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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT      COPYRIGHT IBM COPP 1976
3      COPY LOG7833      ** MAP EC HISTORY **
4      *****
5      *
6      *      ***      PREREQUISITES      ***
7      *
8      *      NONE
9      *
10     *****
11     *
12     *      ***      MODIFICATIONS      ***
13     *
14     *      CHANGES MADE TO MEET PROGAM REQUIREMENTS
15     *
16     *****
17     *
18     *      ***      REA'S INCORPORATED      ***
19     *
20     *      NONE
21     *
22     *****
23     *
24     *      ***      SPECIAL INSTRUCTIONS      ***
25     *
26     *      NONE
27     *
28     *****
29     *
30     *      ***      E. C. HISTORY      ***
31     *
32     *      DATE 17DEC76  DATE 18JAN77  DATE 04MAR77  DATE 10JUN77
33     *      E.C. 578486  P.C. 578573  E.C. 578638  E.C. 578625
34     *
35     *      DATE 01MAR78  DATE
36     *      E.C. 755285  E.C.
37     *
38     *****
002500 17833  START X'2500'      START ADDRESS OF ALL 'T' TYPE PPOG
000100 EQU X'0100'      EQUATED VALUE FOR MDI STATEMENT
000101 EQU X'0101'      EQUATED VALUE FOR MDI STATEMENT
000102 EQU X'0102'      EQUATED VALUE FOR MDI STATEMENT
000200 EQU X'0200'      EQUATED VALUE FOR MDI STATEMENT
000300 EQU X'0300'      EQUATED VALUE FOR MDI STATEMENT
000400 EQU X'0400'      EQUATED VALUE FOR MDI STATEMENT
000500 EQU X'0500'      EQUATED VALUE FOR MDI STATEMENT
000600 EQU X'0600'      EQUATED VALUE FOR MDI STATEMENT
000000 EQU X'0000'      EQUATE FOR EQUAL
000004 EQU X'0004'      EQUATE FOR NOT EQUAL
000008 EQU X'0008'      EQUATE FOR HIGH
00000C EQU X'000C'      EQUATE FOR NOT HIGH
000010 EQU X'0010'      EQUATE FOR LOW
000014 EQU X'0014'      EQUATE FOR NOT LOW
000018 EQU X'0018'      EQUATE FOR LESS THAN
00000C EQU X'000C'      EQUATE FOR LESS THAN OR EQUAL TO
000008 EQU X'0008'      EQUATE FOR GREATER THAN
000014 EQU X'0014'      EQUATE FOR GREATER THAN OR EQUAL TO
000200 EQU X'0200'      EQUATE FOR ON
000202 EQU X'0202'      EQUATE FOR OFF
000204 EQU X'0204'      EQUATE FOR MIXED
000000 EQU X'0000'      EQUATE FOR EBCDIC DATA TRANSFER
000001 EQU X'0001'      EQUATE FOR HEX DATA TRANSFER
000000 EQU X'0000'      EQUATE FOR EXTERNAL REFERENCE
000000 EQU X'0000'      EQUATE FOR INTERNAL REFERENCE
000001 EQU X'0000'      EQUATE INDICATING PARAMETER
000002 EQU X'0002'      EQUATE FOR DEVICE ADDRESS
000000 EQU X'0000'      EQUATE FOR UNIT ADDRESS
001800 EQU *-X'0000'      DUMMY EQUATE
000232 EQU *-X'22CE'      ADDRESS OF MDI HEADER
00180C EQU P1D+X'000C'      ADDRESS OF PROCESSOR TYPE FIELD
00180E EQU P1D+X'000E'      ADDRESS OF DECIMAL STEP NUMBER
001810 EQU P1D+X'0010'      ADDRESS OF OPTION WORD ONE
001818 EQU P1D+X'0018'      ADDRESS OF OPTION WORD TWO
00181A EQU P1D+X'001A'      ADDRESS OF TU STATUS WORD
00181A EQU P1D+X'001A'      ADDRESS OF TU WORK AREA
00189A EQU P1D+X'009A'      ADDRESS OF PARM 1 POINTER
00189C EQU P1D+X'009C'      ADDRESS OF PARM 2 POINTER
00189E EQU P1D+X'009E'      ADDRESS OF PARM 3 POINTER
0018A0 EQU P1D+X'00A0'      ADDRESS OF PARM 4 POINTER
0018A2 EQU P1D+X'00A2'      ADDRESS OF PARM 5 POINTER
0018A4 EQU P1D+X'00A4'      ADDRESS OF PARM 6 POINTER
0018A6 EQU P1D+X'00A6'      ADDRESS OF PARM 7 POINTER
0018A8 EQU P1D+X'00A8'      ADDRESS OF PARM 8 POINTER
0018AA EQU P1D+X'00AA'      ADDRESS OF PARM 9 POINTER
0018AC EQU P1D+X'00AC'      ADDRESS OF PARM 10 POINTER
0018AE EQU P1D+X'00AE'      ADDRESS OF PARM 11 POINTER
0018B0 EQU P1D+X'00B0'      ADDRESS OF PARM 12 POINTER
0018B2 EQU P1D+X'00B2'      ADDRESS OF PARM 13 POINTER
0018B4 EQU P1D+X'00B4'      ADDRESS OF PARM 14 POINTER
0018B6 EQU P1D+X'00B6'      ADDRESS OF PARM 15 POINTER
0018B8 EQU P1D+X'00B8'      ADDRESS OF PARM 16 POINTER
0018BA EQU P1D+X'00BA'      ADDRESS OF -> TO COMMON MSG WRITER
0018BB EQU P1D+X'00BB'      ADDRESS OF UNIT ADDRESS IN FBC
0018C0 EQU P1D+X'00C0'      ADDRESS OF DEVICE ADDRESS IN EBC
0018C2 EQU P1D+X'00C2'      ADDRESS OF LAST USED WORD IN MAP
0018C4 EQU P1D+X'00C4'      ADDRESS OF LAST ADDRESSABLE WORD
0018C6 EQU P1D+X'00C6'      ADDRESS OF LENGTH OF TU RESULTS
0018C8 EQU P1D+X'00C8'      ADDRESS OF TU RESULTS FIELD
0018FC EQU P1D+X'00FC'      ADDRESS OF MAP NAME FIELD IN HEX
001948 EQU P1D+X'0148'      ADDRESS OF SINPT DATA
00196E EQU P1D+X'016E'      ADDRESS OF SINPT INPUT AREA
001988 EQU P1D+X'0188'      MDI POINTER
00199A EQU P1D+X'019A'      MDI POINTER
0019C4 EQU P1D+X'01C4'      ADDRESS OF MDI STATUS
0019D0 EQU P1D+X'01D0'      ADDRESS OF DEVICE ADDRESS TABLE 0
0019DA EQU P1D+X'01DA'      ADDRESS OF DEVICE ADDRESS TABLE 1
0019E4 EQU P1D+X'01E4'      ADDRESS OF DEVICE ADDRESS TABLE 2
0019EE EQU P1D+X'01EE'      ADDRESS OF DEVICE ADDRESS TABLE 3
0019F8 EQU P1D+X'01F8'      ADDRESS OF DEVICE ADDRESS TABLE 4
001A02 EQU P1D+X'0202'      ADDRESS OF DEVICE ADDRESS TABLE 5
001A0C EQU P1D+X'020C'      ADDRESS OF DEVICE ADDRESS TABLE 6
001A16 EQU P1D+X'0216'      ADDRESS OF DEVICE ADDRESS TABLE 7
116     PRINT OFF

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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT      COPYRIGHT IBM COPP 1976
002500 2C20
201     DC A(ENTPT)      POINT TO MAP ENTRY POINT TABLE
202     *****
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THE FOLLOWING TABLES ARE USED BY THE MDI SUPERVISOR (D3C00) TO LOCATE THE CORRECT RULE TO INVOKE. TO OBTAIN THE PROPER PARAMETERS TO PASS TO THE TU'S AND TO PASS TO THE OPERATOR THE INDICATED MESSAGE(S). THERE ARE FOUR TABLES USED FOR THIS PURPOSE THEY ARE:

STEP AND RULE ADDRESS TABLE
 THIS TABLE GIVES THE ADDRESS OF THE RULE TO INVOKE AND THE ASSOCIATED STEP DECIMAL STEP NUMBER OF THAT RULE. ENTRIES ARE AS FOLLOWS
 A) AN ADDRESS OF THE RULE DC STAPT AREA
 B) THE STEP NUMBER IN DECIMAL
 C) AN EQUATE FOR THE STEP NUMBER

RULE INFORMATION TABLE
 THIS TABLE CONTAINS THE REQUIRED INFORMATION TO EXECUTE THE APPROPRIATE RULE UNDER MDI. EACH RULE HAS ITS OWN UNIQUELY DEFINED AREA INDICATED BELOW. END OF TABLE IS INDICATED WITH A X'0000' FOR THE RULE EQUATE.

\$QUES A) RULE EQUATE X'0100'
 B) ADDRESS OF THE YES LEG RULE

\$FIXT A) RULE EQUATE X'0101'
 B) ADDRESS OF MESSAGE TO PRINT

\$STOP A) RULE EQUATE X'0102'
 B) ADDRESS OF MESSAGE

\$GOTO A) RULE EQUATE X'0200'
 B) ADDRESS OF MESSAGE
 C) NAME OF MAP TO GO TO
 D) ENTRY POINT WITHIN GO TO MAP TO USE
 E) INDICATOR FOR EXTERNAL OR INTERNAL REFERENCE

\$CALL A) RULE EQUATE X'0201'
 B) ADDRESS OF MESSAGE
 C) NAME OF MAP TO CALL
 D) ENTRY POINT WITHIN CALLED MAP TO USE
 E) INDICATOR FOR EXTERNAL OR INTERNAL REFERENCE

\$INPT A) RULE EQUATE X'0300'
 B) INPUT TYPE (EBCDIC OR HEX)
 C) ADDRESS OF YES LEG RULE
 D) DESTINATION LOCATION OF INPUT DATA
 E) LENGTH OF INPUT DATA
 F) LOWER LIMIT OF GOOD DATA
 G) HIGHER LIMIT OF GOOD DATA

\$QUXX A) RULE EQUATE X'0400'
 B) ADDRESS OF YES LEG RULE
 C) TU BRANCH TO ADDRESS (INITIAL)
 D) TU BRANCH TO ADDRESS (SECONDARY)
 E) LENGTH OF PARAMETER IN BYTES
 F) PARAMETER TO PASS TO TU
 G) STORE ADDRESS FOR FIRST 8 WORDS OF PARAMETER

\$TUXX A) RULE EQUATE X'0500'
 B) ADDRESS OF YES LEG RULE
 C) TU BRANCH TO ADDRESS
 D) TYPE OF COMPARE TO MAKE ON RESULTS
 E) LENGTH OF COMPARED RESULTS
 F) MASK FIELD FOR COMPARE
 G) LENGTH OF PARAMETER IN BYTES
 H) PARAMETER TO PASS TO THE TU
 I) STORE ADDRESS FOR FIRST 8 WORDS OF PARAMETER

\$NVLD A) RULE EQUATE X'0600'

ENTRY POINT TABLE
 THIS TABLE CONTAINS THE ENTRY POINTS WITHIN THE MAP THAT THE MAP CAN BE ENTERED FROM THESE ENTRY POINTS ARE REFERENCED BY NAME AND ADDRESS. ENTRIES ARE AS FOLLOWS:
 A) NAME OF ENTRY POINT
 B) ADDRESS OF ENTRY POINT RULE TABLE

THE ENTRY POINT TABLE END IS INDICATED BY A X'0000'

MESSAGE TABLE
 THIS TABLE CONTAINS THE MESSAGE PASSED TO THE OPERATOR VIA THE MDI SUPERVISOR. THE TABLE IS AS FOLLOWS:
 A) EQUATE FOR START OF MESSAGE BLOCK
 B) NUMBER OF LINES OF MESSAGE
 C) LENGTH OF FOLLOWING LINE
 D) FIRST LINE OF MESSAGE
 E) LENGTH OF FOLLOWING LINE
 F) SECOND LINE OF MESSAGE
 G) ETC.

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
00275C 0500 767 N00004 \$TUXX T3C02,4,02000000,ON,QT=(Q00009),YES=N00012
00275E 27AC 768+N00004 DC A(@TUXX)
002760 328A 769+ DC AL2(N00012)
002762 0200 770+ DC A(T3C02)
002764 0004 771+ DC AL2(ON)
002766 02000000 772+ DC AL2(4)
773+ DC X'02000000'

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
881 N00021 \$FIXT FT=(F00132),CT=(C00043),ST=(S00032)
882+N00021 DC A(@FIXT)
883+ DC A(F00132)
884 N00022 \$FIXT FT=(F00024),CT=(C00043),ST=(S00032)
885+N00022 DC A(@FIXT)
886+ DC A(F00024)
887 N00023 \$FIXT FT=(F00024),CT=(C00043),ST=(S00032)
888+N00023 DC A(@FIXT)
889+ DC A(F00024)
890 N00024 \$FIXT FT=(F00021),CT=(C00043)
891+N00024 DC A(@FIXT)
892+ DC A(F00021)
893 N00025 \$TUXX T3C02,4,00000020,ON,QT=(Q00014),YES=N00027
894+N00025 DC A(@TUXX)
895+ DC AL2(N00027)
896+ DC A(T3C02)
897+ DC AL2(ON)
898+ DC AL2(4)
899+ DC X'00000020'

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0028C4 C1C1 995+ DC C'AA'
          996+ ALIGN WORD
          997+ DC AL2 (PARMARA)
0028C6 196E 998+ N00039 SFIXT FT=(F00186),CT=(C00043),ST=(S00032)
          999+ N00039 DC A(@F1XT)
          1000+ DC A(F00186)
          1001+ N00040 SQUES QT=(Q00040),YES=N00042,CT=(C00190)
          1002+ N00040 DC A(@QUES)
          1003+ DC AL2(N00042)
          1004+ N00041 SGO TO TYPE=IMPRNL,EP=B,FT=(F00194),GTO=(N00040)
          1005+ N00041 DC A(@GOTO)
          1006+ DC A(F00194)
          1007+ DC C14'3C00'
          1008+ DC C12'F
          1009+ DC AL2(ENTRNL)
          1010+ N00042 SSTOP FT=(F00507)
          1011+ N00042 DC A(@STOP)
          1012+ DC A(F00507)
          1013+ N00043 STUXX T3C02,4,00000010,ON,QT=(Q00018),YES=N00045
          1014+ N00043 DC A(@TUXX)
          1015+ DC AL2(N00045)
          1016+ DC A(T3C02)
          1017+ DC AL2(ON)
          1018+ DC AL2(4)
          1019+ DC X'00000010'
          1020+ ALIGN WORD
          1021+ DC AL2(0)
          1022+ DC C'AA'
          1023+ ALIGN WORD
          1024+ DC AL2 (PARMARA)
          1025+ N00044 SFIXT FT=(F00024),CT=(C00043),ST=(S00032)
          1026+ N00044 DC A(@F1XT)
          1027+ DC A(F00024)
          1028+ N00045 SQUES QT=(Q00202),YES=N00047,CT=(C00203)
          1029+ N00045 DC A(@QUES)
          1030+ DC AL2(N00047)
          1031+ N00046 SFIXT FT=(F00207),CT=(C00043),ST=(S00032)
          1032+ N00046 DC A(@F1XT)
          1033+ DC A(F00207)
          1034+ N00047 SFIXT FT=(F00021),CT=(C00212)
          1035+ N00047 DC A(@F1XT)
          1036+ DC A(F00021)
          1037+ N00048 STUXX T3C02,4,00000004,ON,QT=(Q00006),YES=N00056
          1038+ N00048 DC A(@TUXX)
          1039+ DC AL2(N00056)
          1040+ DC A(T3C02)
          1041+ DC AL2(ON)
          1042+ DC AL2(4)
          1043+ DC X'00000004'
          1044+ ALIGN WORD
          1045+ DC AL2(0)
          1046+ DC C'AA'
          1047+ ALIGN WORD
          1048+ DC AL2 (PARMARA)
          1049+ N00049 STUXX T3C02,4,00000010,ON,QT=(Q00018),YES=N00051
          1050+ N00049 DC A(@TUXX)
          1051+ DC AL2(N00051)
          1052+ DC A(T3C02)
          1053+ DC AL2(ON)
          1054+ DC AL2(4)
          1055+ DC X'00000010'
          1056+ ALIGN WORD
          1057+ DC AL2(0)
          1058+ DC C'AA'
          1059+ ALIGN WORD
          1060+ DC AL2 (PARMARA)
          1061+ N00050 SFIXT FT=(F00021),CT=(C00043)
          1062+ N00050 DC A(@F1XT)
          1063+ DC A(F00021)
          1064+ N00051 STUXX T3C02,4,00040000,ON,QT=(Q00007),YES=N00055
          1065+ N00051 DC A(@TUXX)
          1066+ DC AL2(N00055)
          1067+ DC A(T3C02)
          1068+ DC AL2(ON)
          1069+ DC AL2(4)
          1070+ DC X'00040000'
          1071+ ALIGN WORD
          1072+ DC AL2(0)
          1073+ DC C'AA'
          1074+ ALIGN WORD
          1075+ DC AL2 (PARMARA)
          1076+ N00052 SQUES QT=(Q00223),YES=N00054,CT=(C00224)
          1077+ N00052 DC A(@QUES)
          1078+ DC AL2(N00054)
          1079+ N00053 SFIXT FT=(F00026),CT=(C00043),ST=(S00032)
          1080+ N00053 DC A(@F1XT)
          1081+ DC A(F00026)
          1082+ N00054 SFIXT FT=(F00021),CT=(C00043)
          1083+ N00054 DC A(@F1XT)
          1084+ DC A(F00021)
          1085+ N00055 SFIXT FT=(F00023),CT=(C00043),ST=(S00032)
          1086+ N00055 DC A(@F1XT)
          1087+ DC A(F00023)
          1088+ N00056 STUXX T3C02,4,00000100,ON,QT=(Q00016),YES=N00058
          1089+ N00056 DC A(@TUXX)
          1090+ DC AL2(N00058)
          1091+ DC A(T3C02)
          1092+ DC AL2(ON)
          1093+ DC AL2(4)
          1094+ DC X'00000100'
          1095+ ALIGN WORD
          1096+ DC AL2(0)
          1097+ DC C'AA'
          1098+ ALIGN WORD
          1099+ DC AL2 (PARMARA)
          1100+ N00057 SFIXT FT=(F00023),CT=(C00043),ST=(S00032)
          1101+ N00057 DC A(@F1XT)
          1102+ DC A(F00023)
          1103+ N00058 SQUES QT=(Q00029),YES=N00060,CT=(C00244)
          1104+ N00058 DC A(@QUES)
          1105+ DC AL2(N00060)
          1106+ N00059 SFIXT FT=(F00021),CT=(C00043)
          1107+ N00059 DC A(@F1XT)
          1108+ DC A(F00021)
  
