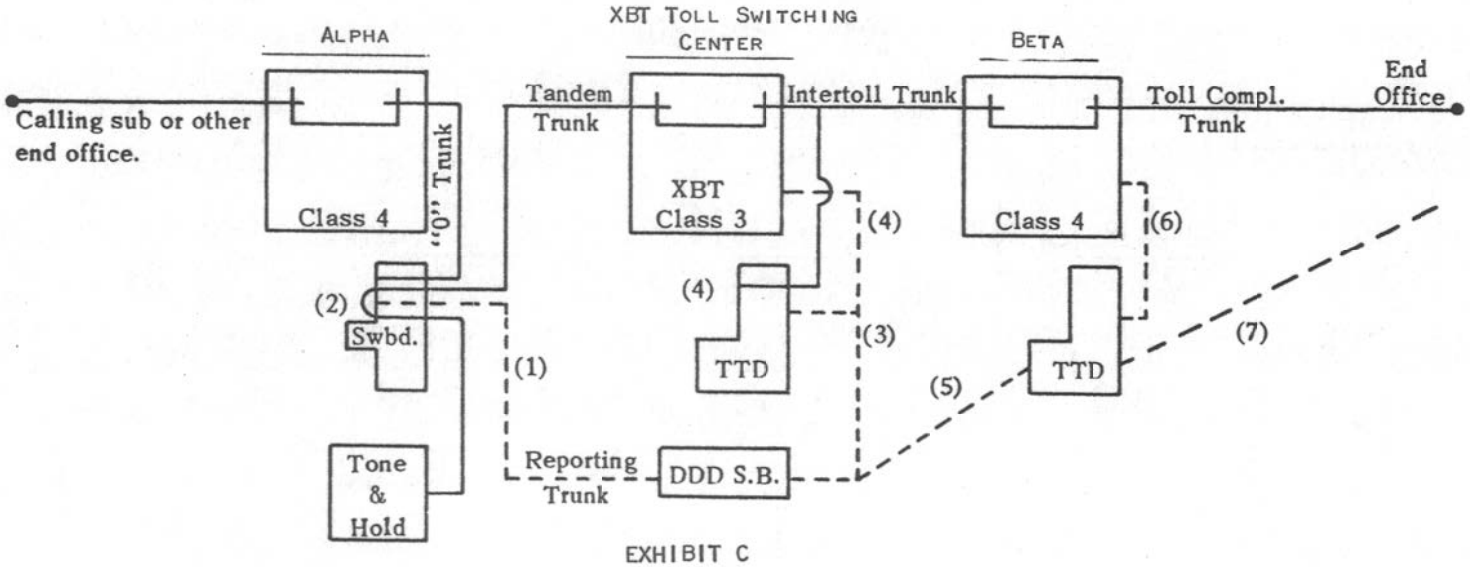


EXHIBIT C

A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code, per Traffic instructions, and gives trouble report to DDD S.B. Clerk.

C. Service Bureau Clerk:

(1) Prepares IBM card.

(2) Requests operator to put answer cord, of trunk which met trouble, in designated "TONE and HOLD" jack. If "TONE and HOLD" circuit is not available, Service Bureau Clerk will place tone back through reporting trunk, through operators cord circuit to trunk being held for trace.

(3) Clerk calls TTD and asks for identity of intertoll trunk by naming called place. If intertoll trunk cannot be found, Clerk calls XBT Maintenance Center for check of tandem trunk.

(4) Clerk gives necessary information to next TTD and requests trace.

(5) Arranges trace through end office.

D. C.O.E. man finds trouble and makes equipment busy. All information will be reported to DDD S.B. Clerk before clearing; this will keep holding time to a minimum.

