

13/03/74/1704

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IDENT D161
DIMENSION JOBNR(6)
DIMENSION ISKIP(36), INSER(36)
DIMENSION ISPSC(8), ISCOL(3), IPRPA(37)
DIMENSION ITEXT(200)
DIMENSION ISTAT(6), DBH(64), DBV(64), ARG(4)
DIMENSION KOR1(53), KOR2(53), KLIN(16), KOL(16), KTK(16), KTH(16),
1 KTP(16), R0(11), IPARA(200)
DIMENSION RR(11), RV(11), RD(11)
DIMENSION INPT2(196), IOUTZ(12), INPRC(200)
DIMENSION IDEFT(37), IPCH(2)
DIMENSION ICR(2), ITYP1(8), ITYP2(5), ITYP3(3), ITYP4(3), ITYP5(3),
1 ITYP6(3), ITYP7(3), ITYP8(3), IZHIST(3),
2 ITYPC(1), ITYPE(1), ITYPL(1), ITYPP(1), ITYPS(1)
COMMON/FPCOH/RIULH, RKULV, JOBNR, IFOGR, IDAY, IHORT, IYEAR, RIRV,
1 REH, REV, REILH, REILV
COMMON/SPCOH/ISKIP, INSER, ISC, ISE, ISKSU, HOPT1, HOPT0, HOPT2
COMMON/P1COH/IPTA, ISCH, ISCV, IDEH, IDEV, ISSSI, ISPSC, ILIN, IOL, ISCR,
1 ISCL, ISCOL, ISTL, IPTG, IPOHD, IPOVD, IPOHT, IPOVT,
2 IHSP1, IHSP2, IHSP3, IHSP4, IHSPV,
3 IVSP1, IVSP2, IVSP3, IVSP4, IVSPV
COMMON/P2COH/SCH, SCV, SCX, SCY, DX, DY, HAXX, HAXY, ITEXT, R100,
1 IST32, IHOG, KORTX
COMMON/PDCOH/RSEG, KOUNT, KOUNP, ISTAT, ISURD, ISHIR, DBH, DBV, IBLOK,
1 IOR, IORV, IND, A1, A2, A3, A4, IREP, KAR, IREC
COMMON/HCCOH/RX0, RV0, RZ0, RU0, RL0, RV0, RB0, RP0, RC0, RS0, RT0, NXT0,
1 RL0G, KOR1, KOR2, KORU, KLIN, KOL, KTK, KTH, KTP
COMMON/HDCOH/RXH, RVH, RZH, RUH, RLH, RVH, RBH, RPH, RCH, RSH, RTH,
1 RXV, RVV, RZV, RUV, RLV, RVV, RBV, RPH, RSV, RTV,
2 RXD, RVD, RZD, RUD, RLD, RVD, RRD, RPD, RCD, RSD, RTD,
3 HATN, HASU, HATV, HASV
COMMON/IGCOH/INPT2, IIRP, JIR, INER, INSH, IOUTZ, ROUT, JOU
COMMON/KRCCOH/IPLUS, IDASH, ISLAS, ICONA, IBLSP, IF1, IF2, IF3, IF4, IE0
COMMON/KRCCOH/LRA, LRB, LRC, LRE, LRH, LRL, LRR, LRP, LRO, LRR, LRS, LRT,
1 LRU, LRV, LEZ, LRO, LRS
COMMON/DECOH/IDEFT
COMMON/LSCOH/XLS, YLS, ZLS, XREP, RREP, DXLS, DYZLS, LOLS, LOLS, LOLS, LSCFL
EQUIVALENCE (IPRPA(1), IPTA)
EQUIVALENCE (ARG(1), A1)
EQUIVALENCE (IPRPA(1), R0(1), RX0)
EQUIVALENCE (RR(1), RXH), (RV(1), RVV), (RD(1), RRD)
EQUIVALENCE (INPRC(1), INPT2(1))
DATA (ICR(1), I=1, 2)/2*#0000/
DATA ITYP1(1)/16NDIGIFOMN JOB NR /
DATA ITYP2(1)/10HSEGMENT /
DATA ITYP3(1)/6H)IRN /
DATA ITYP4(1)/6H)ULT /
DATA ITYP5(1)/6H)RPT /
DATA ITYP6(1)/6H)OUTP /
DATA ITYP7(1)/6H)REFT /
DATA ITYP8(1)/6H) ? /
DATA ITYPC(1)/2HC /
DATA ITYPE(1)/2HE /
DATA ITYPL(1)/2HLE /
DATA ITYPP(1)/2HP /
DATA ITYPS(1)/2HS0 /
DATA IFRBL/18 /
DATA IZHIST(1)/6H /
DATA REXEC/1 /