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002974 0101 1109 N00060 SFIXT FT=(F00023),CT=(C00043),ST=(S00032)
002976 2C70 1110+ N00060 DC A(@F1XT)
          1111+ DC A(F00023)
          1112+ N00061 STUXX T3C02,4,01000000,ON,QT=(Q00017),YES=N00101
          1113+ N00061 DC A(@TUXX)
          1114+ DC AL2(N00101)
          1115+ DC A(T3C02)
          1116+ DC AL2(ON)
          1117+ DC AL2(4)
          1118+ DC X'01000000'
          1119+ ALIGN WORD
          1120+ DC AL2(0)
          1121+ DC C'AA'
          1122+ ALIGN WORD
          1123+ DC AL2 (PARMARA)
          1124+ N00062 STUXX T7872,REPT=T72A,QT=(Q00042),YES=N00100,CT=(C00256), X
          1125+ N00062 DC A(@QUXX)
          1126+ DC AL2(N00100)
          1127+ DC A(T7872)
          1128+ DC AL2(T72A)
          1129+ DC AL2(0)
          1130+ DC C'AA'
          1131+ ALIGN WORD
          1132+ DC AL2 (PARMARA)
          1133+ N00063 STUXX T3C02,4,00000020,ON,QT=(Q00014),YES=N00079
          1134+ N00063 DC A(@TUXX)
          1135+ DC AL2(N00079)
          1136+ DC A(T3C02)
          1137+ DC AL2(ON)
          1138+ DC AL2(4)
          1139+ DC X'00000020'
          1140+ ALIGN WORD
          1141+ DC AL2(0)
          1142+ DC C'AA'
          1143+ ALIGN WORD
          1144+ DC AL2 (PARMARA)
          1145+ N00064 STUXX T3C02,4,00040000,ON,QT=(Q00007),YES=N00074
          1146+ N00064 DC A(@TUXX)
          1147+ DC AL2(N00074)
          1148+ DC A(T3C02)
          1149+ DC AL2(ON)
          1150+ DC AL2(4)
          1151+ DC X'00040000'
          1152+ ALIGN WORD
          1153+ DC AL2(0)
          1154+ DC C'AA'
          1155+ ALIGN WORD
          1156+ DC AL2 (PARMARA)
          1157+ N00065 STUXX T3C02,4,02000000,ON,QT=(Q00009),YES=N00071
          1158+ N00065 DC A(@TUXX)
          1159+ DC AL2(N00071)
          1160+ DC A(T3C02)
          1161+ DC AL2(ON)
          1162+ DC AL2(4)
          1163+ DC X'02000000'
          1164+ ALIGN WORD
          1165+ DC AL2(0)
          1166+ DC C'AA'
          1167+ ALIGN WORD
          1168+ DC AL2 (PARMARA)
          1169+ N00066 SQUES QT=(Q00029),YES=N00070,CT=(C00271)
          1170+ N00066 DC A(@QUES)
          1171+ DC AL2(N00070)
          1172+ N00067 SQUES QT=(Q00273),YES=N00069,CT=(C00274)
          1173+ N00067 DC A(@QUES)
          1174+ DC AL2(N00069)
          1175+ N00068 SFIXT FT=(F00279),CT=(C00043),ST=(S00032)
          1176+ N00068 DC A(@F1XT)
          1177+ DC A(F00279)
          1178+ N00069 SFIXT FT=(F00283),CT=(C00043),ST=(S00032)
          1179+ N00069 DC A(@F1XT)
          1180+ DC A(F00283)
          1181+ N00070 SFIXT FT=(F00023),CT=(C00043),ST=(S00032)
          1182+ N00070 DC A(@F1XT)
          1183+ DC A(F00023)
          1184+ N00071 STUXX T3C02,4,00000040,ON,QT=(Q00012),YES=N00073
          1185+ N00071 DC A(@TUXX)
          1186+ DC AL2(N00073)
          1187+ DC A(T3C02)
          1188+ DC AL2(ON)
          1189+ DC AL2(4)
          1190+ DC X'00000040'
          1191+ ALIGN WORD
          1192+ DC AL2(0)
          1193+ DC C'AA'
          1194+ ALIGN WORD
          1195+ DC AL2 (PARMARA)
          1196+ N00072 SFIXT FT=(F00293),CT=(C00043),ST=(S00032)
          1197+ N00072 DC A(@F1XT)
          1198+ DC A(F00293)
          1199+ N00073 SFIXT FT=(F00023),CT=(C00043),ST=(S00032)
          1200+ N00073 DC A(@F1XT)
          1201+ DC A(F00023)
          1202+ N00074 STUXX T3C02,4,00400000,ON,QT=(Q00013),YES=N00078
          1203+ N00074 DC A(@TUXX)
          1204+ DC AL2(N00078)
          1205+ DC A(T3C02)
          1206+ DC AL2(ON)
          1207+ DC AL2(4)
          1208+ DC X'00400000'
          1209+ ALIGN WORD
          1210+ DC AL2(0)
          1211+ DC C'AA'
          1212+ ALIGN WORD
          1213+ DC AL2 (PARMARA)
          1214+ N00075 STUXX T3C02,4,00100000,ON,QT=(Q00019),YES=N00077
          1215+ N00075 DC A(@TUXX)
          1216+ DC AL2(N00077)
          1217+ DC A(T3C02)
          1218+ DC AL2(ON)
          1219+ DC AL2(4)
          1220+ DC X'00100000'
          1221+ ALIGN WORD
          1222+ DC AL2(0)
  
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LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
002A2A C1C1 1223+ DC C'AA'
1224+ ALIGN WORD
002A2C 196E 1225+ AL2(PARMARA)
1226+ DC A(@AL2)
1227+ N00076 \$FIXT FT=(F00024),CT=(C00043),ST=(S00032)
1228+ DC A(@FIXT)
002A2E 0101 1229+ N00076 DC A(F00024)
002A30 2C4A 1230+ \$FIXT FT=(F00025),CT=(C00043),ST=(S00032)
1231+ DC A(@FIXT)
002A32 0101 1232+ N00077 DC A(F00025)
002A34 2D1C 1233+ \$FIXT FT=(F00021),CT=(C00043)
1234+ DC A(@FIXT)
002A36 0101 1235+ N00078 \$FIXT FT=(F00021),CT=(C00043)
002A38 2C32 1236+ DC A(@FIXT)
1237+ DC A(F00021)
1238+ \$TUXX T3C02,4,00000200,ON,QT=(Q00008),YES=N00093
002A3A 0500 1239+ N00079 DC A(@TUXX)
002A3C 2AA2 1240+ DC AL2(N00093)
002A3E 328A 1241+ DC A(T3C02)
002A40 0200 1242+ DC AL2(ON)
002A42 0004 1243+ DC AL2(4)
002A44 00000200 1244+ DC X'00000200'
1245+ ALIGN WORD
002A48 0000 1246+ DC AL2(PARMARA)
002A4A C1C1 1247+ DC AL2(0)
1248+ DC C'AA'
1249+ ALIGN WORD
002A4C 196E 1250+ DC AL2(PARMARA)
1251+ \$TUXX T3C02,4,00000004,ON,QT=(Q00006),YES=N00092
1252+ DC A(@TUXX)
002A4E 0500 1253+ DC AL2(N00092)
002A50 2A9A 1254+ DC A(T3C02)
002A52 328A 1255+ DC AL2(ON)
002A54 0200 1256+ DC AL2(4)
002A56 0004 1257+ DC X'00000004'
002A58 00000004 1258+ ALIGN WORD
1259+ DC AL2(0)
002A5C 0000 1259+ DC C'AA'
002A5E C1C1 1260+ ALIGN WORD
1261+ DC AL2(PARMARA)
002A60 196E 1262+ \$TUXX T3C02,4,00040000,ON,QT=(Q00007),YES=N00091
1263+ DC A(@TUXX)
002A62 0500 1264+ DC AL2(N00091)
002A64 2A9A 1265+ DC A(T3C02)
002A66 328A 1266+ DC AL2(ON)
002A68 0200 1267+ DC AL2(4)
002A6A 0004 1268+ DC X'00040000'
002A6C 00040000 1269+ ALIGN WORD
1270+ DC AL2(0)
002A70 0000 1271+ DC C'AA'
002A72 C1C1 1272+ ALIGN WORD
1273+ DC AL2(PARMARA)
002A74 196E 1274+ \$QUES QT=(Q00029),YES=N00086,CT=(C00323)
1275+ DC A(@QUES)
002A76 0100 1276+ DC AL2(N00086)
002A78 2A8E 1277+ \$QUES QT=(Q00030),YES=N00085,CT=(C00326)
1278+ DC A(@QUES)
002A7A 0100 1279+ DC AL2(N00085)
002A7C 2A82 1280+ \$FIXT FT=(F00329),CT=(C00043),ST=(S00032)
1281+ DC A(@FIXT)
002A7E 0101 1281+ N00084 DC A(F00329)
002A80 2E9A 1282+ \$FIXT FT=(F00021),CT=(C00334)
1283+ DC A(@FIXT)
002A82 0101 1284+ DC A(F00021)
002A84 2C32 1285+ \$QUES QT=(Q00029),YES=N00090,CT=(C00337)
1286+ DC A(@QUES)
002A86 0100 1287+ DC AL2(N00090)
002A88 2A96 1288+ \$QUES QT=(Q00030),YES=N00089,CT=(C00340)
1289+ DC A(@QUES)
002A8A 0100 1290+ DC AL2(N00089)
002A8C 2A92 1291+ \$FIXT FT=(F00343),CT=(C00043),ST=(S00032)
1292+ DC A(@FIXT)
002A8E 0101 1292+ N00088 DC A(F00343)
002A90 2ED0 1293+ \$FIXT FT=(F00347),CT=(C00043),ST=(S00032)
1294+ DC A(@FIXT)
002A92 0101 1294+ DC A(F00347)
002A94 2F06 1295+ \$FIXT FT=(F00023),CT=(C00043),ST=(S00032)
1296+ DC A(@FIXT)
002A96 0101 1297+ DC A(F00023)
002A98 2C70 1298+ \$FIXT FT=(F00024),CT=(C00043),ST=(S00032)
1299+ DC A(@FIXT)
002A9A 0101 1300+ DC A(F00024)
002A9C 2C4A 1301+ \$FIXT FT=(F00359),CT=(C00043),ST=(S00032)
1302+ DC A(@FIXT)
002A9E 0101 1303+ DC A(F00359)
002AA0 2F54 1304+ \$TUXX T3C02,4,00040000,ON,QT=(Q00007),YES=N00099
1305+ DC A(@TUXX)
002AA2 0500 1306+ DC AL2(N00099)
002AA4 2ADA 1307+ DC A(T3C02)
002AA6 328A 1308+ DC AL2(ON)
002AA8 0200 1309+ DC AL2(4)
002AAA 0004 1310+ DC X'00040000'
002AAC 00040000 1311+ ALIGN WORD
1312+ DC AL2(0)
002AB0 0000 1313+ DC C'AA'
002AB2 C1C1 1314+ ALIGN WORD
1315+ DC AL2(PARMARA)
002AB4 196E 1316+ \$TUXX T3C02,4,00000004,ON,QT=(Q00006),YES=N00096
1317+ DC A(@TUXX)
002AB6 0500 1318+ DC AL2(N00096)
002AB8 2ACE 1319+ DC A(T3C02)
002ABA 328A 1320+ DC AL2(ON)
002ABC 0200 1321+ DC AL2(4)
002ABE 0004 1322+ DC X'00000004'
002AC0 00000004 1323+ ALIGN WORD
1324+ DC AL2(0)
002AC2 0000 1325+ DC C'AA'
002AC4 C1C1 1326+ ALIGN WORD
1327+ DC AL2(PARMARA)
002AC8 196E 1328+ \$FIXT FT=(F00023),CT=(C00043),ST=(S00032)
1329+ DC A(@FIXT)
002ACA 0101 1330+ DC A(F00023)
002ACC 2C70 1331+ \$QUES QT=(Q00371),YES=N00098,CT=(C00372)
1332+ DC A(@QUES)
002ACE 0100 1333+ DC AL2(N00098)
002AD0 2AD6 1334+ \$FIXT FT=(F00021),CT=(C00043)
1335+ DC A(@FIXT)
002AD2 0101 1336+ DC A(F00021)
002AD4 2C32