E. DDD S.B. Clerk records results on IBM card and arranges release of trunk.

2.05 Trouble tracing Class 4 to Class 3 to end office. Operator selects intertoll trunk in multiple.

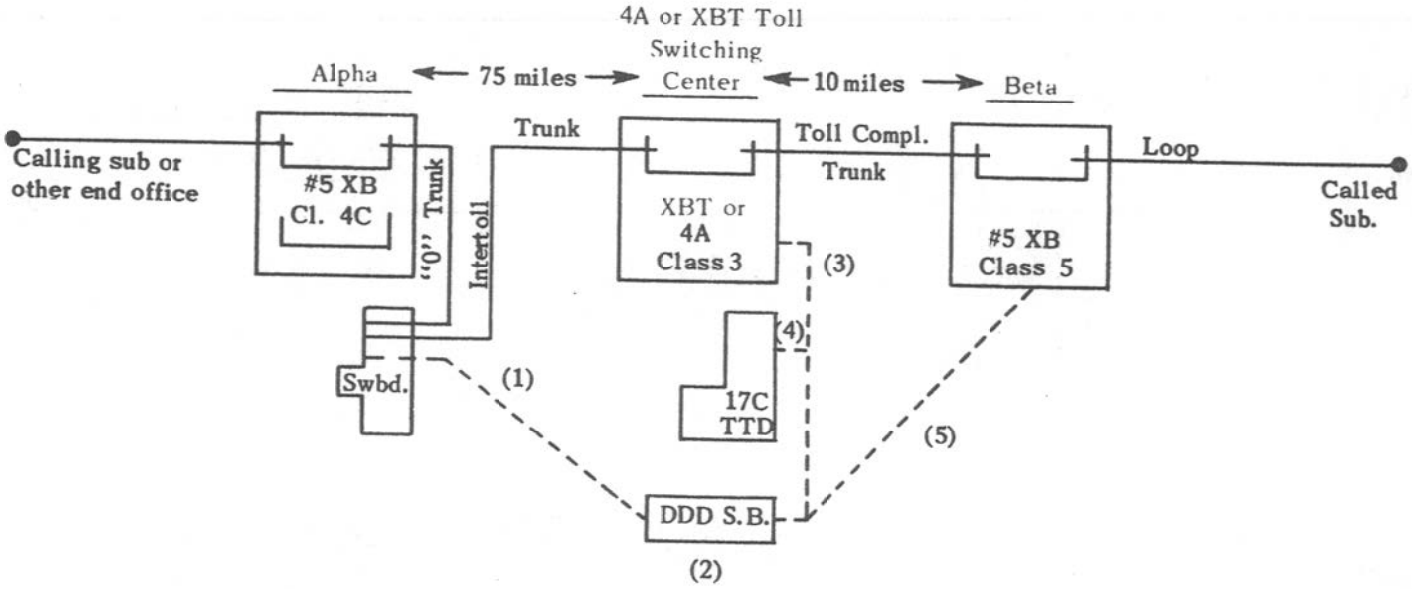


EXHIBIT D

A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code per Traffic instruction and gives trouble report to DDD S.B. Clerk, including both trunks used.

C. Service Bureau Clerk:

(1) Prepares IBM card.

(2) Tells operator to leave cords in trunks.

(3) Calls 4A Maintenance Center and requests trace.

D. 4A Maintenance man finds trouble and makes equipment busy or finds toll completing trunk and refers office and trunk number to DDD S.B. Clerk.

E. Clerk calls end office and requests trace. If call has not reached end office, Clerk will request assistance from 17C TTD.