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DATA RP1PA/37/
C
C *** INITIALIZATION
C
C *** INIT OF ORDER NUMBER (JOBNR), SEGMENT NUMBER (NSEG) AND INVERSION
C CONSTANT (RINV)
C *** INIT. OF I/O ROUTINES
C
CALL INIO
IF (NEXEC.GT.1) GO TO 1
CALL RDFL(IPARR,1,0,INTER)
IF (INTER.NE.0) STOP TAPE
1 NEXEC = NEXEC+1
CALL TYPER(ICR,1,4)
2 CALL TYPER(ITYP1,1,16)
CALL INKY
CALL SKP(IBLSP)
DO 5 KT=1,6
CALL KONF(K,1)
IF (K.LT.0) GO TO 2
JOBNR(KT) = K
5 CONTINUE
RINV = 1.0
CALL SKP(IBLSP)
CALL GKR(KAR)
IF (KAR.EQ.IDASH) RINV=-RINV
NSEG = 1
CALL PUTIR(ITYP2,9,10,NSEG)
CALL TYPER(ICR,1,1)
CALL TYPER(ITYP2,1,10)
CALL TYPER(ICR,1,2)
C
C *** INIT OF FORM AND FILM DIMENSIONS (NFH,NFV,NFILH,NFILV)
C
10 CALL TYPER(ITYP3,1,5)
CALL INKY
CALL SKP(IBLSP)
CALL KONF(NFH,2)
CALL SKP(IDASH)
CALL KONF(NFV,2)
IF (MIN2(NFH,NFV).LE.0) GO TO 10
NFILH = NFH+4
NFILV = NFV+4
NFH = 100*NFH
NFV = 100*NFV
C
C *** INIT OF SCALING CONSTANTS (RMULH,RMULV)
C
20 CALL TYPER(ITYP4,1,5)
CALL INKY
CALL SKP(IBLSP)
IF (NIMP.GT.1) GO TO 21
RMULH = 1.0
RMULV = 1.0
GO TO 30
21 CALL KONV(K1)
CALL SKP(1SLAS)
CALL KONV(K2)
IF (MIN2(K1,K2).LE.0) GO TO 20