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1337 N00098 \$FIXT FT=(F00023),CT=(C00043),ST=(S00032)
1338+ N00098 DC A(@FIXT)
002AD6 0101 1339+ DC A(F00023)
002AD8 2C70 1340+ \$FIXT FT=(F00023),CT=(C00043),ST=(S00032)
1341+ N00099 DC A(@FIXT)
002ADA 0101 1342+ DC A(F00023)
002ADC 2C70 1343+ \$FIXT FT=(F00387),CT=(C00043),ST=(S00032)
1344+ N00100 DC A(@FIXT)
002ADE 0101 1345+ DC A(F00387)
002AE0 2F90 1346+ \$TUXX T3C02,4,00040000,ON,QT=(Q00007),YES=N00125
1347+ N00101 DC A(@TUXX)
002AE2 0500 1348+ DC A(T3C02)
002AE4 2B8A 1349+ DC AL2(N00125)
002AE6 328A 1350+ DC A(T3C02)
002AE8 0200 1351+ DC AL2(ON)
002AEA 0004 1352+ DC AL2(4)
002AEC 00040000 1353+ DC X'00040000'
1354+ ALIGN WORD
002AF0 0000 1355+ DC AL2(0)
002AF2 C1C1 1356+ DC C'AA'
1357+ ALIGN WORD
002AF4 196E 1358+ DC AL2(PARMARA)
1359+ N00102 \$TUXX T3C02,4,00400000,ON,QT=(Q00013),YES=N00104
1360+ N00102 DC A(@TUXX)
002AF6 0500 1361+ DC AL2(N00104)
002AF8 2B0E 1362+ DC A(T3C02)
002AFA 328A 1363+ DC AL2(ON)
002AFC 3200 1364+ DC AL2(4)
002AFE 0004 1365+ DC X'00040000'
002B00 00400000 1366+ ALIGN WORD
1367+ DC AL2(0)
002B04 0000 1368+ DC C'AA'
002B06 C1C1 1369+ ALIGN WORD
1370+ N00103 DC AL2(PARMARA)
002B08 196E 1371+ \$FIXT FT=(F00395),CT=(C00043),ST=(S00032)
1372+ N00103 DC A(@FIXT)
002B0A 0101 1373+ DC A(F00395)
002B0C 2FF0 1374+ \$TUXX T3C02,4,00000010,ON,QT=(Q00018),YES=N00118
1375+ N00104 DC A(@TUXX)
002B0E 0500 1376+ DC AL2(N00118)
002B10 2B8E 1377+ DC A(T3C02)
002B12 328A 1378+ DC AL2(ON)
002B14 0200 1379+ DC AL2(4)
002B16 0004 1380+ DC X'00000010'
002B18 00000010 1381+ ALIGN WORD
1382+ DC AL2(0)
002B1C 0000 1383+ DC C'AA'
002B1E C1C1 1384+ ALIGN WORD
1385+ N00105 DC AL2(PARMARA)
002B20 196E 1386+ \$TUXX T3C02,4,02000000,ON,QT=(Q00009),YES=N00115
1387+ N00105 DC A(@TUXX)
002B22 0500 1388+ DC AL2(N00115)
002B24 2B82 1389+ DC A(T3C02)
002B26 328A 1390+ DC AL2(ON)
002B28 0200 1391+ DC AL2(4)
002B2A 0004 1392+ DC X'02000000'
002B2C 02000000 1393+ ALIGN WORD
1394+ DC AL2(0)
002B30 0000 1395+ DC C'AA'
002B32 C1C1 1396+ ALIGN WORD
1397+ N00106 DC AL2(PARMARA)
002B34 196E 1398+ \$TUXX T3C02,4,00100000,ON,QT=(Q00019),YES=N00112
1399+ N00106 DC A(@TUXX)
002B36 0500 1400+ DC AL2(N00112)
002B38 2B76 1401+ DC A(T3C02)
002B3A 328A 1402+ DC AL2(ON)
002B3C 0200 1403+ DC AL2(4)
002B3E 0004 1404+ DC X'00100000'
002B40 00100000 1405+ ALIGN WORD
1406+ DC AL2(0)
002B44 0000 1407+ DC C'AA'
002B46 C1C1 1408+ ALIGN WORD
1409+ N00107 DC AL2(PARMARA)
002B48 196E 1410+ \$TUXX T3C02,4,00000004,ON,QT=(Q00006),YES=N00111
1411+ N00107 DC A(@TUXX)
002B4A 0500 1412+ DC AL2(N00111)
002B4C 2B72 1413+ DC A(T3C02)
002B4E 328A 1414+ DC AL2(ON)
002B50 0200 1415+ DC AL2(4)
002B52 0004 1416+ DC X'00000004'
002B54 00000004 1417+ ALIGN WORD
1418+ DC AL2(0)
002B58 0000 1419+ DC C'AA'
002B5A C1C1 1420+ ALIGN WORD
1421+ N00108 DC AL2(PARMARA)
002B5C 196E 1422+ \$QUES QT=(Q00040),YES=N00110,CT=(C00407)
1423+ DC A(@QUES)
002B5E 0100 1424+ DC AL2(N00110)
002B60 2B6E 1425+ \$GOTO TYPE=INTNL,EP=C,FT=(F00411),GTO=(N00108)
1426+ DC A(@GOTO)
002B62 0200 1427+ DC A(F00411)
002B64 3046 1428+ DC CL4'3C00'
002B66 F3C3F0F0 1429+ DC CL2'C'
002B68 C340 1430+ DC AL2(INTNL)
002B6C 0000 1431+ \$STOP FT=(F00503)
1432+ DC A(@STOP)
002B6E 0102 1433+ DC A(F00503)
002B70 304C 1434+ \$FIXT FT=(F00025),CT=(C00043),ST=(S00032)
1435+ DC A(@FIXT)
002B72 0101 1436+ DC A(F00025)
002B74 2D1C 1437+ \$QUES QT=(Q00417),YES=N00114,CT=(C00418)
1438+ DC A(@QUES)
002B76 0100 1439+ DC AL2(N00114)
002B78 2B7E 1440+ \$FIXT FT=(F00021),CT=(C00043)
1441+ DC A(@FIXT)
002B7A 0101 1442+ DC A(F00021)
002B7C 2C32 1443+ \$FIXT FT=(F00024),CT=(C00043),ST=(S00032)
1444+ DC A(@FIXT)
002B7E 0101 1445+ DC A(F00024)
002B80 2C4A 1446+ \$QUES QT=(Q00431),YES=N00117,CT=(C00428)
1447+ DC A(@QUES)
002B82 0100 1448+ DC AL2(N00117)
002B84 2B8A 1449+ \$FIXT FT=(F00434),GTO=(7880,A)
1450+ DC A(@FIXT)
002B86 0101 1451+ DC A(F00434)
002B88 305A

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002B8A 0101 1451 N00117 \$FIXT FT=(F00437),CT=(C00043),ST=(S00032)
002B8C 3078 1452+N00117 DC A(@FIXT)
002B8E 0500 1453+N00118 STUXX T3C02,4,00000004,ON,QT=(Q00006),YES=N00122
002B90 2BAE 1454+N00118 DC A(@STUXX)
002B92 328A 1455+N00118 DC A(T3C02)
002B94 0200 1456+N00118 DC AL2(ON)
002B96 0004 1457+N00118 DC AL2(4)
002B98 00000004 1458+N00118 DC X'00000004'

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002C2C C440 1565 ENTPT EP=D,STEP=00133
002C2E 2C0A 1566 CL2'A'
002C30 0000 1567 DC A(N00133)
1568 DC AL2(DUMMY)
1569 *****
1570 *****
1571 **
1572 ** MESSAGE TABLE
1573 **
1574 *****
1575 *****
1576 F00021 EQU *
1577 DC AL2(0001)
1578 DC A(0020)
1579 DC CL0020'REPLACE CARD A-A1H2.'

LOCTR OBJECT TEXT STMT SOURCE STATEMENT
002FCF D9C5D7D3C1C3C540C 1679 DC CL0034*REPLACE CARD A-A1G2. (SEE NOTE 1)
002FF0 0003 1680 EQU *
002FF0 0014 1681 DC A(0020)
002FF0 D9C5D7D3C1C3C540C 1683 DC CL0020*REPLACE CARD A-A1H2.
003008 0022 1684 DC A(0034)
00300A D9C5D7D3C1C3C540C 1685 DC CL0034*REPLACE CARD A-A1K4. (SEE NOTE 1)
00302C 0018 1686 DC A(0024)
00302E D9C5D7D3C1C3C540C 1687 DC CL0024*REPLACE (FCU) CARD A-A1D2.
003046 0001 1689 EQU *
003046 0002 1690 DC AL2(0001)
00304A 4040 1691 DC A(0002)
00304C 0001 1692 EQU *
00304C 000A 1693 DC CL0002
003050 C5D5C440D6C640D4C 1695 DC CL0010*END OF MAP'
00305A 0001 1696 EQU *
00305A 001A 1698 DC AL2(0001)
00305E C7D640E3D640D7C1D 1699 DC A(0026)
003078 0003 1700 EQU *
003078 0022 1702 DC CL0026*GO TO PAPER ONLY MAP 7880.
00307C D9C5D7D3C1C3C540C 1703 DC *
00309E 0022 1704 DC AL2(0003)
0030A0 D9C5D7D3C1C3C540C 1705 DC A(0034)
0030C2 0002 1706 DC CL0034*REPLACE CARD A-A1J2. (SEE NOTE 1)
0030C4 D9C5D7D3C1C3C540C 1707 DC A(0034)
0030E6 0005 1708 EQU *
0030E6 0016 1709 DC CL0034*REPLACE CARD A-A1J4. (SEE NOTE 1)
0030E8 0016 1709 DC *
0030EA D9C5C9D5E2E3C1D3D 1711 DC AL2(0005)
003100 0024 1712 DC A(0022)
003102 C3C8C5C3D240C3D6D 1713 DC CL0022*REINSTALL A-A1K4 CAPD.
003126 0020 1714 DC A(0036)
003128 C460E6F1C1F14B4DE 1715 DC CL0036*CHECK CONTINUITY OF CABLE A-A1Z2 TO
003148 0026 1716 DC A(0032)
00317A 002C 1717 DC C10032*D-W1A1.(SEE SF309,MLD VOLUME 01)'
00317A 002C 1718 DC CL0038*IF CABLE IS OK , REPLACE THE DE UNIT.
00317E E2C5C540F4F9F6F24 1719 DC A(0044)
00319E 0002 1720 EQU *
00319E 0014 1721 DC CL0044*SEE 4962 MIM , PARAGRAPH 3.5 FOR PROCEDURE.
0031A0 0014 1722 DC *
0031A2 D9C5D7D3C1C3C540C 1723 DC AL2(0002)
0031B6 0022 1724 DC A(0020)
0031B8 D9C5D7D3C1C3C540C 1725 DC CL0020*REPLACE CARD A-A1H2.'
0031DA 0003 1726 EQU *
0031DA 0014 1727 DC A(0034)
0031DC D9C5D7D3C1C3C540C 1728 DC CL0034*REPLACE CARD A-A1H2.'
0031FE 0026 1729 DC A(0034)
0031F4 D9C5D7D3C1C3C540C 1731 DC CL0034*REPLACE CARD A-A1K4. (SEE NOTE 1)
003216 0018 1732 DC A(0024)
003218 D9C5D7D3C1C3C540C 1733 DC CL0024*REPLACE (FCU) CARD A-A1D2.'
003230 1734 EQU *
003230 0001 1735 DC AL2(0001)
003232 0002 1736 DC A(0002)
003234 4040 1737 DC CL0002
003236 0001 1738 EQU *
003236 0014 1739 DC AL2(0001)
003238 000A 1740 DC A(0010)
00323A C5D5C440D6C640D4C 1741 DC CL0010*END OF MAP'
003244 0000 1742 HDIT 00B2
1744*OPTN1 DC X'0000' PROGRAM OPTION CONTROL WORD 1
003246 0000 1745* DC X'0000' PROGRAM OPTION CONTROL WORD 2
1747** BIT HEX
1748+B48 EQU 16 0 8 PPOBLEM PROGRAM CONTROL BITS
1749+B49 EQU 17 1 4 *
1750+B50 EQU 18 2 2 * THESE BITS ARE USED WITH THE
1751+B51 EQU 19 3 1 * SECOND OPTION WD AND ARE TO
1752+B52 EQU 20 4 8 * BE ASSIGNED BY EACH PROGRAMMER
1753+B53 EQU 21 5 4 *
1754+B54 EQU 22 6 2 *
1755+B55 EQU 23 7 1 *
1756+B56 EQU 24 8 4 *
1757+B57 EQU 25 9 4 *
1758+B58 EQU 26 10 2 *
1759+B59 EQU 27 11 1 *
1760+B60 EQU 28 12 8 *
1761+B61 EQU 29 13 4 *
1762+B62 EQU 30 14 2 *
1763+B63 EQU 31 14 2 *
1764+CH EQU 30 14 2 *
1765+CHP EQU 31 15 1 *
1767*OPTN3 DC X'0000' PROGRAM OPTION CONTROL WORD 3
1768**
1769** 0 MYSTERY INTERRUPT MI 8 CS STATUS IN PROGRESS CS
1770** 1 ERROR INTERRUPT ER 9 CS AVAILABLE CSA
1771** 2 EXPECTED INTERRUPT XI 10 CS STATUS INTERRUPT ERP CE
1772** 3 INTERRUPT RECEIVED IN 11 ISB BITS ON (1-7) ISBON
1773**
1774** 4 EXPECTED ERR/ATTENT XE 12 TEST UNIT RESULTS VOID NG
1775** 5 HARD ERROR FOUND HE 13 OIO CC ERROR IOCC
1776** 6 WRONG INTR LEVEL SLE 14 NO INTERRUPT NOIN
1777** 7 NO INTR EXPECTED NI 15 INTERRUPT CC ERROR INCC
1778** BIT HEX
1779+MI EQU 32 0 8 MYSTERY INTERRUPT HAPPENED
1780+ER EQU 33 1 4 ERROR RECEIVED ON INTERRUPT
1781+XI EQU 34 2 2 EXPECTED INTERRUPT CONTROL BIT
1782+IN EQU 35 3 1 INTERRUPT RECEIVED CONTROL BIT
1783+XE EQU 36 4 8 EXPECTED ERROR RESPONSE
1784+HE EQU 37 5 4 HARD ERROR, 8 RETRIES
1785+SLE EQU 38 6 2 INTERRUPT ON WRONG LEVEL ERROR
1786+NI EQU 39 7 1 NO INTERRUPT EXPECTED E
1787+CS EQU 40 8 8 CYCLE STATUS IN PROGRESS
1788+C5A EQU 41 9 4 CYCLE STEAL AVAILABLE
1789+CIE EQU 42 10 2 CYCLE STEAL STATUS INERRUPT ERROF
1790+ISBON EQU 43 11 1 ISB BITS ON (1-7)
1791+NG EQU 44 12 8 TEST UNIT RESULTS NO GOOD
1792+IOCC EQU 45 13 4 OIO CC ERROR
1793+NOIN EQU 46 14 2 NO INTERRUPT
1794+INCC EQU 47 15 1 INTRUPT CC ERROR

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1795**
1796** COMMON BUFFER FOR PRINTING DATA
1797**
1799+\$TUID DC A(***) TEST UNIT IDENTIFICATION
00324A 0000 1800+\$IOIN DC A(***) I/O AND INTR CONDITION CODES
00324E 0000 1801+\$ISB DC A(***) R7, INTR STATUS BYTE & DEV ADPS
003250 0000 1802+\$STIO DC A(***) ADPS OF LAST I/O + 4 BYTES
003252 0000 1803+\$DEV1 DC A(***) DEVICE DEPENDENT DATA
003254 0000 1804+\$DEV2 DC A(***) *
003256 0000 1805+\$DEV3 DC A(***) *
003258 0000 1806+\$DEV4 DC A(***) *
00325A 1807+\$CTID EQU DEV1 READ ID BUFFER FOR IBIS & TERN
00325A 1808+\$DCBUF EQU * DCB BUFFER FOR LAST DCB USED
00325A 0000 1809+\$DCB1 DC A(***) LAST DCB TABLE, CONTROL WORD
00325C 0000 1810+\$DCB2 DC A(***) LAST DCB TABLE, DEV DEP WORD
00325E 0000 1811+\$DCB3 DC A(***) LAST DCB TABLE, DEV DEP WORD
003260 0000 1812+\$DCB4 DC A(***) LAST DCB TABLE, DEV DEP WORD
003262 0000 1813+\$DCB5 DC A(***) LAST DCB TABLE, DEV DEP WORD
003264 0000 1814+\$DCB6 DC A(***) LAST DCB TABLE, CHAIN ADPS
003266 0000 1815+\$DCB7 DC A(***) LAST DCB TABLE, BYTE COUNT
003268 0000 1816+\$DCB8 DC A(***) LAST DCB TABLE, BUFFER ADDRESS
1817**
00326A 0000 1818+\$CSBUF EQU * CYCLE STEAL DATA BUFFER
00326A 0000 1819+\$CSTL1 DC A(***) CYCLE STEAL BUFFER RESIDUAL ADPS
00326C 0000 1820+\$CSTL2 DC A(***) CYCLE STEAL WD 2, DEVICE DEPEND
00326E 0000 1821+\$CSTL3 DC A(***) CYCLE STEAL WD 3, DEVICE DEPEND
003270 0000 1822+\$CSTL4 DC A(***) CYCLE STEAL WD 4, DEVICE DEPEND
003272 0000 1823+\$CSTL5 DC A(***) CYCLE STEAL WD 5, DEVICE DEPEND
003274 0000 1824+\$CSTL6 DC A(***) CYCLE STEAL WD 6, DEVICE DEPEND
003276 0000 1825+\$CSTL7 DC A(***) CYCLE STEAL WD 7, DEVICE DEPEND
003278 0000 1826+\$CSTL8 DC A(***) CYCLE STEAL WD 8, DEVICE DEPEND
1827**
00327A 0000 1828+\$SUBN DC A(***) LAST SUBROUTINE ADDRESS USED
00327C 00000000 1829+\$DATA DC 2A(***) OPTIONAL DATA
003280 0021 1830+\$INTR DC X'0021' INTRUPT LEVEL REQUESTED
003282 0000 1831+\$TUNIT DC A(***) TEST UNIT RETURN ADPS TO MDI
003284 0000 1832+\$DEV2 DC X'0022' DEVICE ID
003286 1900 1833+\$SVCAL DC A(DEVADD) ADDRESS OF DEV DEV2
003288 0000 1834+\$DCV DC A(***) IBIS CYLINDER ADDRESS
1835**
1836** THIS TEST UNIT WILL RETURN TO MDI WITHOUT DOING ANY PROGRAM
1837** FUNCTION. THE RESULTS THAT WERE SET UP IN THE RESULTS AREA ARE
1838** STILL VALID BUT A DIFFERENT TEST IS TO BE PERFORMED.
1839**
00328A 4020 324A 3C02 1840+\$T3C02 MVWI X'3C02',\$TUID SET UP TEST UNIT ID
003290 5700 1841+\$BX\$ DC (R7) RETURN TO MDI SUPVR
1842**
1843** COPY COMEQU *****
1844**
1845**
1846** EQUATED NAMES FOR SUPPORTED SVC'S *****
1847**
1848**
1849 OUT EQU 0 OUT SVC
1850 OUTIN EQU 1 OUTIN SVC
1851 IDLE EQU 2 IDLE SVC
1852 ASCII EQU 3 HEX TO ASCII SVC
1853 CHNGE EQU 4 CHANGE LEVEL SVC
1854 PGMCK EQU 5 ALLOW RETURN ON PROGRAM CHECK SVC
1855 EXIT EQU 6 EXIT SVC
1856 TRESV EQU 7 TERMINATE SVC
1857 RSET EQU 8 TEST DEVICE SVC
1858 RTD EQU 9 READ ID SVC
1859 START EQU 10 START CYCLE STEAL SVC
1860 STCSS EQU 11 START CYCLE STEAL STATUS SVC
1861 PREP EQU 12 PREPARE DEVICE SVC
1862 READO EQU 13 READ WITH FUNCTION BIT 3 OFF SVC
1863 READ1 EQU 14 READ WITH FUNCTION BIT 3 ON SVC
1864 RSTAT EQU 15 READ STATUS SVC
1865 WRIT0 EQU 16 WRITE WITH FUNCTION BIT 3 OFF SVC
1866 WRIT1 EQU 17 WRITE WITH FUNCTION BIT 3 ON SVC
1867 CTRL EQU 18 CONTROL SVC
1868 RTCB EQU 19 RELEASE INTERRUPT CONTROL BLOCK SVC
1869 CICB EQU 20 CONNECT INTERRUPT CONTROL PLOCK SVC
1870 HIO EQU 21 HALT ALL I/O
1871 RECSD EQU 22 REQUEST USE OF DCP DISK SVC
1872 RELSD EQU 23 RELEASE USE OF DCP DISK SVC
1873 HALT EQU 24 HALT SVC
1874 ETOH EQU 25 EBCDIC TO HEX SVC (STRING)
1875 HTOE EQU 26 HFX TO EBCDIC SVC (STRING)
1876 ATOH EQU 27 ASCII TO HEX SVC (STRING)
1877 HTOA EQU 28 HEX TO ASCII SVC (STRING)
1878 ETOA EQU 29 EBCDIC TO ASCII SVC (STRING)
1879 ATOE EQU 30 ASCII TO EBCDIC SVC (STRING)
1880 READI EQU 31 READ DATA SETS FOR MDI/UTIL
1881 WRITI EQU 32 WRITE DATA SETS FOR UTIL
1882**
1883** EQUATES USED BY TU'S AS CONSTANTS *****
1884**
1885**
1886**
1887**
1888 PLUS EQU C'+ ' PLUS CHAR
1889 MINUS EQU C'- ' MINUS CHAR
1890 ZERO EQU 0
1891 ONE EQU 1
1892 TWO EQU 2
1893 THREE EQU 3
1894 FOUR EQU 4
1895 FIVE EQU 5
1896 SIX EQU 6
1897 SEVEN EQU 7
1898 EIGHT EQU 8
1899 NINE EQU 9
1900 TEN EQU 10
1901 ELEVN EQU 11
1902 TWELV EQU 12
1903 THRTN EQU 13
1904 FVRTN EQU 14
1905 SIXTN EQU 15
1906 SEVNTN EQU 16
1907 THRY2 EQU 32
1908 SIXT4 EQU 64
1909 ONE28 EQU 128
1910 TWO56 EQU 256
1911 ONEK EQU 1024
1912 TWOK EQU 2048

