reads one basic symbol of the algol-text from papertape, magnetic tape or drum, prints it, if listing wanted, assembles := into "becomes" skips spaces and "carriage returns". and some more tasks

```
                                                                        " 7.0
                                                                        " HSYM - 0
HSYM(179)
        A = 4
        S = 7
        SE18
        S = 23
        SE1
    U,  A = HVERDERLEZEN, P
    N,  S = HVOORSYM
    Y,  SUBC(:MT[122])                  " S := G := SYM
    U,  S + 1, P                        " SYM ≥ 0?
    Y,  JUMP(8)
        HVERDERLEZEN = B
    U,  A = HBANDCORRECT, P
    N,  JUMP(133)
        HFOUT = S
        B + 2
        S = 9
        SE73
        HBOODSCHAP
    U,  A = HTEXTGEWENST, P
    N,  JUMP(2)
    U,  A = HVERDERLEZEN, P
    Y,  SUBC(:MT[99])                   " PRSYM(S)
    U,  S - 118, Z                      " PROGEND?
    N,  JUMP(6)
        S = MT[4]
        GL0 = S
        S = MD[3]
        GL1 = S
        SE34
        HPROGEND
        HVERDERLEZEN = B
    U,  S - 119, Z                      " NLCR?
    N,  JUMP(47)

                                                                        " 7.0
                                                                        " HSYM - 1
        SUBC(:MT[96])                   " S := G := SYM
        HVOORSYM = S
        S - 119, Z
    N,  JUMP(3)
        S = HTEXTGEWENST, P
    Y,  SUBC(:MT[83])                   " PRSYM(HVOORSYM)
        JUMP(- 7)
        S = 1
        HREGELNR + S
        S = 0
        HRANGNR = S
        HREGELLEEG = B
        S = - HSTRINGLEZEN, P
    Y,  S = - HERRORFOUND, P
    N,  JUMP(15)
        G = - HWIJZER, P
        E + 2, E
    N,  JUMP(4)                         " DAN MOET WIJZER = 0 ZIJN GEWEEST
        S = :HTEXTPASS2, Z
        SUBC(MS)
        SE39
```