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RMULH = FLOAT(K1)/FLOAT(K2)
CALL SKP(IDASH)
CALL KONV(K1)
CALL SKP(ISLAS)
CALL KONV(K2)
IF (MIN2(K1,K2).LE.0) GO TO 20
RMULV = FLOAT(K1)/FLOAT(K2)
C
C *** INIT OF ERROR PROCESSING OPTION (NOPE)
C
30 CALL INIPA(ITYP7,NOPE,0,4,3)
C
C *** INIT OF INPUT OTION (NOPTI)
C
CALL INIPA(ITYP5,NOPTI,1,2,1)
C
C *** INIT OF OUTPUT OPTION (NOPTO) AND PUNCH LEADER TAPE
C
CALL INIPA(ITYP6,NOPTO,0,1,1)
IF (NOPTO.EQ.0) GO TO 50
CALL BLANK(96)
CALL PCHVG(JOBNR,6)
CALL BLANK(24)
IPCH(1) = NFILH/10
IPCH(2) = NFILH-IPCH(1)*10
CALL PCHVG(IPCH,2)
CALL BLANK(12)
IPCH(1) = NFILV/10
IPCH(2) = NFILV-IPCH(1)*10
CALL PCHVG(IPCH,2)
CALL BLANK(24)
CALL FIL1(1,-1)
CALL FIL1(2,-1)
CALL FIL1(1,-1)
ROUT = 3
CALL OUTP1
CALL BLANK(6)
C
C *** INIT OF MACHINE CONSTANTS, MACHINE DATA AND PROGRAM DATA
C
50 CALL RDEL(IPARA,1,1,INTER)
CALL NOVEN(N0,1,11,NN,1)
CALL NOVEN(N0,1,11,NV,1)
MATV = 0
MASV = 1
KOUNT = 0
CALL FILLI(ISTAT,1,6,0)
C
C *** INIT OF PRIMARY AND SECONDARY PROGRAM PARAMETERS
C
INIT OF A DUMMY STYLE NUMBER IN ITEXT (FOR P1P2)
C
CALL NOVEN(IDEFT,1,IP1PA,IPRPA,1)
ITEXT(1) = -1
IBLOK = 0
CALL P1P2S
CALL P1P2T
C
C *** INIT OF SKIP TABLE (SKIP) AND INSERT TABLE (INSER)
C *** AND SEGMENT PROGRAM DATA

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C
100  CALL INISI
110  KOUNP = 0
      ISNRD = 0
      ISNIR = 0
      IBLOK = 0
      IORV = 0
      IND = 3
C
C *** START OF NORMAL LOOP PROCESSING OF ORDERS
C
1000  KOUNT = KOUNT+1
      KOUNP = KOUNP+1
      IF (ISNRD.NE.0) GO TO 1270
      IF (ISKSN.NE.0) GO TO 1020
      IF (KOUNP.EQ.ISK)P(ISK)) GO TO 1025
      IF (KOUNP.EQ.INSERT(ISE)) GO TO 1015
      IF (NOPT1.EQ.2) GO TO 1010
      CALL INPP1
      IF (INER.NE.0) CALL RES(14)
      GO TO 1050
1010  IPCH(2) = #2020
      CALL PUTIN(IPCH,1,3,KOUNP)
      CALL TYPER(IPCH,1,4)
      CALL INKY
      INSIR = 0
      GO TO 1050
1015  CALL RES(57)
      CALL TYPER(ITYP8,1,2)
      CALL INKY
      KOUNT = KOUNT-1
      KOUNP = KOUNP-1
      INSIR = 1
      ISE = ISE+1
      GO TO 1050
1020  IF (KOUNP.LT.-ISK)P(ISK)) GO TO 1035
      ISK = ISK+1
      ISKSN = 0
      CALL RES(61)
      GO TO 1035
1025  ISK = ISK+1
      IF (ISKJP(ISK).LT.0) GO TO 1030
      CALL RES(56)
      GO TO 1035
1030  ISKSN = 1
      CALL RES(60)
1035  IF (NOPT1.EQ.2) GO TO 1040
      CALL INPP1
1040  INPTZ(1) = 256
      JIR = 1
1050  IF (ISNIR.NE.0) GO TO 1220
      CALL GKR(IOR)
      CALL INJIR
      IF (IOR.GT.1) GO TO 1060
      IF (IOR.EQ.1) IND=2
      GO TO 1000
1060  IREP = 0
      IF (IOR.NE.LRQ .AND. IOR.NE.LRR) GO TO 1070
      IF (IND.EQ.0) GO TO 1060