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
000C00 1913 THREE EQU 3072
001000 1914 FOUR EQU 4096
FFFFF 1916 M1 EQU -1
FFFFF 1917 M2 EQU -2
FFFFFD 1918 M3 EQU -3
FFFFFC 1919 M4 EQU -4
1921 *****
1922 *
1923 * THE FOLLOWING ARE EQUATES FOR BIT DISPLACEMENTS FROM THE *
1924 * BEGINNING OF THE BYTE TO EACH BIT IN THE WORD OF SWITCHES. *
1925 *****
1926 BS0 EQU 0
1927 BS1 EQU 1
1928 BS2 EQU 2
1929 BS3 EQU 3
1930 BS4 EQU 4
1931 BS5 EQU 5
1932 BS6 EQU 6
1933 BS7 EQU 7
1934 BS8 EQU 8
1935 BS9 EQU 9
1936 BS10 EQU 10
1937 BS11 EQU 11
1938 BS12 EQU 12
1939 BS13 EQU 13
1940 BS14 EQU 14
1941 BS15 EQU 15
1942 BS15 EQU 15
1944 COPY T78DCB
1945 ** (T78DCB)
1946 *****12/1/76*****
1947 *
1948 * DCB TABLES AND DC'S
1949 *
1950 *****
1951 *****
1952 *****
1953 *****
1954 DGDCB DC X'2008' DIAGNOSTIC DCB
1955 DC X'0000' NOT USED
1956 DC A(*-*) 0-7 = PHYSICAL SECTOR # MINUS ONE
1957 DC X'0000' NOT USED
1958 DC X'0000' NOT USED
1959 DC A(*-*) CHAINING ADDRESS
1960 DC X'0100' BYTE COUNT
1961 DC A(*-*) DATA ADDRESS
1962 *
1963 *****
1964 *****
1965 *****
1966 CLDCB DC X'0007' RECALIBRATE DCB
1967 DC X'0007'
1968 *
1969 *****
1970 *****
1971 WSDCB DC X'0002' WRITE SECTOR ID CONTROL WORD
1972 DC X'0000' NOT USED
1973 DC A(*-*) 0-7 = PHYSICAL SECTOR # MINUS ONE
1974 DC A(*-*) NOT USED
1975 DC A(*-*) NOT USED
1976 DC A(*-*) CHAIN ADDRESS
1977 DC X'0006' BYTE COUNT
1978 DC A(WRSID) ADDR OF SECTOR ID DATA
1979 *****
1980 *****
1981 RSDCB DC X'200A' READ SECTOR ID
1982 DC X'0000' NOT USED
1983 DC X'0000' 0-7 = PHYSICAL SECTOR # MINUS ONE
1984 DC X'0000' NOT USED
1985 DC X'0000' NOT USED
1986 DC X'0000' CHAIN ADDRESS
1987 DC X'0006' BYTE COUNT FOR READ SECTOR ID
1988 DC A(SCTID) SECTOR ID DATA ADDRESS
1989 *
1990 *****
1991 *****
1992 *****
1993 RIDCB DC X'200E' READ SECTOR ID
1994 DC X'0000' NOT USED
1995 DC X'0000' NOT USED
1996 DC X'0000' NOT USED
1997 DC X'0000' NOT USED
1998 DC A(*-*) CHAIN ADDRESS
1999 DC X'0006' BYTE COUNT FOR READ SECTOR ID
2000 DC A(SCTID) SECTOR ID DATA ADDRESS
2001 *
2002 *****
2003 *****
2004 *****
2005 SKDCB DC X'0005' SEEK DCB
2006 DC X'0000' BIT 0-3=0; BIT4=DIRECTION; 5-15=DIFFER
2007 DC F'0'
2008 DC F'0'
2009 DC X'0000' 0-7 = HEAD; 8-15 NOT USED
2010 DC A(*-*) CHAIN ADDRESS
2011 DC F'0' NOT USED
2012 DC F'0' NOT USED
2013 *****
2014 *****
2015 *****
2016 CSDCB DC X'2000' CONTROL WORD
2017 DC F'0' NOT USED
2018 DC F'0' NOT USED
2019 DC F'0' NOT USED
2020 DC F'0' NOT USED
2021 DC F'0' NOT USED
2022 DC X'0008' 4 WORDS OF STATS
2023 DC A(CSBUF) ADDRESS OF CYCLE STEAL STATUS DATA
2024 *
2025 *****
2026 *****
2027 WRDCB DC X'0001' WRITE CONTROL WORD
2028 DC F'0' NOT USED
2029 DC X'0000' 0-7=0; 8-15 = FLAG BYTE

LOCTR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
003308 0000 2030 DC X'0000' SERCH ARGUMENT CYLINDER
003309 0000 2031 DC X'0000' SEARCH ARGUMENT HEAD-SECTOR
00330C 0000 2032 DC A(*-*) CHAIN ADDRESS
00330E 0000 2033 DC F'0' BYTE COUNT
003310 0000 2034 DC A(*-*) WRITE DATA ADDRESS
2035 *
2036 *****
2037 *****
2038 VRDCB DC X'200C' CONTROL WORD
2039 DC F'0' NOT USED
2040 DC X'0000' 0-7=0; 8-15 = FLAG BYTE
2041 DC X'0000' CYLINDER
2042 DC X'0000' HEAD - SECTOR
2043 DC A(*-*) CHAIN ADDRESS
2044 DC F'0' BYTE COUNT
2045 DC A(*-*) VERIFY DATA ADDRESS
2046 *
2047 *****
2048 *****
2049 RDDCJ DC X'2009' READ DCB CONTROL WORD
2050 DC F'0' NOT USED
2051 DC X'0000' 0-7=0; 8-15 = FLAG BYTE
2052 DC X'0000' SEARCH ARGUMENT CYLINDER
2053 DC X'0101' SEARCH ARGUMENT H-R
2054 DC A(*-*) CHAIN ADDRESS
2055 DC F'0' BYTE COUNT
2056 DC A(*-*) READ DATA ADDRESS
2057 *
2058 *****
2059 *****
2060 WKDCB DC X'0003' CONTROL WORD
2061 DC X'0000' NOT USED
2062 DC A(*-*) 0-7 = PHYSICAL SECTOR # MINUS ONE
2063 DC A(*-*) NOT USED
2064 DC A(*-*) NOT USED
2065 DC A(*-*) CHAIN ADDRESS
2066 DC X'0006' BYTE COUNT
2067 DC A(WRSID) ADDR OF SECTOR ID DATA
2068 *
2069 *****
2070 *****
2071 RKDCB DC X'200B' CONTROL WORD
2072 DC X'0000' NOT USED
2073 DC X'0000' 0-7 = PHYSICAL SECTOR # MINUS ONE
2074 DC X'0000' NOT USED
2075 DC X'0000' NOT USED
2076 DC A(*-*) CHAIN ADDRESS
2077 DC X'0006' BYTE COUNT FOR READ SECTOR ID
2078 DC A(SCTID) SECTOR ID DATA ADDRESS
2079 *
2080 *****
2081 ZERO0 DC X'0000' CONSTANTS AND DEFINED STORAGE LOCATIONS
2082 ONE1 DC X'0001' CONSTANT ZERO
2083 TIMEOUT DC 2A(*-*) TIMEOUT COUNTER
2084 TONE DC X'0000' CONSTANT FOR ADD DOUBLE
2085 DC X'0001' *
2086 COUNT DC F'1280' BYTE COUNT (1280)
2087 DIF DC A(*-*) SEEK DIFFERENCE
2088 XXX DC A(*-*) WORK WORD INT TO ZERO
2089 BCNT DC X'0000' BYTE COUNT
2090 JOE DC A(*-*) WRITE PARAMETER POINTER
2091 JOE1 DC A(*-*) SAVE LOC FOR PARM LIST ADDRESS
2092 WDATA DC X'DEB6' WRITE DATA
2093 DC X'6BED' *
2094 TABLE DC A(*-*) ADDR OF WRT PAR LIST FOR FORMAT RTNS
2095 LGSEC DC X'0000' LOGICAL SECTOR #
2096 PHYSC DC X'0000' CONVERTED PHYSICAL SEC #
2097 CB29 DC X'1D00' CONSTANT BYTE 29
2098 FIVE9 DC X'3B00' CONSTANT BYTE 59
2099 WRSID DC X'0000' FLAG, CYLINDER (WRT SECTOR ID DATA)
2100 DC X'0000' CYLINDER HEAD
2101 DC X'0000' LOG SECTOR, NOT USED
2102 CDAT DC X'00FF' INVALID DATA CONSTANT
2103 WSIDT DC X'0030' WRITE SECTOR ID TEST DATA
2104 DC X'5678' *
2105 DC X'9A00' *
2106 SCTST DC X'0000' READ SECTOR ID TEST DATA 3 BUFFER
2107 DC X'0000' *
2108 DC X'0000' *
2109 CTR01 DC X'0000' COUNTER
2110 CTR02 DC X'0000' COUNTER
2111 CTR03 DC X'0000' COUNTER
2112 CTR04 DC X'0000' COUNTER
2113 CTR05 DC X'0000' COUNTER
2114 CTR06 DC X'0000' COUNTER
2115 SAVR3 DC X'0000' SAVE AREA
2116 SAVR5 DC X'0000' SAVE AREA
2117 WR2 DC X'0000' *
2118 SVSEK DC X'0000' *
2119 ICT DC X'0000' *
2120 T56AA DC X'0000' *
2121 T56BB DC X'0000' *
2122 T56CC DC X'0000' *
2123 T56DD DC X'0000' *
2124 T56EE DC X'0000' *
2125 T56FF DC X'0000' *
2126 T56GG DC X'0000' *
2127 T86AA DC X'0000' *
2128 T86BB DC X'0000' *
2129 T86CC DC X'0000' *
2130 T86DD DC X'0000' *
2131 T86EE DC X'0000' *
2132 T86FF DC X'0000' *
2133 T86GG DC X'0000' *
2134 T41D DC X'0000' *
2135 T41LP DC X'0000' *
2136 WR1CT DC X'0000' *
2137 CYS1 DC X'0000' *
2138 PYS1 DC X'0000' *
2139 HEAD0 DC A(*-*) *
2140 HEAD1 DC A(*-*) *
2141 GDSE0 DC A(*-*) *
2142 GDSE1 DC A(*-*) *
2143 ER00 DC A(*-*) *

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0033D2 0000 2144 ER01 DC A(*-*)
0033D4 0000 2145 HD0SV DC A(*-*)
0033D6 0000 2146 HD1SV DC A(*-*)
0033D8 0000 2147 ER0SV DC A(*-*)
0033DA 0000 2148 ER1SV DC A(*-*)
0033DC 0000 2149 PATTR DC A(*-*)
0033DE 0000 2150 CECYL DC A(*-*)
0033E0 0000 2151 STATS DC A(*-*)
2152 *
2153 * COPY T7872
2154 *****
2155 *T7872
2156 * THIS TU INHIBITS INTERRUPT 12/01/76*
2157 * CALLING ROUTINE LOOPS ON T72A
2158 *****
2159 *
2160 T7872 MVW F7,TURTN SAVE RETURN ADDRESS
2161 MVWI X'0020',IODCB PREP TO LEVEL 2 WITH THE 'I' BIT OFF
2162 MVA IOBLK,R7 *
2163 SVC PREP *
2164 J T72B
2165 T72A MVW R7,TURTN SAVE RETURN ADDRESS
2166 T72B B \$CONX EXIT
2167 *
2168 * COPY T7810
2169 ** (T7810)
2170 *****12/01/76*****
2171 *
2172 * SUBROUTINE
2173 *
2174 * PURPOSE
2175 *
2176 * COMPARE READ SECTOR ID DATA TO WRITE SECTOR ID DATA
2177 * NORMAL AND TEST DATA.
2178 *
2179 * CALLING SEQUENCE
2180 *
2181 * BAL CMPRW,R6 (NORMAL)
2182 * BAL CMPRT,R6 (TEST)
2183 *
2184 * RETURN
2185 *
2186 * BXS (R6,2) - NORMAL
2187 *
2188 *
2189 *
2190 *****
2191 *
2192 * CMPPT MVWI 5,R7 BYTE COUNT
2193 * MVA SCTST+1,R3 ADDR OF RD SECT ID DATA (TEST)
2194 * MVA WSIDT,R5 ADDR OF WR SECT ID DATA (TEST)
2195 * J TT4Y
2196 * CMPRW MVWI 5,R7 COMPARE BYTE COUNT
2197 * MVA SCTID+1,F3 ADDR OF RD SECT ID DATA
2198 * MVA WRSID,R5 ADDR OF WR SECT ID DATA
2199 * TT4Y CFNEN (R3),(R5) COMPARE ID DATA
2200 * BE (R6,2) BCH IF WRITE ID DATA OK
2201 * B (R6)* COMPARE ERROR
2202 *
2203 *****
2204 *
2205 * SUBROUTINE
2206 *
2207 * PURPOSE
2208 * CONVERT LOGICAL SECTOR NUMBER TO A PHYSICAL SECTOR MINUS
2209 * ONE.
2210 * SETUP LOGICAL SECTOR # IN LOCATION 'LGSEC'
2211 * PHYSICAL SECTOR # WILL BE LOADED IN LOCATION 'PHYS'
2212 *
2213 * LOGICAL SECTOR# TO PHYSICAL SECTOR# CONVERSION
2214 * LOGICAL- X 00, 1E, 01, 1F, 02, 20, 03, 21, 04, 22, 05, 23, 06, 24,
2215 * PHYSICAL X 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D,
2216 *
2217 * LOGICAL- 07, 25, 08, 26, 09, 27, 0A, 28, 0B, 29, 0C, 2A, 0D, 2B,
2218 * PHYSICAL 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B,
2219 *
2220 * LOGICAL- 0E, 2C, 0F, 2D, 10, 2E, 11, 2F, 12, 30, 13, 31, 14, 32,
2221 * PHYSICAL 0E, 1D, 1E, 1F, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,
2222 *
2223 * LOGICAL- 15, 33, 16, 34, 17, 35, 18, 36, 19, 37, 1A, 38, 1B, 39,
2224 * PHYSICAL 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37,
2225 *
2226 * LOGICAL- 1C, 3A, 1D, 3B, X
2227 * PHYSICAL 38, 39, 3A, 3B, X
2228 *
2229 *
2230 * CALLING SEQUENCE
2231 *
2232 * BAL CONVT,R6
2233 *
2234 * RETURN
2235 *
2236 * B (TT304+2)
2237 *
2238 *****
2239 *
2240 * CONVT MVW R6,TT304+2 SETUP RETURN ADDR
2241 * CB ZER00,LGSEC+1 CK FOR LOG # ZERO
2242 * JE TT303 RCH IF LOG # IS ZERO
2243 * CB LGSEC+1,CE29 COMP LOG TO 29
2244 * JGE RTT01 RCH IF LGSEC EQ OR LESS THAN CB29
2245 * MVWI 2,R0 SETUP MULTIPLIER
2246 * MB LGSEC+1,R0 LOG SECTOR # TIMES 2
2247 * SWI 60,R0 LOG SEC TIMES 2 MINUS 60
2248 * MVB R0,PHYS+1 PHYSICAL SECTOR NUMBER
2249 * J TT304 RETURN TO CALLER
2250 * TT303 MVB FIVE9,PHYS+1 PHYSICAL SECTOR # 59
2251 * J RTT01 RETURN TO CALLER
2252 * RTT01 MVWI 2,R0 LOAD MULTIPLIER
2253 * MB LGSEC+1,R0 LOG SECTOR # TIMES 2
2254 * SWI 1,R0 SUBTRACT ONE
2255 * R0,PHYS+1 LOAD PHYSICAL SECTOR #
2256 * TT304 B *-* RETURN TO CALLER
2257 *
2258 *****
2259 *