F. C.O.E. man finds trouble and makes equipment busy. Reports all information to DDD S.B. Clerk.

G. DDD S.B. Clerk records results on IBM card and arranges for release of trunks.

2.06 Trouble tracing Class 4 to Class 4 to end office, operator selects intertoll trunk in multiple.

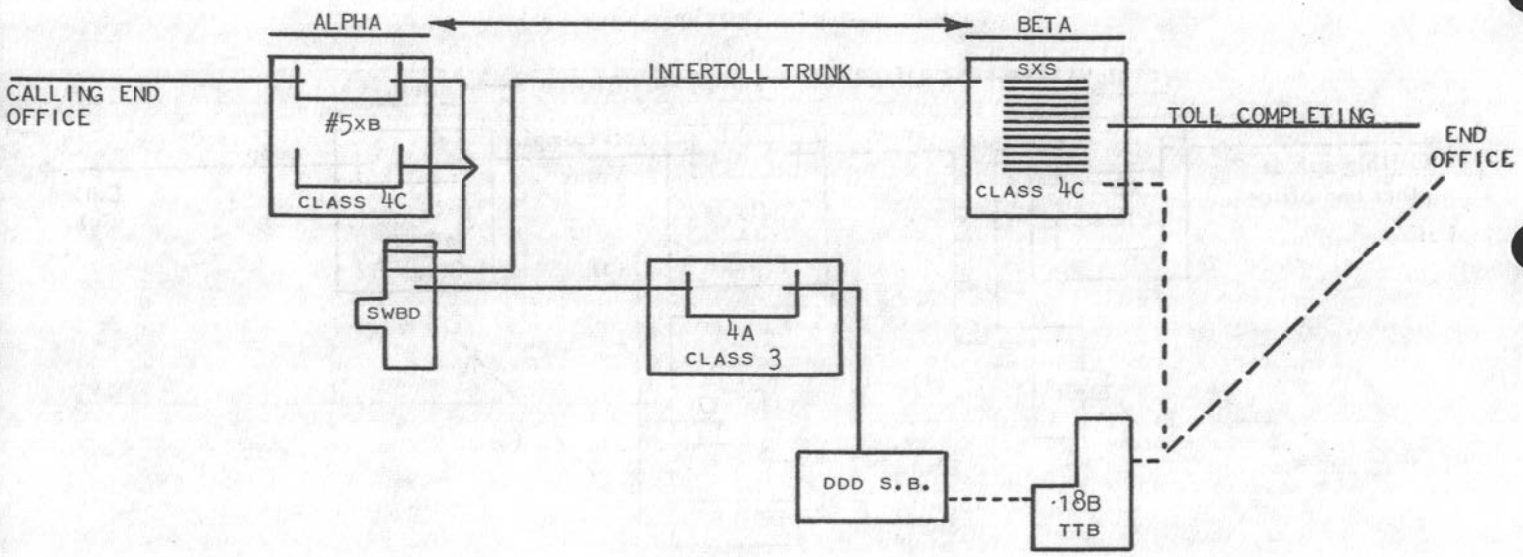


EXHIBIT E

A. Operator encounters a trouble condition to be held and reported.

B. Operator dials reporting code per Traffic instructions and gives trouble report to DDD S.B. Clerk, including both trunks used.

C. Service Bureau Clerk:

(1) Prepares IBM card.

(2) Tells operator to leave cords in trunks.

(3) Calls Maintenance Center and requests trace. If call has not reached central office, Clerk calls in TTD and requests assistance.

D. C.O.E. man finds trouble and makes equipment busy or identifies toll completing trunk. All information will be reported to DDD S.B. Clerk.