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IF (IND.EQ.3) GO TO 1065
IDIF = NOPTE-IND
IF (IDIF.LT.0) GO TO 1065
IF (IDIF.GT.1) GO TO 1068
C
CONDITIONAL REPEAT
CALL MES(19)
CALL TYPER(ITYP8,3,4)
CALL INSTPT
CALL GER(KAR)
CALL INGRES
CALL INJIN
IF (KAR.EQ.LRY) GO TO 1068
GO TO 1000
C
NO REPEAT
1065 CALL MES(18)
GO TO 1000
C
REPEAT
1068 IREP = IOR-LRP
IOR = IORV
1070 IORV = IOR
IF (IOR.EQ.LRA) GO TO 1100
IF (IOR.EQ.LRB) GO TO 1200
IF (IOR.EQ.LRC) GO TO 1300
IF (IOR.EQ.LRE) GO TO 1500
IF (IOR.EQ.LRH) GO TO 1800
IF (IOR.EQ.LRL) GO TO 2200
IF (IOR.EQ.LRP) GO TO 2600
IF (IOR.EQ.LRS) GO TO 2900
IF (IOR.EQ.LRT) GO TO 3000
IF (IOR.EQ.LRX) GO TO 3000
IF (IOR.EQ.LRZ) GO TO 3600
CALL MES(17)
IND = 3
GO TO 1000
C
C *** PROCESSING OF A ORDER
C
1100 CALL SKP(IBLSP)
DO 1102 KT=1,6
CALL KONF(K,1)
IF (K.RE.JOBNR(KT)) GO TO 1104
1102 CONTINUE
GO TO 1106
1104 CALL MES(51)
1106 IF (NSEG.RE.1) GO TO 1110
C
PROCESSING OF A ORDER
CT
NOT IMPLEMENTED
1110 IND = 3
GO TO 1000
C
C *** PROCESSING OF BS AND BE ORDER AND BLOCK REPEAT PROCESS
C
1200 CALL GER(KAR)
IF (KAR.EQ.LRS) GO TO 1205
IF (KAR.EQ.LRE) GO TO 1200
CALL MES(44)
IND = 3
GO TO 1000
C *** BS WRITE PASS

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1205 IF (ISURD. NE. 0) GO TO 1210
CALL MOVEH(IPRPA, 1, NP1PA, INPTZ, 2)
INPTZ(60) = KOUNT
INPTZ(61) = KOUNP
CALL WRFL (INPTZ, 1, IFRBL, INTER)
ISNR = 1
IREC = IFRBL+1
GO TO 1000
C *** BS READ PASS
1210 CALL MOVEH(INPTZ, 2, NP1PA+2, IPRPA, 1)
KOUNT = INPTZ(60)
KOUNP = INPTZ(61)
CALL P1P2S
CALL P1P2T
IND = 3
GO TO 1000
C *** ORDER WRITE SEQUENCE
1220 IF (IREC. GT. 255) STOP BLOK
CALL WRFL(INPTZ, 1, IREC, INTER)
IREC = IREC+1
CALL GKR(KAR)
IF (KAR. NE. LR2) GO TO 1225
CALL MES(45)
STOP ABNBE
1225 IF (KAR. NE. LRB) GO TO 1000
C *** BE WRITE PASS
DBH(1) = 0.0
DBV(1) = 0.0
IBLOK = 1
CALL IJWJN
CALL GKR(KAR)
IF (KAR. NE. LRE) GO TO 1260
CALL SKP(LRE)
CALL KONV(K1)
CALL SKP(ICONR)
CALL KONV(K2)
IF (MIN2(K1, K2). LT. 0) GO TO 1260
H0 = FLOAT(K1)*SCH
V0 = FLOAT(K2)*SCV
CALL SKP(ISLAS)
1230 JBLOK = IBLOK
1235 CALL KONV(K1)
CALL SKP(ICONR)
CALL KONV(K2)
IF (MIN2(K1, K2). LT. 0) GO TO 1260
HD = FLOAT(K1)*SCH-H0
VD = FLOAT(K2)*SCV-V0
CALL SKP(IBLSP)
CALL GKR(KAR)
IF (KAR. EQ. ISLAS .OR. KAR. EQ. IPLUS .OR. KAR. EQ. IE0) GO TO 1240
CALL SKP(ICONR)
CALL KONV(K1)
IF (K1. LE. 0) GO TO 1260
M = K1/10
CALL SKP(IBLSP)
CALL GKR(KAR)
GO TO 1245
1240 M = 1
1245 DO 1255 JI=1, M