LOCTR OBJECT TEXT STMT SOURCE STATEMENT
2260 * SUBROUTINE
2261 *
2262 * PURPOSE
2263 *
2264 * LOAD WRITE SECTOP ID DATA BUFFER FROM RD SEC ID BUFFER
2265 *
2266 * CALLING SEQUENCE
2267 *
2268 * BAL LWSID,F6
2269 *
2270 * RETURN
2271 *
2272 * BXS (R6)
2273 *
2274 *****
2275 *
2276 * LWSID MVWI 5,R7 BYTE COUNT
2277 * MVA SCTID+1,R3 ADDR OF RD SECT ID DATA BUFFER
2278 * MVA WRSID,R5 ADDR OF WR SECT ID DATA BUFFER
2279 * MVFN (R3),(R5) MOV DATA FROM RD TO WR BUFFER
2280 * BXS (R6) RETURN TO CALLER
2281 *
2282 *
2283 * EXECUTE INPUT & OUTPUT COMMANDS
2284 * TO EXECUTE ALL I/O COMMANDS FROM A COMMON PLACE.
2285 * EACH OF THESE ENTRIES SET R7 WITH THE ADRS OF ITS PARAMETER
2286 * LIST AND ANY SPECIAL SWITCHES BEFORE BRANCHING TO THE
2287 * SUPVR CALL.
2288 *
2289 * THIS SUBROUTINE WILL CHECK FOR THE FOLLOWING:
2290 *
2291 * 1. LOST INTERRUPTS BY TIMING OUT A COUNTING LOOP
2292 * 2. ERROR INTERRUPTS RECEIVED FROM SUPVR
2293 *
2294 * THIS ROUTINE HAS THE FOLLOWING ENTRIES:
2295 *
2296 * 1 BAL \$RKEW,R6 READ SECTOR ID SKEWED
2297 *
2298 * 2 BAL \$WKST,R6 WRITE SECTOR ID SKEWED (TEST)
2299 *
2300 * 3 BAL \$PWST,R6 READ SECTOR ID SKEWED (TEST)
2301 *
2302 * 4 BAL \$RIDS,R6 READ SECTOR ID (TEST)
2303 *
2304 * 5 BAL \$WKEW,R6 WRITE SECTOR ID SKEWED
2305 *
2306 * 6 BAL \$WSEC,R6 WRITE SECTOR ID
2307 *
2308 * 7 BAL \$WSTS,R6 WRITE SECTOR ID (TEST)
2309 *
2310 * 8 BAL \$DIAG,R6 DIAGNOSTIC
2311 *
2312 * 9 BAL \$XIOCS,R6 CYCLE STEAL STATUS
2313 *
2314 * 10 BAL \$SEEK,R6 SEEK
2315 *
2316 * 11 BAL \$PECL,P6 RECALIBRATE
2317 *
2318 * 12 BAL \$RDID,R6 READ SECTOR ID
2319 *
2320 * 13 BAL \$RD,P6 READ
2321 *
2322 * 14 BAL \$RDVY,R6 READ VERIFY
2323 *
2324 * 15 BAL \$WRT,R6 WRITE
2325 *
2326 *
2327 *
2328 *
2329 * \$SEEK MVA SKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2330 * J XIO
2331 *
2332 * \$RECL MVA CLDCB,IODCB SET UP BLOCK FOR SVC CALL
2333 * J XIO
2334 *
2335 * \$RDID MVA RSDCB,IODCB SET UP BLOCK FOR SVC CALL
2336 * MVB X'FF',R3 SET BUFFER TO F'S
2337 * MVA SCTID,R5 SETUP READ SECTOR ID BUFFER ADRS
2338 * MVWI 6,R7 SETUP BUFFER LENGTH
2339 * FFN R3,(R5) INIT READ SECTOR ID BUFFER
2340 * MVA SCTID,RSDCB+14 DATA ADDR
2341 * J XIO
2342 *
2343 * \$RD MVB X'FF',R3 SETRD BUFFER TO ALL F'S
2344 * MVB RSDCB+14,R5 SET UP READ BUFFER ADRS
2345 * MVWI X'0100',R7 SET UP BUFFER LENGTH
2346 * FFN R3,(R5) CLEAR READ BUFFER
2347 * \$RDS MVA RDDCB,IODCB SET UP BLOCK FOR SVC CALL
2348 * J XIO
2349 *
2350 * \$RDVY MVA WRDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2351 * J XIO
2352 *
2353 * \$WRT MVA WRDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2354 * J XIO
2355 *
2356 * \$RKEW MVA RKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2357 * MVB X'FF',R3 SET BUFFER TO F'S
2358 * MVA SCTID,R5 SETUP READ SECTOR ID BUFFER ADRS
2359 * MVWI 6,R7 SETUP BUFFER LENGTH
2360 * FFN R3,(R5) INIT READ SECTOR ID BUFFER
2361 * MVA SCTID,RKDCB+14 DATA ADDR
2362 * J XIO
2363 *
2364 * \$WKST MVA WKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2365 * MVA WSIDT,WKDCB+14 DATA ADDR
2366 * J XIO
2367 *
2368 * \$RWST MVA RKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2369 * MVA RCTST,RKDCB+14 DATA ADDR
2370 * J XIO
2371 *
2372 * \$RIDS MVA RSDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2373 * MVB X'FF',R3 SET BUFFER TO F'S
2374 * MVA SCTST,R5 SETUP READ SECTOR ID BUFFER ADPS

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003502 4724 0006 2375 MVWI 6,R7 SETUP BUFFER LENGTH
003506 2BAC 2376 PPN R3,(R5) INIT READ SECTOR ID BUFFER
003508 4020 32D0 3386 2377 MVA SCIST,RSDCB+14 DATA ADDR
00350E 5019 2378 J XIO
2379 *
003510 4020 3644 3332 2380 \$WKW MVA WKDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
003516 4020 3340 3378 2381 MVA WRSID,WKDCB+14 DATA ADDR
00351C 5012 2382 J XIO
2383 *
00351E 4020 3644 32B2 2384 \$WSEC MVA WSDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
003524 4020 32C0 3378 2385 MVA WRSID,WSDCB+14 DATA ADDR
00352A 500B 2386 J XIO
00352C 4020 3644 32B2 2387 \$WSTS MVA WSDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
003532 4020 32C0 3380 2388 MVA WSIDT,WSDCB+14 DATA ADDR
003538 5004 2389 J XIO
2390 *
00353A 4020 3644 3292 2391 \$DIAG MVA DGDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
003540 5000 2392 J XIO
2393 KEQIT
2394 *****29JUL76**
2395**
2396** SUB-ROUTINE
2397**
2398** EXECUTE INPUT AND OUTPUT COMMANDS
2399**
2400** PURPOSE
2401**
2402** TO EXECUTE ALL I/O COMMANDS FROM A COMMON PLACE.
2403** THIS SUBROUTINE WILL DO THE FOLLOWING FUNCTIONS:
2404**
2405** 1. SAVE THE ADDRESS THAT POINTS TO THE INSTRUCTION THAT STARTED
2406** THE I/O COMMAND.
2407** 2. SAVES THE DCB BLOCK USED UNLESS IT IS A START CYCLE STATUS
2408** ISSUED BY THIS SUBROUTINE.
2409** 3. CLEAR OUT THE CYCLE STEAL STATUS STORAGE UNLESS THE
2410** START CYCLE STATUS WAS ISSUED BY THIS SUBROUTINE.
2411** 4. RESETS THE INTERRUPT INDICATOR AND CHECKS FOR ANY INTERRUPT
2412** SINCE THE LAST EXPECTED INTERRUPT. IF AN INTERRUPT IS FOUND,
2413** MYSTERY INTERRUPT (MI) CONTROL BIT IS SET.
2414** 5. MOVES THE ADDRESS OF THE I/O CONTROL BLOCK IN R7, SET THE
2415** EXPECTED INTERRUPT CONTROL BIT AND ISSUE THE 'SVC START'.
2416** 6. WHEN THE SUPVR RETURNS AFTER ISSUING THE I/O COMMAND, TIMING
2417** STARTS TO DETERMINE A LOST INTERRUPT.
2418** 7. EXCEPT THE INTERRUPT AND GATHER INFORMATION TO DETERMINE IF IT
2419** WAS AN ERROR OR OKAY AND EXIT OFF THE INTERRUPT LEVEL.
2420** 8. CHECK IF THERE WAS A WRONG INTERRUPT LEVEL.
2421** 9. CHECK IF AN ERROR WAS EXPECTED AND IF THERE WAS RETURN.
2422** 10. CHECK IF THERE WAS AN ERROR CONDITION, IF NOT RETURN.
2423** 11. CHECK TO SEE IF THE EXERCISER IS TO BE TERMINATED.
2424** 12. CHECK IF A CYCLE STEAL OPERATION WAS IN PROGRESS THAT WAS
2425** ISSUED BY THIS SUBROUTINE.
2426** 13. CHECK THE ISB BITS THAT ARE ON. IF BIT 0 IS ON, ISSUE A
2427** CYCLE STEAL STATUS COMMAND. CHECK FOR ANY OTHER BIT BEING ON,
2428** COUNT IT AND SET UP THE PROPER ERROR MESSAGE TO BE PRINTED.
2429**
2430** CALLING SEQUENCE
2431**
2432** THIS ROUTINE HAS THE FOLLOWING ENTRIES:
2433**
2434** --> BAL XIO OR XEQ ANY CYCLE STEAL COMMAND, MOD=0
2435** --> BAL XIO1 MOD PARM PRELOADED IN 'IOMOD'
2436** --> BAL XIOCS,P6 OP XEQ START CYCLE STEAL STATUS, MOD=F
2437** --> BAL XIOCS-4,R6 AUTO CS STATUS (FOLLOWING OTHER XIO
AND DOES NOT POST INTERRUPT STATUS)
2438**
2439** RETURN CONTROL
2440**
2441**
2442** BXS (R6,2) RETURN TO USER NO ERROR
2443** OR B (R6,1) RETURN AND RETRY ON ERROR
2444*****
2445**
2446** XIO MVWZ IOMOD,R3 SET MOP OF 0 FOR CYCLE STEAL OP
2447** J XIO1 CS I/O'S ARE NOT RETRIED
2448**
2449** TBTR (R4,CE) RESET CS STATUS INTER ERROR INDICAT.
2450** TBTS (R4,CS) SET 'CYCLE STEAL STATUS' IN PROGRESS
2451** XIOCS MVA CSDCB,IODCB SET UP CONTROL BLOCK FOR SVC CALL
2452** MVWI X'000F',IOMOD SET CYCLE STEAL MODIFIER
2453** TBTR (R4,CS) IS CS IN PROGRESS; ERROR CONDITION
* YES, BYPASS SAVING I/O ADRES
2454** JON XIO2 * YES, BYPASS SAVING I/O ADRES
2455** XIO1 MVW R6,I\$TIO SAVE IAR FOR RETRY IF REQUESTED
2456** MVA DCBUP,R3 SET UP TO ADRES TO MOVE DCB TABLE
2457** MVW IODCB,R5 * AND THE FROM ADPS, ALONG WITH
2458** MVBI 16,R7 * THE NUMBER OF MOVES
2459** MVFN (R5),(R3) MOVE 1 STATUS WORD AND ADJUST
2460** MVBI 255,R3 CLEAR CYCLE STATUS BUFFER
2461** MVA CSBUP,P5 * TO ALL ONES *
2462** MVBI 16,R7 *
2463** FPN R3,(R5)
2464** MVWI X'0708',SIOIN OVERLAY OLD CONDITION CODES
2465** MVWZ \$ISB,P3 ZERO OUT OLD ISB VALUE
2466**
2467** TBTR (R4,EP) RESET ANY ERROR BEFORE I/O COMMAND
2468** XIO2 TBTR (R4,IN) CLEAR INTERRUPT RECEIVED CNTL BIT
2469** MVA IOBLK,R7 SET UP CONTROL BLOCK FOR SUPVR
2470** TBTR (R4,\$IE) RESET LEVEL ERROR INDICATOR
2471** TBTS (R4,XI) SET EXPECTED INTR CONTROL BIT
2472** SVC STABT CALL SUPVR FOR I/O COMMAND
2473**
2474** TBTR (R4,NI) IS AN INTR EXPECTED
2475** BN (R6,2) * NO, RETURN TO USER
2476**
2477** THE INTR SHOULD OCCUR WHILE SPINNING IN THE NEXT SECTION
2478**
2479** MVBI X'00',R5 SET UP WORK REG FOR 'LOST INTR'
2480** XIO8 TBTR (R4,IN) HAS INTERRUPT BEEN RECEIVED
2481** JON XIOCK * YES, CHECK IF ALL WAS SATISFACTORY
2482** SVC IDLE ALLOW ANOTHER PROGRAM A CHANCE TO UN
SUPVR WILL RETURN HERE
2483**
2484** AWI 1,R5 ADVANCE TIME OUT COUNT
2485** JNZ XIO8 BCH IF TIME OUT NOT PEACHED
2486** TBTS (R4,ER) SET ON ERROR CONTROL BIT
2487** B (R6,*) ERR 'NO INTERRUPT'
2488*****03FEB76**
2489**
2490**