E. DDD S.B. Clerk records results on IBM card and arranges for release of trunks.

2.07 Trouble tracing Class 4 to Class 3 to Class 4 to end office. Operator selects intertoll trunks in multiple.

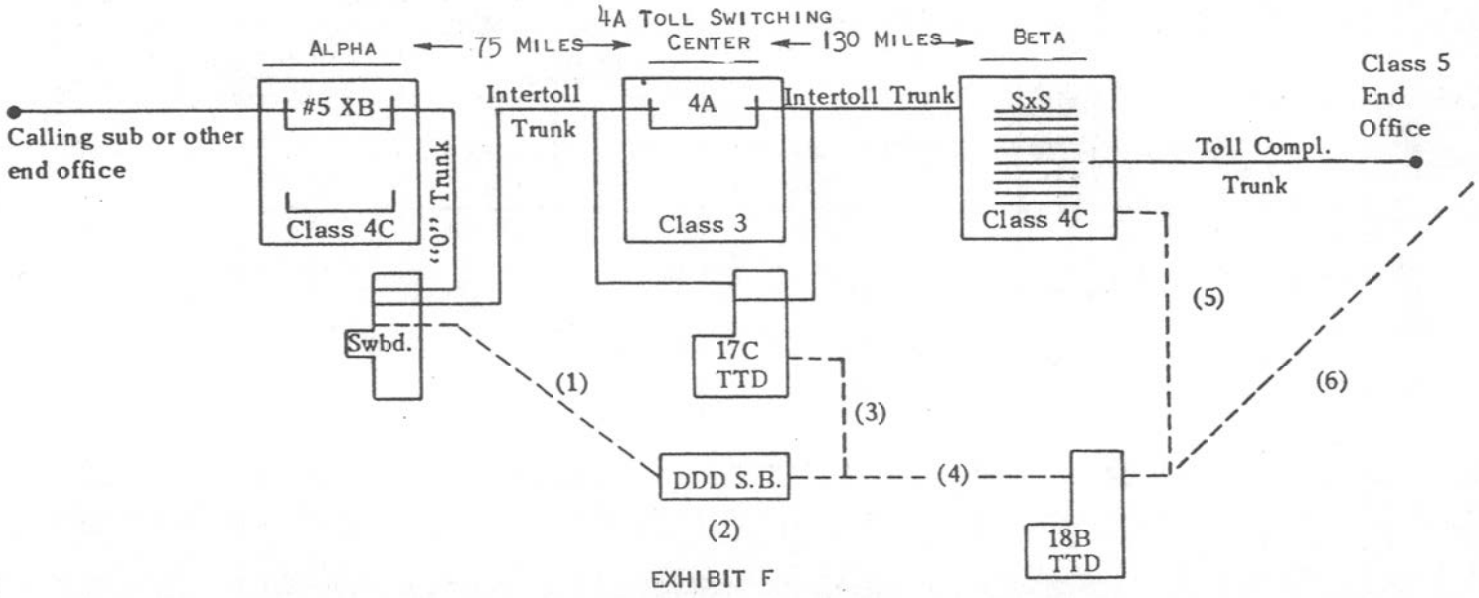


EXHIBIT F

A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code per traffic instructions and gives trouble report to DDD S.B. Clerk, including both trunks used.

C. Service Bureau Clerk:

(1) Prepares IBM card.

(2) Tells operator to leave cords in trunks.

(3) Calls 17C TTD, gives originating trunk number and asks for identification of trunk selected to called location. If call has not reached first switching point, Toll man will investigate.

(4) Requests trace in the 4A if trunk cannot be found in the called trunk group.

(5) Requests trace from next switching point who will proceed as outlined in 2.04 D.

D. DDD S.B. Clerk records results on IBM card and arranges for release of trunks.

2.08 Trouble tracing through 4A with lockout beyond PRIME area.

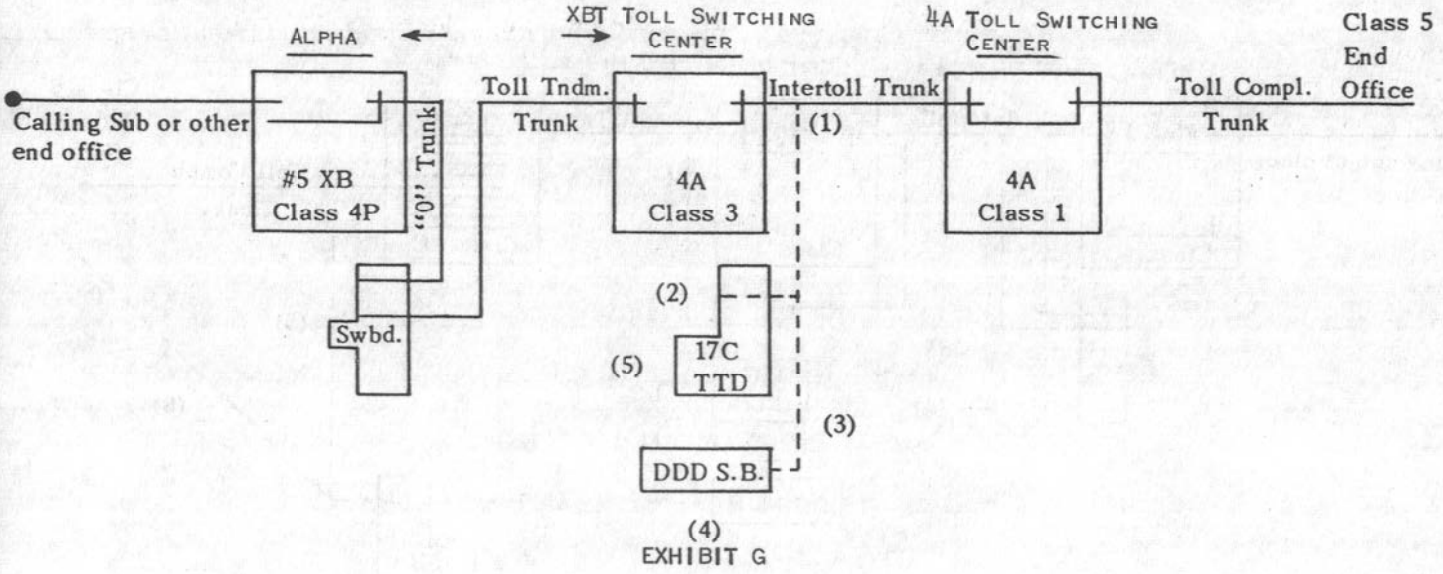


EXHIBIT G

A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code and tandem trunk number. This locks out the intertoll trunk seized on the call which encountered trouble.