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DO 1250 JB=1,JBLOK
IBLOK = IBLOK+1
IF (IBLOK.GT.64) GO TO 1262
DBH(IBLOK) = DBH(JB)+HD*FLOAT(IN)
DBV(IBLOK) = DBV(JB)+VD*FLOAT(IN)
1250 CONTINUE
1255 CONTINUE
CALL JHJH
CALL SKP(IBLSP)
IF (KAR.EQ.IPLUS) GO TO 1235
IF (KAR.EQ.ISLAS) GO TO 1230
GO TO 1265
1260 CALL NES(47)
GO TO 1265
1262 CALL NES(46)
1265 ISNR = 0
ISNRD = 1
IREC = IFRBL
GO TO 1000
C *** ORDER READ SEQUENCE
1270 CALL RDEL(INPTZ,1,IREC,ITER)
IREC = IREC+1
JIR = 1
KOUNT = KOUNT-INSIR
KOUNP = KOUNP-INSIR
GO TO 1050
C *** BE READ PASS
1280 IF (ISNRD.EQ.0) GO TO 1290
IBLOK = IBLOK-1
IF (IBLOK.EQ.0) GO TO 1205
IREC = IFRBL
GO TO 1000
1285 ISNRD = 0
IND = 3
GO TO 1000
1290 CALL NES(48)
IND = 3
GO TO 1000
C
C *** PROCESSING OF C AND CS ORDERS
C
1300 CALL GER(KAR)
IF (KAR.EQ.LRS) GO TO 1330
CALL SKP(IBLSP)
CALL KONF(ISCH,1)
IF (ISCH.LT.0) GO TO 1390
CALL SKP(IBLSP)
CALL KONF(ISCY,1)
IF (ISCY.LT.0) GO TO 1390
ISSN = 0
GO TO 1380
1330 IF (NINP.GT.3) GO TO 1340
ISSN = 0
GO TO 1380
1340 CALL JHJH
DO 1350 KT=1,4
CALL SKP(IBLSP)
CALL KONVCK)
IF (K.LT.0) GO TO 1390

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ISPSC(KT) = K
1350 CONTINUE
CALL SKP(IDASH)
DO 1360 KT=5,8
CALL SKP(IBLSP)
CALL KONV(K)
IF (K.LT.0) GO TO 1390
ISPSC(KT) = K
1360 CONTINUE
DO 1370 KT=1,4
KT2 = KT*2
IF (ISPSC(KT2).LE.ISPSC(KT2-1)) GO TO 1390
1370 CONTINUE
ISSN = 1
1380 CALL P1P2S
IND = 3
GO TO 1000
1390 CALL MESIN(13,ITYPE,1)
GO TO 1300
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C

C \*\*\* PROCESSING OF E ORDER

C

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1500 IF (NINP.LE.2) GO TO 1530
CALL SKP(IPLUS)
ISG = 1
CALL GKR(KAR)
IF (KAR.NE.IDASH) GO TO 1515
ISG = -1
CALL SKP(IDASH)
1515 CALL KONF(K,4)
IF (K.LT.0) GO TO 1590
IDEH = ISG*K
CALL SKP(ICOMR)
CALL SKP(IPLUS)
ISG = 1
CALL GKR(KAR)
IF (KAR.NE.IDASH) GO TO 1520
ISG = -1
CALL SKP(IDASH)
1520 CALL KONF(K,4)
IF (K.LT.0) GO TO 1590
IDEV = ISG*K
GO TO 1550
1530 IDEH = 0
IDEV = 0
1550 CALL P1P2S
IND = 3
GO TO 1000
1590 CALL MESIN(13,ITYPE,1)
GO TO 1500
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C