LOC TR OBJECT TEXT STMT SOURCE STATEMENT COPYRIGHT IBM CORP 1976
2491** SUBROUTINE
2492**
2493** I/O EXECUTE ERROR HANDLING ROUTINE
2494**
2495** PURPOSE
2496**
2497** THIS ROUTINE WILL COLLECT INFORMATION TO HELP DETERMINE THE
2498** PROBLEM THAT WAS FOUND WHEN THE I/O COMMAND WAS ISSUED BY THE
2499** SUPERVISOR AND IT WAS NOT ACCEPTED.
2500**
2501** CALLING SEQUENCE
2502**
2503** SUPVR WILL ENTER WHEN AN ERROR OCCURS ON AN I/O COMMAND
2504**
2505** RETURN CONTROL
2506**
2507** B (R6)* RETURN TO USERS ERPOP HANDLEP
2508**
2509*****
2510**
2511** CC 0= DEVICE NOT ATTACHED
2512** FOR 1= DEVICE BUSY
2513** I/O 2= DEVICE BUSY AFTER RESET
2514** 3= COMMAND REJECT
2515** 4= INTERVENTION REQUIRED
2516** 5= INTERFACE DATA CHECK
2517** 6= CONTROLLER BUSY
2518** 7= I/O COMMAND EXCEPTED
2519**
2520** XIOER DC X'706E' COPY STATUS ANY LEVEL INTO R3
2521** SRL 13,R3 POSITION CC CODE TO BITS 13-15
2522** MVB R3,SIOIN * PUT IN LOG OUT AREA
2523** B (R6,*) RETURN TO USER ERROR HANDLER
2524*****14APR76**
2525**
2526** SUB-ROUTINE
2527**
2528** ERROR INTERRUPT RUNS ON INTERRUPT LEVEL '\$INTL'
2529**
2530** PURPOSE
2531**
2532** THIS ROUTINE WILL BE ENTERED WHEN THE SUPVR DETECTS AN ERROR
2533** OR THE INTERRUPTING CONDITION CODE DOES NOT AGREE WITH THE
2534** EXPECTED CODE.
2535**
2536** CALLING SEQUENCE
2537**
2538** SUPVR WILL ENTER WHEN AN ERROR OCCURS ON AN I/O INTERRUPT
2539**
2540** RETURN CONTROL
2541**
2542** SVC EXIT RETURN TO USER VIA SUPVR
2543**
2544**
2545*****
2546**
2547** CC 0= CONTROLLER END ISB 0= ADD STATUS
2548** FOR 1= PROGRAM CONTROL INTERRUPT BITS 1= COMD REJECT
2549** INTR 2= EXCEPTION INTERRUPT FOP 2= INCOR LENGTH
2550** 3= DEVICE END INTERRUPT INTP 3= DCP SPEC CK
2551** 4= ATTENTION INTERRUPT 4= STG DATA CK
2552** 5= ATTENTION / PROGRAM CNTL INTR 5= INV STG ADPS
2553** 6= ATTENTION / EXCEPTION INTR 6= PROTRCT CK
2554** 7= ATTENTION / DEVICE END INTR 7= I-FACE DATA
2555**
2556** INTER DC X'706E' COPY STATUS ANY LEVEL INTO P3
2557** SRL 13,R3 POSITION INDICATORS IN R3
2558** MVA OPIN1,R4 SET UP BASE ADRES
2559** TBTR (R4,CS) IS CS IN PROGRESS
2560** JOFF INTES * NO
2561** TBTS (R4,CE) TURN ON CYCLE STEAL INTER ERROR
2562** MVW R7,CSTL8 SAVE CS ERR ISB VALUE, BITS 0-7
2563** MVB R3,CSTL8+1 * AND THE COND CODE
2564** J INTR1
2565** INTES TBTR (R4,XE) TEST EXPECTED ATTEN / ERROR IND
2566** JOFF INTET BCH IF NOT EXPECTED
2567** CBI 4,R3 IS THIS AN 'ATTENTION' INTR
2568** JE INTR1 * YES, BCH TO END INTR SEQUENCE
2569** INTET TBTS (R4,ER) SET ERROR ON I/O COMMAND CNTL BIT
2570** J INTR1
2571**
2572** THE ERROR INTERRUPT USES THE SAME
2573** ENDING SEQUENCE AS THE NORMAL INTR
2574*****14APR76**
2575**
2576** SOUBROUTINE
2577**
2578** OKAY INTERRUPT RUNS ON INTERRUPT LEVEL '\$INTL'
2579**
2580** PURPOSE
2581**
2582** TO CHECK THE INTERRUPT AND CONTINUE THE TEST
2583**
2584** CALLING SEQUENCE
2585**
2586** SUPERVISOR WILL ENTER HERE IF INTR CC IS AS REQUESTED
2587** THE ERROR INTERRUPT HANDLER WILL BRANCH TO THIS ROUTINE
2588** AFTER THE SPECIAL PART HAS BEEN COMPLETED AND THE
2589** COMMON SECTION IS HANDLED HERE.
2590**
2591** RETURN CONTROL
2592**
2593** SVC EXIT RETURN TO USER VIA SUPVR
2594**
2595*****
2596** INTOK DC X'706E' COPY STATUS ANY LEVEL INTO P3
2597** SRL 13,R3 POSITION INDICATORS IN R3
2598** MVA OPIN1,R4 SET UP BASE ADRES
2599** INTR1 TBTS (R4,IN) SET INTERRUPT RECEIVED
2600** TBTR (R4,CS) IS 'CS IN PROGRESS' ON
2601** JON INTES * YES, BCH AROUND UPDATE
2602** MVB R3,\$SIOIN+1 SAVE INTERRUPTING CC CODE
2603** MVW R7,\$ISB SAVE INTR STATUS AND DEV ADRES
2604** INTR2 EQU *
2605** CPCL R5 CUPRENT LEVEL COPIED BY DCP
2606** SIL 4,R5 POSITION INTR LEVEL AND PUT

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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT      COPYRIGHT IBM CORP 1976
0035F0 0501          2607+ ABI 1,R5 * IN 'I' BIT IL
0035F2 CD24 3280      2608+ CW $INTL,R5 IS THIS THE CORRECT INTR LEVEL IL
0035F6 1002          2609+ JE INTR3 * YES, GO EXIT THIS LEVEL IL
0035F8 4C66          2610+ TBTS (R4,SLE) SET INTR LEVEL ERROR CONTROL BIT IL
0035FA 4C61          2611+ TBTS (R4,ER) SET ERROR ON I/O COMMAND CNTL BIT IL
0035FC 4CA2          2612+INTR3 TBTR (R4,XI) WAS INTERRUPT EXPECTED IL
0035FE 1204          2613+ JON INTRX * YES, EXIT OFF THIS INTR LEVEL IL
003600 4C60          2614+ TBTS (R4,HI) * NO, SET MYSTERY INTR CONTROL BIT IL
003602 F304          2615+ CBI 4,R3 ATTENTION INTERRUPT? IL
003604 1001          2616+ JE INTRX YES IL
003606 4C6C          2617+ TBTS (R4,NG) ERROR,UNEXPECTED INTERRUPT IL
003608 6006          2618+INTRX SVC EXIT EXIT THIS LEVEL VIA SUPVR TO PGM IL
2620+*****03FEB76**
2621+
2622+ THIS IS THE CONTINUATION OF EXECUTE I/O AFTER THE INTEPRUPT
2623+ HAS BEEN SEPVICED. THE EXERCISER FINDS AN INTERRUPT HAS BEEN
2624+ RECEIVED AND BRANCHES HERE TO CHECK FOR ANY ERROR CONDITIONS.
2625+
2626+
2627+XIOCK TBTR (R4,XE) WAS AN ERROR EXPECTED
2628+ BN (R6,2) * YES, EXIT THIS ROUTINE
2629+ TBTR (R4,CS) WAS AUTO CS IN PROGRESS
2630+ JOFF XIOCV * NO, CONTINUE CHECKING
2631+ TBT (R4,CE) IS CS IN AN EFR CONDITTON
2632+ JOFF XIOCO * NO, BCH
2633+ B (R6)* CS ERROR
2634+XIOCO TBTS (R4,CSA) TURN ON CS STATS AVAIL FLAG
2635+ BXS (R6,2) GO TO USER
2636+XIOCV TBT (R4,ER) WAS ERROR INTR CONTROL BIT ON
2637+ JOFF XIOCX * NO, EXIT THIS ROUTINE
2638+
2639+ MVB $IOIN+1,R5 GET LAST INTR CC CODE
2640+ CBI 2,R5 IS THIS CC=2
2641+ BNE (R6)* * NO, BCH TO ERROR HANDLER
2642+XIOCV MVB $ISB,R5 GET LAST ISB DATA BYTE AND IF CS
2643+ BN XIOCS-4 * AVAILABLE, GO AND GET IT
2644+ B (R6)* ERROR
2645+XIOCV MVWZ OPTN3,R3 CLEAR OUT OPTION 3 CNTL BITS
2646+ BXS (R6,2) RETURN TO USER VIA PEG 6
2647+
2648+ I/O PARAMETER LIST
2649+
2650+IOBLK DC A(DEVADD) ADRS OF DEVICE ADRS
2651+ DC A(XIOER) ERROR ROUTINE ADRS
2652+IODCB DC A(*-*) DCB ADRS OR LEVEL & INTR
2653+IOMOD DC A(*-*) MODIFTR
2654+ DC A(*-*) ADRS OF LAST SVC CALL
2655+IORSP DC A(*-*) SECOND WORD OF LAST IDCB
2656+
2657+ INTERRUPT CONTROL BLOCK FOR I/O COMMANDS
2658+
2659+INTEL DC A(DEVADD) ADRS OF DEVICE ADRS
2660+ DC A(INTRK) INTERRUPT OR RETURN ADRS
2661+ DC A(INTR) INTERRUPT ERROR ADRS
2662+INTCC DC X(0003) INTERRUPT CODE EXPECTED
2664+*****11MAY76**
2665+
2666+ SUBROUTINE
2667+
2668+ CONNECT INTERRUPT CONTROL BLOCK & PREPARE DEVICE
2669+
2670+ PURPOSE
2671+
2672+ TO CONNECT THE INTERRUPT CONTROL BLOCK TO THIS DEVICE AND
2673+ PREPARE ON THE DESIRED INTERRUPT LEVEL AND TO ALLOW THE DEVICE
2674+ TO INTERRUPT.
2675+
2676+ CALLING SEQUENCE
2677+
2678+ THIS SUBROUTINE HAS THE FOLLOWING ENTRIES:
2679+
2680+ --> BAL $CONC,R6 CLEAR DEV DEP STG AND CONNECT I/O BLK
2681+ --> BAL $CONP,R6 PREPARE DEVICE ONLY, ALREADY CONNECT
2682+
2683+ RETURN CONTROL
2684+
2685+ BXS (R6,2) RETURN TO USER VIA REG 6 IF OKAY
2686+ OR B (R6)* IF THE DEVICE COULD NOT BE CONNECTED
2687+
2688+*****
2689+$CONC MVBI 6,R7 NUMBER OF BYTE TO CLEAR
2690+ MVBI 0,R3 * AND THE DATA TO USE
2691+ MVA DEV1,R5 * ALONG WITH THE ADRS TO USE
2692+ FPN R3,(R5) *
2693+ MVWZ OPTN3,R3 CLEAR OLD CONTROLS FOR NEW ROUTINE
2694+ MVA INTEL,R7 SET R7 TO CONTROL BLOCK AND
2695+ SVC CTCB * CONNECT IT TO THIS DEVICE
2696+ BN (R6)* ERROR RETURN TO USER
2697+
2698+$CONP MVW $INTL,IODCB PUT IN LEVEL & INTR PARAMETER
2699+ MVA IOBLK,R7 SET R7 TO CONTROL BLOCK TO PREPARE
2700+ MVWI X'0708',SIOIN INITIALIZE CONDITION CODE STORAGE
2701+ MVWZ $ISB,R3 * AND CLEAR OLD ISB VALUE
2702+ MVW R6,LSTIO SET UP ADDRESS THAT STARTED LAST I/O
2703+ SVC PREP * AND CALL ON SUPVR
2704+ BXS (R6,2) RETURN TO USER
2705+*****06APR76**
2706+
2707+
2708+ SUBROUTINE
2709+
2710+ DISCONNECT THE INTERRUPT CONTROL BLOCK AND LOG ERRORS
2711+
2712+ PURPOSE
2713+
2714+ DISCONNECT THE INTERRUPT CONTROL BLOCK TO THIS DEVICE AND
2715+ SET THE 'NO GOOD' CONTROL BIT, THEN LOG THE DATA THAT HAS
2716+ BEEN FOUND TO HELP THE OPERATOR DEFINE THE ERROR CONDITION.
2717+
2718+ CALLING SEQUENCE
2719+
2720+ THIS SUBROUTINE HAS THE FOLLOWING ENTRIES:
2721+
2722+ --> B $ERRS SET 'NG' BIT AND CONVERT DATA TO LOG
2723+ --> B $CONX RETURN TO MDI SUPERVISOR TO TEST STS

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LOCTR OBJECT TEXT      STMT SOURCE STATEMENT      COPYRIGHT IBM CORP 1976
2724+ RETURN CONTROL
2725+
2726+
2727+ OR B TURTN* RETURN TO MDI
2728+ OR B (R6)* IF THE DEVICE COULD NOT BE CONNECTED
2729+*****
2730+*****
2731+$ERRS HVHI X'8000',TUSTATUS SET ON 'NO GOOD' STATUS BIT
2732+ MVA HEBLK,R7 GET ADRS OF CONTROL BLOCK
2733+ SVC HTOE CONVERT HEX TO EBC VIS DCP
2734+$PRNT MVBI 3,R5
2735+ MVA TOWORK,P3 SET UP BUFFER STORAGE
2736+ MVW R3,BUFP
2737+ MVA LINE1,R1
2738+ MVBI 4,R7
2739+ MVBI 8,R6
2740+MVBUF MVFN (R3),(R1)
2741+ MVBI 4,R7
2742+ MVBI X'40',R2
2743+ MVB R2,(R1)
2744+ JCT NVBUF,R6
2745+ MVBI 8,R6
2746+ AWI 44,R1
2747+ JCT MVBUF,R5
2748+ MVWI PIDMSG10,PID+2
2749+ MVA PAKETU,@DCADD1
2750+ MVA DC2PT,@DCADD2
2751+ OWI BIT0080,SUPSTAT
2752+ MVA $TUID,R3
2753+ BAL TUMSGWTR*,R7 SET UP BUFFER STORAGE
GO TO MESSAGE WRITER
2754+
2755+$CONX EQU *
2756+ MVB DEVADD,R7 GET DEVICE ADDRESS FROM MDI
2757+ SVC RIBC RELEASE INTERRUPT CONTROL BLOCK
2758+ B TURTN* RETURN TO MDI SUPERVISOR
2759+
2760+BEGIN DC A(0007) NUMBER OF LINES TO PRINT
2761+ DC A(0008) LINE LENGTH = 8 CHAP
2762+ DC C'*** ABORT'
2763+ DC A(0040)
2764+ DC C'TUID IOIN ISB INST LINE LENGTH = 40 CHAR
2765+ DC A(0040)
2766+LINE1 DC C'
2767+ DC A(0040) LINE LENGTH = 40 CHAR
2768+ DC C'CNTRL DCB2 DCB3 DCB4 DCB5 CHAD BYCT ADRS
2769+ DC A(0040) LINE LENGTH = 40 CHAR
2770+LINE2 DC C'
2771+ DC A(0040) LINE LENGTH = 40 CHAR
2772+ DC C'RSID CS-2 CS-3 CS-4 CS-5 CS-6 CS-7 CS-8
2773+ DC A(0040) LINE LENGTH = 40 CHAR
2774+LINE3 DC C'
2775+
2776+BUFPT DC A(*-*)
2777+DC2PT DC A(BEGIN)
2778+FIXTU DC X'0101'
2779+FAKETU DC X'0101'
2780+PIDMSG10 EQU X'F1F0'
2781+BIT0080 EQU X'0080'
2782+
2783+ DATA CONTROL BLOCK FOR CONVERTING HEX TO EBCDIC
2784+
2785+HEBLK DC A(48) NUMBER OF BYTES TO CONVERT
2786+ DC A($TUID) FROM ADRS
2787+ DC A(TOWORK) AND THE TO ADRS
2788+ END
003688 4020 1818 8000
00368E 4724 37F2
003692 601A
003694 0D03
003696 4324 181A
00369A 6B0D 37EA
00369E 4124 371A
0036A2 0F04
0036A4 0E08
0036A6 2B24
0036A8 0F04
0036AA 0A40
0036AC C258
0036AE BEFB
0036B0 0E08
0036B2 7921 002C
0036B6 BDF7
0036B8 4020 1802 F1F0
0036BA 4020 19B8 37F0
0036BC 4020 19BA 37EC
0036CA 402C 19C4 0080
0036D0 4324 324A
0036D4 6F13 18BA
0036E2 0007
0036E4 0008
0036E6 5C5C40C1C2D6D9E3
0036E8 0028
0036E9 E3E4C9C440C9D6C9D
003718 0028
00371A 4040404040404040
00371C 0028
00371E 4040404040404040
003720 0028
003722 4040404040404040
003724 0028
003726 4040404040404040
003728 0028
00372A D9E2C9C440C3E260F
00372C 0028
00372E 4040404040404040
0037EA 0000
0037EC 36E2
0037EE 0101
0037F0 0101
00F1F0
000080
0037F2 0030
0037F4 324A
0037F6 181A
000000