C. Intertoll trunk is identified by lockout lamp on 17C TTD.

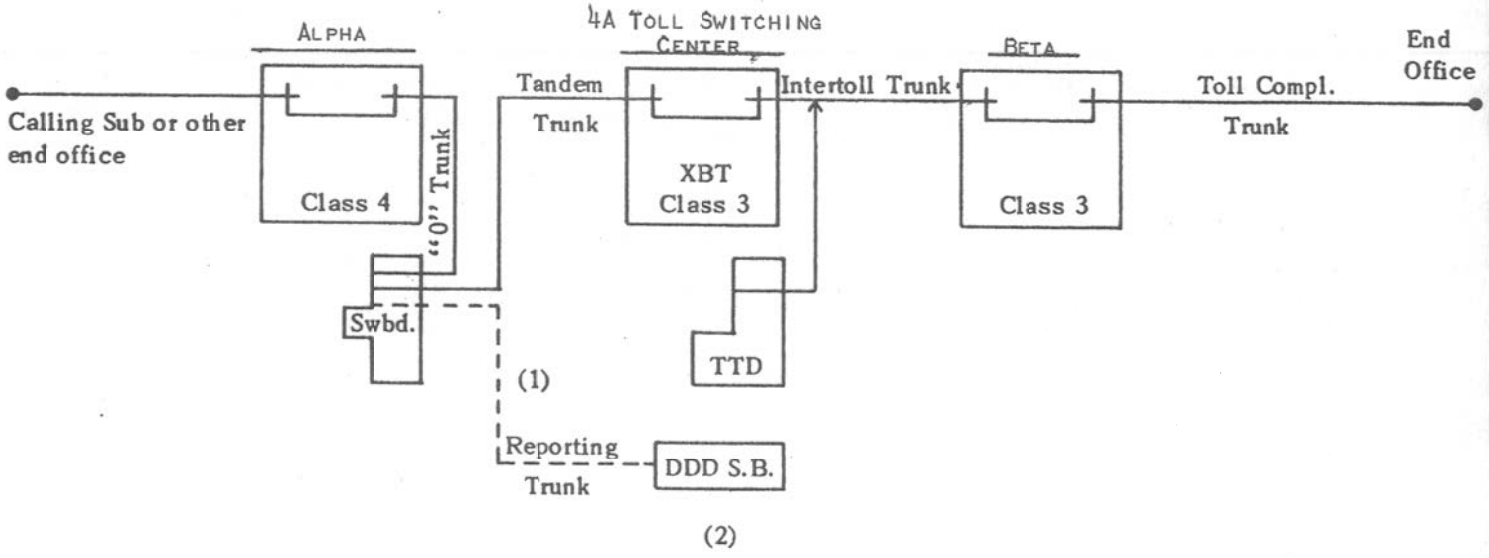
D. Operator gives trouble report to DDD S.B. Clerk.

E. Service Bureau Clerk:

(1) Prepares IBM card.

(2) When trouble report warrants, call may be traced through intertoll network as per 2.03 but not into end office.

2.09 Trouble tracing through XBT with "TONE and HOLD" beyond prime office.



A. Operator encounters a trouble to be held and reported.

B. Operator dials reporting code per traffic instructions and gives trouble report to DDD S.B. Clerk.

C. DDD S.B. Clerk

(1) Prepares IBM card.

(2) When trouble report warrants, call may be traced through intertoll network as per 2.04, but not into end office.

3. REPORTS

3.01 It is important that every operator trouble report be recorded, whether or not a trace is made or the actual cause of the trouble report is determined. These reports should be analyzed along with other data to determine where and what kind of maintenance effort is needed.

3.02 On a trace request from the DDD S.B., the C.O.E. man should prepare a trouble ticket, make the trace, determine if or what equipment to make busy, then inform the DDD S.B. Clerk, who can arrange for release of the intertoll trunk. If necessary, the final report of condition causing trouble can be reported later in the day.