C \*\*\* PROCESSING OF H ORDER

C

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1800 IF (IREP.NE.0) GO TO 1890
CALL SKP(IBLSP)
CALL GTARG(4,IERAR)
IF (IERAR.NE.0) GO TO 1890
CALL KONV(NREP)
IF (NREP.LE.0) GO TO 1890
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NREP = NREP/10
XLS = A1
YLS = A3
ZLS = A4
DXLS = (A2-A1)/FLOAT(NREP)
DYZLS = 0.0
NUN = 100
NLN = KLIN(IJLIN+1)
LOLST = KOL(IOL+1)
LSCFL = 1
XREP=0.
CALL SKP(1BLSP)
CALL GKR(KAR)
IF (KAR.EQ.1PLUS) GO TO 1810
NREP = NREP-1
XLS = XLS+DXLS
GO TO 4000
1810 NREP = NREP+1
GO TO 4000
1890 CALL MES(16)
IND = 3
GO TO 1000
C
C *** PROCESSING OF L ORDER
C
2200 CALL SKP(1BLSP)
CALL GKR(KAR)
IF (KAR.EQ.1F2) GO TO 2250
C
LF2 = 1 FOR LOCAL USE OF F2
LF2 = 1
IF (IREP.NE.0) GO TO 2210
CALL GTARG(3,IERAR)
IF (IERAR.NE.0) GO TO 2290
2205 XREP = A1
XLS = A1
YLS = A2
ZLS = A3
NUN = 100
NREP = 0
2206 CALL GKR(KAR)
IF (KAR.EQ.1F2) GO TO 2251
ILINL = ILIN
IOLL = IOL
2208 NLN = KLIN(ILINL+1)
LOLSL = KOL(IOLL+1)
LOLSR = LOLSL
LSCFL = 1
GO TO 4000
2210 CALL GTARG(1,IERAR)
IF (IERAR.NE.0) GO TO 2290
IF (IREP.EQ.2) GO TO 2215
DXLS = 0.0
DYZLS = A1-YLS
GO TO 2220
2215 DXLS = A1-XREP
DYZLS = 0.0
2220 CALL GKR(KAR)
IF (INVAL(LRB,KAR,LR9).NE.0) GO TO 2225
CALL KQNY(NREP)

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      IF (NREP. LE. 0) GO TO 2290
      NREP = NREP/10
      GO TO 2230
2225  NREP = 1
2230  IF (IOR. EQ. LRS) GO TO 4000
      CALL SKP( IBLSP )
      GO TO 2206
2250  LF2 = 0
2251  CALL SKP( IF2 )
      CALL KONH( ILINL )
      IF ( ILINL. LT. 0 ) GO TO 2260
      CALL SKP( IBLSP )
      CALL GKR( KAR )
      IF ( KAR. EQ. IE0 ) GO TO 2256
      CALL KONH( IOLL )
      GO TO 2258
2256  IOLL = 0
2258  IF ( IOLL. LT. 0 ) GO TO 2260
      IF ( LF2. EQ. 1 ) GO TO 2208
      ILIN = ILINL
      IOL = IOLL
      IND = 3
      GO TO 1000
2260  IF ( LF2. EQ. 1 ) GO TO 2265
      CALL MESIN( 13, ITYPL, 2 )
      GO TO 2250
2265  CALL MES( 15 )
      IND = 1
      GO TO 1000
2290  CALL MES( 16 )
      IND = 2
      GO TO 1000
C
C *** PROCESSING OF P ORDER
C
2600  CALL SKP( IBLSP )
      CALL KONF( IPTA, 1 )
      IF ( INVAL( 1, IPTA, 4 ) .NE. 0 ) GO TO 2690
      CALL P1P2S
      IND = 1
      GO TO 1000
2690  CALL MESIN( 13, ITYPP, 1 )
      GO TO 2600
C
C *** PROCESSING OF S ORDER
C
2900  CALL SKP( IBLSP )
      CALL GKR( KAR )
      IF ( KAR. EQ. IF2 ) GO TO 2950
      IF ( IREP. NE. 0 ) GO TO 2910
      CALL GTARG( 4, IERAR )
      IF ( IERAR. NE. 0 ) GO TO 2990
      XREP = A2
      XLS = (A1+A2)*0.5
      YLS = A3
      ZLS = A4
      NUN = JNTAS( (A2-A1)*SCX*FLOAT( KORU ) * 0.0001 ) - 2 * ISCOL( 3 )
      NLN = MAX2( NLV, 5300 + NUN )
      LOLSL = - ISCOL( 1 )