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
0	.R0.	ABSOLUTE. HEX VALUE(00000000) 2245 2246 2247 2248 2252 2253 2254 2255
0	.R1.	ABSOLUTE. HEX VALUE(00000001) 2737 2740 2743 2746
0	.R2.	ABSOLUTE. HEX VALUE(00000002) 2742 2743
0	.R3.	ABSOLUTE. HEX VALUE(00000003) 2193 2197 2199 2278 2280 2336 2339 2343 2346 2357 2360 2373 2376 2446 2456 2459 2460 2463 2465 2521 2522 2557 2563 2567 2597 2602 2615 2645 2690 2692 2693 2701 2735 2736 2740 2752
0	.R4.	ABSOLUTE. HEX VALUE(00000004) 2449 2450 2453 2467 2468 2470 2471 2474 2480 2486 2558 2559 2561 2565 2569 2598 2599 2600 2610 2611 2612 2614 2617 2627 2629 2631 2634 2636
0	.R5.	ABSOLUTE. HEX VALUE(00000005) 2194 2198 2199 2279 2280 2337 2339 2344 2346 2358 2360 2374 2376 2457 2459 2461 2463 2479 2484 2606 2607 2608 2639 2640 2642 2691 2692 2734 2747
0	.R6.	ABSOLUTE. HEX VALUE(00000006) 2200 2201 2240 2284 2455 2475 2487 2523 2628 2633 2635 2641 2644 2646 2696 2702 2704 2739 2744 2745
0	.R7.	ABSOLUTE. HEX VALUE(00000007) 1841 2160 2162 2165 2192 2196 2277 2338 2345 2359 2375 2458 2462 2469 2562 2603 2689 2694 2699 2732 2738 2741 2753 2756
2755	\$CONX	ADDRESS. HEX LOCATION(000036D8) IN CSECT(I7833) LENGTH(1) 2166
1830	\$INTL	ADDRESS. HEX LOCATION(00003280) IN CSECT(I7833) LENGTH(2) 2608 2698
1800	\$IOIN	ADDRESS. HEX LOCATION(0000324C) IN CSECT(I7833) LENGTH(2) 2464 2522 2602 2639 2700
1801	\$ISB	ADDRESS. HEX LOCATION(0000324E) IN CSECT(I7833) LENGTH(2) 2465 2603 2642 2701
1785	\$LE	ABSOLUTE. HEX VALUE(00000026) 2470 2610
1799	\$TUID	ADDRESS. HEX LOCATION(0000324A) IN CSECT(I7833) LENGTH(2) 1840 2752 2786
105	@DCADD1	ADDRESS. HEX LOCATION(000019B8) IN CSECT(I7833) LENGTH(1) 2749
106	@DCADD2	ADDRESS. HEX LOCATION(000019BA) IN CSECT(I7833) LENGTH(1) 2750
42	@FIXT	ABSOLUTE. HEX VALUE(00000101) 807 810 813 816 834 837 840 882 885 888 891 906 909 948 963 969 972 999 1026 1032 1035 1062 1080 1083 1086 1101 1107 1110 1176 1179 1182 1197 1200 1227 1230 1233 1278 1281 1290 1293 1296 1299 1302 1329 1335 1338 1341 1344 1371 1434 1440 1443 1449 1452 1470 1473 1479 1482 1497 1527 1530 1533
44	@GOTO	ABSOLUTE. HEX VALUE(00000200) 1005 1425 1539
41	@QUFS	ABSOLUTE. HEX VALUE(00000100) 804 831 879 966 1002 1029 1077 1104 1170 1173 1272 1275 1284 1287 1332 1422 1437 1446 1467 1476 1524 1536
47	@QUXX	ABSOLUTE. HEX VALUE(00000400) 1125
43	@STOP	ABSOLUTE. HEX VALUE(00000102) 1011 1431 1545
48	@TUXX	ABSOLUTE. HEX VALUE(00000500) 732 744 756 768 780 792 819 843 855 867 894 912 924 936 951 975 987 1014 1038 1050 1065 1089 1113 1134 1146 1158 1185 1203 1215 1236 1248 1260 1305 1317 1347 1359 1374 1386 1398 1410 1455 1485 1500 1512
2760	BEGIN	ADDRESS. HEX LOCATION(000036E2) IN CSECT(I7833) LENGTH(2) 2777
2781	BIT0080	ABSOLUTE. HEX VALUE(00000080) 2751
2776	BUFPT	ADDRESS. HEX LOCATION(000037EA) IN CSECT(I7833) LENGTH(2) 2736
2097	CB29	ADDRESS. HEX LOCATION(00003374) IN CSECT(I7833) LENGTH(2) 2243
1789	CE	ABSOLUTE. HEX VALUE(0000002A) 2449 2561 2631
1869	CICB	ABSOLUTE. HEX VALUE(00000014) 2695
1966	CLDCB	ADDRESS. HEX LOCATION(000032A2) IN CSECT(I7833) LENGTH(2) 2332
1787	CS	ABSOLUTE. HEX VALUE(00000028) 2450 2453 2559 2600 2629
1788	CSA	ABSOLUTE. HEX VALUE(00000029) 2634
1818	CSBUF	ADDRESS. HEX LOCATION(0000326A) IN CSECT(I7833) LENGTH(1) 2023 2461
2016	CSDCB	ADDRESS. HEX LOCATION(000032F2) IN CSECT(I7833) LENGTH(2) 2451
1826	CSTL8	ADDRESS. HEX LOCATION(00003278) IN CSECT(I7833) LENGTH(2) 2562 2563
1808	DCBUF	ADDRESS. HEX LOCATION(0000325A) IN CSECT(I7833) LENGTH(1) 2456
2777	DC2PT	ADDRESS. HEX LOCATION(000037EC) IN CSECT(I7833) LENGTH(2) 2750
108	DEVADD	ADDRESS. HEX LOCATION(000019D0) IN CSECT(I7833) LENGTH(1) 1833 2650 2659 2756
1803	DEV1	ADDRESS. HEX LOCATION(00003252) IN CSECT(I7833) LENGTH(2) 1807 2691
1954	DGDCB	ADDRESS. HEX LOCATION(00003292) IN CSECT(I7833) LENGTH(2) 2391
70	DUMMY	ABSOLUTE. HEX VALUE(00000000) 723 1547 1568
1548	ENTFT	ADDRESS. HEX LOCATION(00002C20) IN CSECT(I7833) LENGTH(1) 201
1780	ER	ABSOLUTE. HEX VALUE(00000021) 2467 2486 2569 2611 2636
1855	EXIT	ABSOLUTE. HEX VALUE(00000006) 2618

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
2779	FAKETU	ADDRESS. HEX LOCATION(000037F0) IN CSECT(I7833) LENGTH(2) 2749
2098	FIVE9	ADDRESS. HEX LOCATION(00003376) IN CSECT(I7833) LENGTH(2) 2250
1576	F00021	ADDRESS. HEX LOCATION(00002C32) IN CSECT(I7833) LENGTH(1) 808 814 817 835 841 892 907 964 970 1035 1063 1084 1108 1234 1282 1336 1441 1498
1584	F00023	ADDRESS. HEX LOCATION(00002C70) IN CSECT(I7833) LENGTH(1) 838 1087 1102 1111 1183 1201 1297 1330 1339 1342
1580	F00024	ADDRESS. HEX LOCATION(00002C4A) IN CSECT(I7833) LENGTH(1) 811 886 889 910 1027 1228 1300 1444 1474
1600	F00025	ADDRESS. HEX LOCATION(00002D1C) IN CSECT(I7833) LENGTH(1) 973 1231 1435 1471 1534
1624	F00026	ADDRESS. HEX LOCATION(00002DC8) IN CSECT(I7833) LENGTH(1) 1081 1528
1588	F00132	ADDRESS. HEX LOCATION(00002C96) IN CSECT(I7833) LENGTH(1) 883
1594	F00162	ADDRESS. HEX LOCATION(00002CD2) IN CSECT(I7833) LENGTH(1) 949
1604	F00186	ADDRESS. HEX LOCATION(00002D42) IN CSECT(I7833) LENGTH(1) 1000
1610	F00194	ADDRESS. HEX LOCATION(00002D7E) IN CSECT(I7833) LENGTH(1) 1006
1618	F00207	ADDRESS. HEX LOCATION(00002D92) IN CSECT(I7833) LENGTH(1) 1033
1628	F00279	ADDRESS. HEX LOCATION(00002DEE) IN CSECT(I7833) LENGTH(1) 1177
1634	F00283	ADDRESS. HEX LOCATION(00002F26) IN CSECT(I7833) LENGTH(1) 1180
1640	F00293	ADDRESS. HEX LOCATION(00002E5E) IN CSECT(I7833) LENGTH(1) 1195
1646	F00329	ADDRESS. HEX LOCATION(00002E9A) IN CSECT(I7833) LENGTH(1) 1279
1652	F00343	ADDRESS. HEX LOCATION(00002ED0) IN CSECT(I7833) LENGTH(1) 1291
1658	F00347	ADDRESS. HEX LOCATION(00002F06) IN CSECT(I7833) LENGTH(1) 1294
1666	F00359	ADDRESS. HEX LOCATION(00002F54) IN CSECT(I7833) LENGTH(1) 1303
1672	F00387	ADDRESS. HEX LOCATION(00002F90) IN CSECT(I7833) LENGTH(1) 1345
1680	F00395	ADDRESS. HEX LOCATION(00002FF0) IN CSECT(I7833) LENGTH(1) 1372
1688	F00411	ADDRESS. HEX LOCATION(00003046) IN CSECT(I7833) LENGTH(1) 1426
1696	F00434	ADDRESS. HEX LOCATION(0000305A) IN CSECT(I7833) LENGTH(1) 1450
1700	F00437	ADDRESS. HEX LOCATION(00003078) IN CSECT(I7833) LENGTH(1) 1453
1708	F00461	ADDRESS. HEX LOCATION(000030F6) IN CSECT(I7833) LENGTH(1) 1480
1720	F00469	ADDRESS. HEX LOCATION(0000319E) IN CSECT(I7833) LENGTH(1) 1483
1726	F00489	ADDRESS. HEX LOCATION(000031DA) IN CSECT(I7833) LENGTH(1) 1513
1734	F00501	ADDRESS. HEX LOCATION(00003230) IN CSECT(I7833) LENGTH(1) 1540
1692	F00503	ADDRESS. HEX LOCATION(0000304C) IN CSECT(I7833) LENGTH(1) 1432
1738	F00505	ADDRESS. HEX LOCATION(00003236) IN CSECT(I7833) LENGTH(1) 1546
1614	F00507	ADDRESS. HEX LOCATION(00002D84) IN CSECT(I7833) LENGTH(1) 1012
2785	HEBLF	ADDRESS. HEX LOCATION(000037F2) IN CSECT(I7833) LENGTH(2) 2732
1875	H7OE	ABSOLUTE. HEX VALUE(0000001A) 2733
1851	IDLE	ABSOLUTE. HEX VALUE(00000002) 2482
1782	TN	ABSOLUTE. HEX VALUE(00000023) 2468 2480 2599
2659	INTBL	ADDRESS. HEX LOCATION(0000364C) IN CSECT(I7833) LENGTH(2) 2694
2556	INTEP	ADDRESS. HEX LOCATION(000035B4) IN CSECT(I7833) LENGTH(2) 2661
2565	INTES	ADDRESS. HEX LOCATION(000035CC) IN CSECT(I7833) LENGTH(2) 2560
2569	INTET	ADDRESS. HEX LOCATION(000035D4) IN CSECT(I7833) LENGTH(2) 2566
2596	INTOK	ADDRESS. HEX LOCATION(000035D8) IN CSECT(I7833) LENGTH(2) 2660
66	INTENL	ABSOLUTE. HEX VALUE(00000000) 1009 1429 1543
2618	INTRX	ADDRESS. HEX LOCATION(00003608) IN CSECT(I7833) LENGTH(2) 2613 2616
2599	INTP1	ADDRESS. HEX LOCATION(000035F0) IN CSECT(I7833) LENGTH(2) 2564 2568 2570
2604	INTR2	ADDRESS. HEX LOCATION(000035EE) IN CSECT(I7833) LENGTH(1) 2601
2612	INTR3	ADDRESS. HEX LOCATION(000035FC) IN CSECT(I7833) LENGTH(2) 2609
2650	IOBLK	ADDRESS. HEX LOCATION(00003640) IN CSECT(I7833) LENGTH(2) 2162 2469 2699
2652	IODCB	ADDRESS. HEX LOCATION(00003644) IN CSECT(I7833) LENGTH(2) 2161 2329 2332 2335 2347 2350 2353 2356 2364 2368 2372 2380 2384 2387 2391 2451 2457 2698
2653	IOMOD	ADDRESS. HEX LOCATION(00003646) IN CSECT(I7833) LENGTH(2) 2446 2452
40	I7833	CSECT. START(00002500) LENGTH(4856) ESDID(0) 40
2095	LGSEC	ADDRESS. HEX LOCATION(00003370) IN CSECT(I7833) LENGTH(2) 2241 2243 2246 2253
2766	LINE1	ADDRESS. HEX LOCATION(0000371A) IN CSECT(I7833) LENGTH(40) 2737
1802	LSTIO	ADDRESS. HEX LOCATION(00003250) IN CSECT(I7833) LENGTH(2) 2455 2702
1779	MI	ABSOLUTE. HEX VALUE(00000020) 2614
2740	MVBUF	ADDRESS. HEX LOCATION(000036A6) IN CSECT(I7833) LENGTH(2) 2744 2747

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
1791	NG	ABSOLUTE. HEX VALUE(0000002C)
1786	NI	ABSOLUTE. HEX VALUE(00000027)
732	N00001	ADDRESS. HEX LOCATION(00002720) IN CSECT(I7833) LENGTH(2)
744	N00002	ADDRESS. HEX LOCATION(00002734) IN CSECT(I7833) LENGTH(2)
756	N00003	ADDRESS. HEX LOCATION(00002748) IN CSECT(I7833) LENGTH(2)
768	N00004	ADDRESS. HEX LOCATION(0000275C) IN CSECT(I7833) LENGTH(2)
780	N00005	ADDRESS. HEX LOCATION(00002770) IN CSECT(I7833) LENGTH(2)
792	N00006	ADDRESS. HEX LOCATION(00002784) IN CSECT(I7833) LENGTH(2)
804	N00007	ADDRESS. HEX LOCATION(00002798) IN CSECT(I7833) LENGTH(2)
807	N00008	ADDRESS. HEX LOCATION(0000279C) IN CSECT(I7833) LENGTH(2)
810	N00009	ADDRESS. HEX LOCATION(000027A0) IN CSECT(I7833) LENGTH(2)
813	N00010	ADDRESS. HEX LOCATION(000027A4) IN CSECT(I7833) LENGTH(2)
816	N00011	ADDRESS. HEX LOCATION(000027A8) IN CSECT(I7833) LENGTH(2)
819	N00012	ADDRESS. HEX LOCATION(000027AC) IN CSECT(I7833) LENGTH(2)
831	N00013	ADDRESS. HEX LOCATION(000027C0) IN CSECT(I7833) LENGTH(2)
834	N00014	ADDRESS. HEX LOCATION(000027C4) IN CSECT(I7833) LENGTH(2)
837	N00015	ADDRESS. HEX LOCATION(000027C8) IN CSECT(I7833) LENGTH(2)
840	N00016	ADDRESS. HEX LOCATION(000027CC) IN CSECT(I7833) LENGTH(2)
843	N00017	ADDRESS. HEX LOCATION(000027D0) IN CSECT(I7833) LENGTH(2)
855	N00018	ADDRESS. HEX LOCATION(000027E4) IN CSECT(I7833) LENGTH(2)
867	N00019	ADDRESS. HEX LOCATION(000027F8) IN CSECT(I7833) LENGTH(2)
879	N00020	ADDRESS. HEX LOCATION(0000280C) IN CSECT(I7833) LENGTH(2)
882	N00021	ADDRESS. HEX LOCATION(00002810) IN CSECT(I7833) LENGTH(2)
885	N00022	ADDRESS. HEX LOCATION(00002814) IN CSECT(I7833) LENGTH(2)
888	N00023	ADDRESS. HEX LOCATION(00002818) IN CSECT(I7833) LENGTH(2)
891	N00024	ADDRESS. HEX LOCATION(0000281C) IN CSECT(I7833) LENGTH(2)
894	N00025	ADDRESS. HEX LOCATION(00002820) IN CSECT(I7833) LENGTH(2)
906	N00026	ADDRESS. HEX LOCATION(00002834) IN CSECT(I7833) LENGTH(2)
909	N00027	ADDRESS. HEX LOCATION(00002838) IN CSECT(I7833) LENGTH(2)
912	N00028	ADDRESS. HEX LOCATION(0000283C) IN CSECT(I7833) LENGTH(2)
924	N00029	ADDRESS. HEX LOCATION(00002850) IN CSECT(I7833) LENGTH(2)
936	N00030	ADDRESS. HEX LOCATION(00002864) IN CSECT(I7833) LENGTH(2)
948	N00031	ADDRESS. HEX LOCATION(00002878) IN CSECT(I7833) LENGTH(2)
951	N00032	ADDRESS. HEX LOCATION(0000287C) IN CSECT(I7833) LENGTH(2)
963	N00033	ADDRESS. HEX LOCATION(00002890) IN CSECT(I7833) LENGTH(2)
966	N00034	ADDRESS. HEX LOCATION(00002894) IN CSECT(I7833) LENGTH(2)
969	N00035	ADDRESS. HEX LOCATION(00002898) IN CSECT(I7833) LENGTH(2)
972	N00036	ADDRESS. HEX LOCATION(0000289C) IN CSECT(I7833) LENGTH(2)
975	N00037	ADDRESS. HEX LOCATION(000028A0) IN CSECT(I7833) LENGTH(2)
987	N00038	ADDRESS. HEX LOCATION(000028B4) IN CSECT(I7833) LENGTH(2)
999	N00039	ADDRESS. HEX LOCATION(000028C8) IN CSECT(I7833) LENGTH(2)
1002	N00040	ADDRESS. HEX LOCATION(000028CC) IN CSECT(I7833) LENGTH(2)
1005	N00041	ADDRESS. HEX LOCATION(000028D0) IN CSECT(I7833) LENGTH(2)
1011	N00042	ADDRESS. HEX LOCATION(000028DC) IN CSECT(I7833) LENGTH(2)
1014	N00043	ADDRESS. HEX LOCATION(000028E0) IN CSECT(I7833) LENGTH(2)
1026	N00044	ADDRESS. HEX LOCATION(000028F4) IN CSECT(I7833) LENGTH(2)
1029	N00045	ADDRESS. HEX LOCATION(000028F8) IN CSECT(I7833) LENGTH(2)
1032	N00046	ADDRESS. HEX LOCATION(000028FC) IN CSECT(I7833) LENGTH(2)
1035	N00047	ADDRESS. HEX LOCATION(00002900) IN CSECT(I7833) LENGTH(2)
1038	N00048	ADDRESS. HEX LOCATION(00002904) IN CSECT(I7833) LENGTH(2)
1050	N00049	ADDRESS. HEX LOCATION(00002918) IN CSECT(I7833) LENGTH(2)
1062	N00050	ADDRESS. HEX LOCATION(0000292C) IN CSECT(I7833) LENGTH(2)
1065	N00051	ADDRESS. HEX LOCATION(00002930) IN CSECT(I7833) LENGTH(2)
1077	N00052	ADDRESS. HEX LOCATION(00002944) IN CSECT(I7833) LENGTH(2)
1080	N00053	ADDRESS. HEX LOCATION(00002948) IN CSECT(I7833) LENGTH(2)
1083	N00054	ADDRESS. HEX LOCATION(0000294C) IN CSECT(I7833) LENGTH(2)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
1086	N00055	ADDRESS. HEX LOCATION(00002950) IN CSECT(I7833) LENGTH(2)
1089	N00056	ADDRESS. HEX LOCATION(00002954) IN CSECT(I7833) LENGTH(2)
1101	N00057	ADDRESS. HEX LOCATION(00002968) IN CSECT(I7833) LENGTH(2)
1104	N00058	ADDRESS. HEX LOCATION(0000296C) IN CSECT(I7833) LENGTH(2)
1107	N00059	ADDRESS. HEX LOCATION(00002970) IN CSECT(I7833) LENGTH(2)
1110	N00060	ADDRESS. HEX LOCATION(00002974) IN CSECT(I7833) LENGTH(2)
1113	N00061	ADDRESS. HEX LOCATION(00002978) IN CSECT(I7833) LENGTH(2)
1125	N00062	ADDRESS. HEX LOCATION(0000298C) IN CSECT(I7833) LENGTH(2)
1134	N00063	ADDRESS. HEX LOCATION(0000299A) IN CSECT(I7833) LENGTH(2)
1146	N00064	ADDRESS. HEX LOCATION(000029AE) IN CSECT(I7833) LENGTH(2)
1158	N00065	ADDRESS. HEX LOCATION(000029C2) IN CSECT(I7833) LENGTH(2)
1170	N00066	ADDRESS. HEX LOCATION(000029D6) IN CSECT(I7833) LENGTH(2)
1173	N00067	ADDRESS. HEX LOCATION(000029DA) IN CSECT(I7833) LENGTH(2)
1176	N00068	ADDRESS. HEX LOCATION(000029DE) IN CSECT(I7833) LENGTH(2)
1179	N00069	ADDRESS. HEX LOCATION(000029E2) IN CSECT(I7833) LENGTH(2)
1182	N00070	ADDRESS. HEX LOCATION(000029E6) IN CSECT(I7833) LENGTH(2)
1185	N00071	ADDRESS. HEX LOCATION(000029EA) IN CSECT(I7833) LENGTH(2)
1197	N00072	ADDRESS. HEX LOCATION(000029FE) IN CSECT(I7833) LENGTH(2)
1200	N00073	ADDRESS. HEX LOCATION(00002A02) IN CSECT(I7833) LENGTH(2)
1203	N00074	ADDRESS. HEX LOCATION(00002A06) IN CSECT(I7833) LENGTH(2)
1215	N00075	ADDRESS. HEX LOCATION(00002A1A) IN CSECT(I7833) LENGTH(2)
1227	N00076	ADDRESS. HEX LOCATION(00002A2E) IN CSECT(I7833) LENGTH(2)
1230	N00077	ADDRESS. HEX LOCATION(00002A32) IN CSECT(I7833) LENGTH(2)
1233	N00078	ADDRESS. HEX LOCATION(00002A36) IN CSECT(I7833) LENGTH(2)
1236	N00079	ADDRESS. HEX LOCATION(00002A3A) IN CSECT(I7833) LENGTH(2)
1248	N00080	ADDRESS. HEX LOCATION(00002A4E) IN CSECT(I7833) LENGTH(2)
1260	N00081	ADDRESS. HEX LOCATION(00002A62) IN CSECT(I7833) LENGTH(2)
1272	N00082	ADDRESS. HEX LOCATION(00002A76) IN CSECT(I7833) LENGTH(2)
1275	N00083	ADDRESS. HEX LOCATION(00002A7A) IN CSECT(I7833) LENGTH(2)
1278	N00084	ADDRESS. HEX LOCATION(00002A7E) IN CSECT(I7833) LENGTH(2)
1281	N00085	ADDRESS. HEX LOCATION(00002A82) IN CSECT(I7833) LENGTH(2)
1284	N00086	ADDRESS. HEX LOCATION(00002A86) IN CSECT(I7833) LENGTH(2)
1287	N00087	ADDRESS. HEX LOCATION(00002A8A) IN CSECT(I7833) LENGTH(2)
1290	N00088	ADDRESS. HEX LOCATION(00002A8E) IN CSECT(I7833) LENGTH(2)
1293	N00089	ADDRESS. HEX LOCATION(00002A92) IN CSECT(I7833) LENGTH(2)
1296	N00090	ADDRESS. HEX LOCATION(00002A96) IN CSECT(I7833) LENGTH(2)
1299	N00091	ADDRESS. HEX LOCATION(00002A9A) IN CSECT(I7833) LENGTH(2)
1302	N00092	ADDRESS. HEX LOCATION(00002A9E) IN CSECT(I7833) LENGTH(2)
1305	N00093	ADDRESS. HEX LOCATION(00002AA2) IN CSECT(I7833) LENGTH(2)
1317	N00094	ADDRESS. HEX LOCATION(00002AB6) IN CSECT(I7833) LENGTH(2)
1329	N00095	ADDRESS. HEX LOCATION(00002ACA) IN CSECT(I7833) LENGTH(2)
1332	N00096	ADDRESS. HEX LOCATION(00002ACE) IN CSECT(I7833) LENGTH(2)
1335	N00097	ADDRESS. HEX LOCATION(00002AD2) IN CSECT(I7833) LENGTH(2)
1338	N00098	ADDRESS. HEX LOCATION(00002AD6) IN CSECT(I7833) LENGTH(2)
1341	N00099	ADDRESS. HEX LOCATION(00002ADA) IN CSECT(I7833) LENGTH(2)
1344	N00100	ADDRESS. HEX LOCATION(00002ADE) IN CSECT(I7833) LENGTH(2)
1347	N00101	ADDRESS. HEX LOCATION(00002AE2) IN CSECT(I7833) LENGTH(2)
1359	N00102	ADDRESS. HEX LOCATION(00002AF6) IN CSECT(I7833) LENGTH(2)
1371	N00103	ADDRESS. HEX LOCATION(00002B0A) IN CSECT(I7833) LENGTH(2)
1374	N00104	ADDRESS. HEX LOCATION(00002B0E) IN CSECT(I7833) LENGTH(2)
1386	N00105	ADDRESS. HEX LOCATION(00002B22) IN CSECT(I7833) LENGTH(2)
1398	N00106	ADDRESS. HEX LOCATION(00002B36) IN CSECT(I7833) LENGTH(2)
1410	N00107	ADDRESS. HEX LOCATION(00002B4A) IN CSECT(I7833) LENGTH(2)
1422	N00108	ADDRESS. HEX LOCATION(00002B5E) IN CSECT(I7833) LENGTH(2)
1425	N00109	ADDRESS. HEX LOCATION(00002B62) IN CSECT(I7833) LENGTH(2)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
1431	N00110	ADDRESS. HEX LOCATION (00002B6E) IN CSECT (I7833) LENGTH (2)
1434	N00111	ADDRESS. HEX LOCATION (00002B72) IN CSECT (I7833) LENGTH (2)
1437	N00112	ADDRESS. HEX LOCATION (00002B76) IN CSECT (I7833) LENGTH (2)
1440	N00113	ADDRESS. HEX LOCATION (00002B7A) IN CSECT (I7833) LENGTH (2)
1443	N00114	ADDRESS. HEX LOCATION (00002B7E) IN CSECT (I7833) LENGTH (2)
1446	N00115	ADDRESS. HEX LOCATION (00002B82) IN CSECT (I7833) LENGTH (2)
1449	N00116	ADDRESS. HEX LOCATION (00002B86) IN CSECT (I7833) LENGTH (2)
1452	N00117	ADDRESS. HEX LOCATION (00002B8A) IN CSECT (I7833) LENGTH (2)
1455	N00118	ADDRESS. HEX LOCATION (00002B8E) IN CSECT (I7833) LENGTH (2)
1467	N00119	ADDRESS. HEX LOCATION (00002BA2) IN CSECT (I7833) LENGTH (2)
1470	N00120	ADDRESS. HEX LOCATION (00002BA6) IN CSECT (I7833) LENGTH (2)
1473	N00121	ADDRESS. HEX LOCATION (00002BAA) IN CSECT (I7833) LENGTH (2)
1476	N00122	ADDRESS. HEX LOCATION (00002BAE) IN CSECT (I7833) LENGTH (2)
1479	N00123	ADDRESS. HEX LOCATION (00002BB2) IN CSECT (I7833) LENGTH (2)
1482	N00124	ADDRESS. HEX LOCATION (00002BB6) IN CSECT (I7833) LENGTH (2)
1485	N00125	ADDRESS. HEX LOCATION (00002BBA) IN CSECT (I7833) LENGTH (2)
1497	N00126	ADDRESS. HEX LOCATION (00002BCE) IN CSECT (I7833) LENGTH (2)
1500	N00127	ADDRESS. HEX LOCATION (00002BD2) IN CSECT (I7833) LENGTH (2)
1512	N00128	ADDRESS. HEX LOCATION (00002BE6) IN CSECT (I7833) LENGTH (2)
1524	N00129	ADDRESS. HEX LOCATION (00002BFA) IN CSECT (I7833) LENGTH (2)
1527	N00130	ADDRESS. HEX LOCATION (00002BFE) IN CSECT (I7833) LENGTH (2)
1530	N00131	ADDRESS. HEX LOCATION (00002C02) IN CSECT (I7833) LENGTH (2)
1533	N00132	ADDRESS. HEX LOCATION (00002C06) IN CSECT (I7833) LENGTH (2)
1536	N00133	ADDRESS. HEX LOCATION (00002C0A) IN CSECT (I7833) LENGTH (2)
1539	N00134	ADDRESS. HEX LOCATION (00002C0E) IN CSECT (I7833) LENGTH (2)
1545	N00135	ADDRESS. HEX LOCATION (00002C1A) IN CSECT (I7833) LENGTH (2)
60	ON	ABSOLUTE. HEX VALUE (00002000) 735 747 759 771 783 795 822 846 858 870 897 915 927 939 954 978 990 1017 1041 1053 1068 1092 1116 1137 1149 1161 1188 1206 1218 1239 1251 1263 1308 1320 1350 1362 1377 1389 1401 1413 1458 1488 1503 1515
1744	OPTN1	ADDRESS. HEX LOCATION (00003244) IN CSECT (I7833) LENGTH (2)
1767	OPTN3	ADDRESS. HEX LOCATION (00003248) IN CSECT (I7833) LENGTH (2)
104	PARMARA	ADDRESS. HEX LOCATION (0000196E) IN CSECT (I7833) LENGTH (1) 742 754 766 778 790 802 829 853 865 877 904 922 934 946 961 985 997 1024 1048 1060 1075 1099 1123 1132 1144 1156 1168 1195 1213 1225 1246 1258 1270 1315 1327 1357 1369 1384 1396 1408 1420 1465 1495 1510 1522
2096	PHYSC	ADDRESS. HEX LOCATION (00003372) IN CSECT (I7833) LENGTH (2)
72	PID	ADDRESS. HEX LOCATION (00001800) IN CSECT (I7833) LENGTH (1) 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 2748
2780	PIDMSG10	ABSOLUTE. HEX VALUE (0000F1F0)
1861	PREP	ABSOLUTE. HEX VALUE (0000000C)
2049	RDDCB	ADDRESS. HEX LOCATION (00003322) IN CSECT (I7833) LENGTH (2)
1868	RICB	ABSOLUTE. HEX VALUE (00000013)
2071	RKDCB	ADDRESS. HEX LOCATION (00003342) IN CSECT (I7833) LENGTH (2)
1981	RSDCB	ADDRESS. HEX LOCATION (000032C2) IN CSECT (I7833) LENGTH (2)
2252	RTT01	ADDRESS. HEX LOCATION (0000344E) IN CSECT (I7833) LENGTH (4)
1807	SCID	ADDRESS. HEX LOCATION (00003252) IN CSECT (I7833) LENGTH (2)
2106	SCST	ADDRESS. HEX LOCATION (00003386) IN CSECT (I7833) LENGTH (2)
2005	SKDCB	ADDRESS. HEX LOCATION (000032E2) IN CSECT (I7833) LENGTH (2)
1859	START	ABSOLUTE. HEX VALUE (0000000A)
107	SUPSTAT	ADDRESS. HEX LOCATION (000019C4) IN CSECT (I7833) LENGTH (1)
2250	TT303	ADDRESS. HEX LOCATION (00003446) IN CSECT (I7833) LENGTH (6)
2256	TT304	ADDRESS. HEX LOCATION (0000345E) IN CSECT (I7833) LENGTH (4)
2199	TT4Y	ADDRESS. HEX LOCATION (00003416) IN CSECT (I7833) LENGTH (2)
95	TMSGWTR	ADDRESS. HEX LOCATION (000018BA) IN CSECT (I7833) LENGTH (1)
1831	TURTN	ADDRESS. HEX LOCATION (00003282) IN CSECT (I7833) LENGTH (2)
77	TUSTATUS	ADDRESS. HEX LOCATION (00001818) IN CSECT (I7833) LENGTH (1)

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
78	TUWORK	ADDRESS. HEX LOCATION (0000181A) IN CSECT (I7833) LENGTH (1)
1840	T3C02	ADDRESS. HEX LOCATION (0000328A) IN CSECT (I7833) LENGTH (6) 734 746 758 770 782 794 821 845 857 869 896 918 926 938 953 977 989 1016 1040 1052 1067 1091 1115 1136 1148 1160 1187 1205 1217 1238 1250 1262 1307 1319 1349 1361 1376 1388 1400 1412 1457 1487 1502 1514
2165	T72A	ADDRESS. HEX LOCATION (000033F4) IN CSECT (I7833) LENGTH (4)
2166	T72B	ADDRESS. HEX LOCATION (000033F8) IN CSECT (I7833) LENGTH (4)
2160	T7872	ADDRESS. HEX LOCATION (000033E2) IN CSECT (I7833) LENGTH (4)
2038	VRDCB	ADDRESS. HEX LOCATION (00003312) IN CSECT (I7833) LENGTH (2)
2060	WKDCB	ADDRESS. HEX LOCATION (00003332) IN CSECT (I7833) LENGTH (2)
2027	WRDCB	ADDRESS. HEX LOCATION (00003302) IN CSECT (I7833) LENGTH (2)
2099	WRSID	ADDRESS. HEX LOCATION (00003378) IN CSECT (I7833) LENGTH (2)
1971	WSDCB	ADDRESS. HEX LOCATION (000032B2) IN CSECT (I7833) LENGTH (2)
2103	WSIDT	ADDRESS. HEX LOCATION (00003380) IN CSECT (I7833) LENGTH (2)
1783	XE	ABSOLUTE. HEX VALUE (00000024)
1781	XI	ABSOLUTE. HEX VALUE (00000022)
2446	XIO	ADDRESS. HEX LOCATION (00003542) IN CSECT (I7833) LENGTH (4) 2330 2333 2341 2348 2351 2354 2362 2366 2370 2378 2382 2386 2389 2392
2627	XIOCK	ADDRESS. HEX LOCATION (0000360A) IN CSECT (I7833) LENGTH (2)
2634	XIOCO	ADDRESS. HEX LOCATION (0000361C) IN CSECT (I7833) LENGTH (2)
2451	XIOCS	ADDRESS. HEX LOCATION (0000354C) IN CSECT (I7833) LENGTH (6)
2636	XIOCV	ADDRESS. HEX LOCATION (00003620) IN CSECT (I7833) LENGTH (2)
2645	XIOCX	ADDRESS. HEX LOCATION (0000363A) IN CSECT (I7833) LENGTH (4)
2520	XIOER	ADDRESS. HEX LOCATION (000035A8) IN CSECT (I7833) LENGTH (2)
2455	XIO1	ADDRESS. HEX LOCATION (0000355C) IN CSECT (I7833) LENGTH (4)
2468	XIO2	ADDRESS. HEX LOCATION (00003582) IN CSECT (I7833) LENGTH (2)
2480	XIO8	ADDRESS. HEX LOCATION (00003596) IN CSECT (I7833) LENGTH (2)
2081	ZERO0	ADDRESS. HEX LOCATION (00003352) IN CSECT (I7833) LENGTH (2)

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