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LOLSR = -ISCOL(2)
LSCFL = ISCFI+6
NREP = 0
C CHANGE OF SCREEN MATRIX IF NECESSARY
IF (MASK.NE.MASY) CALL VERY
GO TO 4000
C THE REPEAT PROCEDURE FOR S IS IDENTICAL TO THE REPEAT
C PROCEDURE FOR L BY PROPER DEFINITION OF NREP
2910 GO TO 2210
2950 CALL SKP(IF2)
CALL KONH(ISCR)
IF (ISCR.LT.0) GO TO 2960
CALL SKP(1BLSP)
CALL KONH(ISCFI)
IF (ISCFI.LT.0) GO TO 2960
CALL SKP(1BLSP)
CALL GKR(KAR)
IF (KAR.EQ.1E0) GO TO 2956
DO 2955 KT=1,3
CALL KONH(ISCOL(KT))
CALL SKP(1BLSP)
IF (ISCOL(KT).LT.0) GO TO 2960
2955 CONTINUE
GO TO 2958
2956 CALL FILLH(ISCOL,1,3,0)
2958 CALL P1P2T
IND = 3
GO TO 1000
2960 CALL RESIN(13,1TYP5,2)
GO TO 2950
2990 CALL RES(16)
IND = 2
GO TO 1000
C
C *** T AND U PROCESSING
C
3000 CALL TEXT
GO TO 1000
C
C *** PROCESSING OF 2 ORDER
C
3600 NSEG = NSEG+1
CALL RES(99)
CALL PUTIR(ITYP2,9,10,NSEG)
CALL TYPER(1CR,1,1)
CALL TYPER(ITYP2,1,10)
CALL TYPER(1CR,1,2)
CALL INIPA(ITYP5,NOPT1,0,2,1)
IF (NOPT1.EQ.0) GO TO 3640
IF (NOPT0.EQ.0) GO TO 100
CALL INIPA(ITYP6,NOPT0,0,1,1)
IF (NOPT0.EQ.1) GO TO 100
GO TO 3660
3640 IF (NOPT0.EQ.0) GO TO 3600
C *** SEND MACHINE BACK HOME
3660 CALL HOVER(0,1,11,RR,1)
CALL FIL1(5,-1)
DO 3665 KT=1,8
ND(KT) = RR(KT)-RV(KT)

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CALL FIL2(NDK(KT),-1)
3665 CONTINUE
      NKD = IDISK(NKV,KNR)
CT    TEMPORARY
      NSD = NSH-NSV
      CALL CANTD
      CALL FIL1(NKD,-1)
      CALL FIL1(NSD,-1)
      CALL FIL1(NTD,-1)
      NOUT = JOU-1
      CALL OUTP1
      CALL BLANK(96)
3670 CONTINUE
      CALL OUTBF
      IF (NOPT1.NE.0) GO TO 100
C
C *** PROCESSING OF ISTAT
C
3680 DO 3685 I=1,5
      CALL PUTIN (IZHIST,1,4,ISTAT(I))
3685 CALL TYPER(IZHIST,1,6)
      CALL TYPER(ICR,1,2)
      STOP NORII
C
C *** LINE AND SCREEN SET PROCESS - SEE SUBROUTINE LINSO
C
4000 CALL LINSO
      GO TO 1000
      END
F/MESSAGE 7F00
```