```
59          F + 7799, Z                         " WAS ER HET LAATST EEN NLCR IN TEXTPASS2 GESTOPT ?
60      N,  S = 2
61      N,  HWIJZER + S
62      N,  S = - 7799
63      N,  F = 2
64      N,  SUBC(:MT:521)                       " TEXTPASS2[WIJZER - G] := S
65          F = 1
66          S = HREGELNR
67          SUBC(:MT:491)                       " TEXTPASS2[WIJZER - G] := S
68          S = HTEXTGEWENST, R
69      N,  JUMR(13)
70          B + 2
71          SE76
72          + 0
73          + 4
74          SE76
75          + 0
76          + 0
77          S = :HREGELNR
78                                                                  " 7.0
79                                                                  " HSYM - 2
80          SE78
81          S = 21
82          SE73
83          CABSEIXT
84          SUBC(:MT:441)                       " RRSYM(HVOORSYM)
85          HVERDERLEZEN = - B
86          JUMR( - 75)
87      U,  S - 93, Z                           " SPATIE?
88      N,  JUMR(3)
89          S = - HSTRINGLEZEN, R
90      Y,  JUMR( - 77)
91          S = 129                             " STRINGSPATIE
92          HREGELLEEG = - B
93          G = S
94      U,  S = HSTRINGLEZEN, R
95      Y,  JUMR(4)
96      U,  S - 123, Z
97      Y,  F = 63                              " REPRESENTATION FOR MIDDE
98      U,  S - 124, Z                          " LIBRARY ?
99      Y,  F = 93
100     U,  S - 62, R                           " GEEN LETTER OF DIGIT ?
101     Y,  S = - HDRUM, R
102     Y,  S = 1
103     Y,  HRANGNR + S
104         S = G
105         S - 90, Z
106     Y,  S = - HSTRINGLEZEN, R
107     N,  JUMR(45)
108         SUBC(:MT:281)                       " S := G := SYM
109         HVOORSYM = S
110     U,  S = HTEXTGEWENST, R
111     Y,  SUBC(:MT:171)                       " RRSYM(HVOORSYM)
112     U,  S - 93, Z                           " SPATIE?
113     Y,  JUMR(- 6)
114     U,  S - 70, Z                           " EQUAL?
115     Y,  F = 344
116                                                                 " 7.0
```

```
117                                                                    " HSYM - 3
118     N,  E = 90
119     N,  HVERDERLEZEN = - B
120         JUMP(34)
121         MC = S                                  " TEXTPASS2[WIJZER - G] := S
122         G - HWIJZER
123         S = :HTEXTPASS2, Z
124         SUBC(MS)
125         SE38
126         G = M[B - 3]
127         DO(MC[ - 1])
128         B - 1
129         GOTOR(MC[- 1])
130         HVOORSYM = S                            " RRSYM(S)
131         B + 2                                   " RRSYM(HVOORSYM)
132         S = :HVOORSYM
133         SE78
134         S = 13
135         SE73
136         CRRSYM
137         G = HVOORSYM
138         JUMP(22)
139         S = 15                                  " SUBROUTINE S := G := SYM
140         GBILL + S, R
141         SE115
142         S = HDRUM, R
143     Y,  JUMP(5)
144     U,  S = HLEZENVANTAPE, R
145     Y,  JUMP(28)
146         CHEEN
147         SYM
148         JUMP(11)
149         E = :HSTRINGVARIABLE
150         SUBCD(:UDNSS)
151         S = A
152         DO(MD[- 1])
153     U,  S - 510, Z                              " EINDE STRING ?
154         JUMP(4)
155         S = 17
156         GBILL + S, R
157         SE115
158         SE71
159     Y,  JUMP(9)
160         G = S
161         S = MC[- 1]
162         S '*' - HRAG
163         MC = S
164         S = :MT[0]
165         S '*' HRAG
166         M[B - 1] + S
167         S = G
168         GOTOR(MC[- 1])
169         CHEEN
170         CDUMEND
171     N,  JUMP( - 11)
172         SUBC(:MT[ - 52])                        " TEXTPASS2[WIJZER - G] := S
173         JUMP( - 32)
174         G = JCURUNIT
175     U,  S = MG[17], R                           " NEXTEL ?
176     Y,  JUMP(3)
```

```
177          CHEEN
178          CNEXTGROUP
179          JUMP( - 36)
180          SUBC(:CFASTREAD)
181          S = G
182     U,   S - 118, Z                    " PROGEND ?
183     N,   S - 123, Z
184     N,   S - 1, Z                      " OF MIARE OF LIBRARY ?
185     N,   JUMP( - 25)
186          SE33
187          CBOODSCHARO

188                                                                  " 7.1
189                                                                  " HIDPRINT - 0
190 HIDPRINT(63)   prints an identifier
191          A = 2                         " IN ALGOLBLOCK
192          S = 6
193          SE18                          " TELLER, WOORD, SYMBOL,
194          S = 8                         " M3[2], M3[3], M3[4],
195          SE0
196          S = 16
197          SE1
198          DOS(M2[- 11])
199          DO(ERV)
200          M2[- 11] = G
201          F = - F
202          S = :HCL, Z
203          SUBC(MS)
204          SE39
205          MA[2] = G
206          F = - 1
207          G - M2[- 11]
208          S = :HCL, Z
209          SUBC(MS)
210          SE39
211          M2[- 11] = G
212          G = - MA[2]
213          S = :HIL, Z
214          SUBC(MS)
215          SE39
216          MA[3] = - G, F                " CONDITIE OP N ZETTEN
217          S = G
218          RUS(18)
219          SUBC(:MT[19])
220          RUS(12)
221          S '*' 63
222          SUBC(:MT[14])

223                                                                  " 7.1
224                                                                  " HIDPRINT - 1
225     N,   RUS(6)
226     N,   S '*' 63
227     N,   SUBC(:MT[11])
228     N,   S '*' 63
229     N,   SUBC(:MT[9])
230          S = 1
231          PLUSS(MA[2])
232          S - M2[- 11], Z
233     N,   JUMP(- 20)
234          SE6
```

```
235          $ = 55
236          GBILL + S, P
237          $E115
238          $E71
239      U,  $ - 63, Z                    " SUBROUTINE
240      Y,  GOTO(MC[- 1])
241          MA[4] = S
242          B + 2
243          $ = :MA[4]
244          $E78
245          $ = 13
246          $E73
247          CRRSYM
248          $ = MC[- 1]
249          $ '*' - HRAG
250          MC = $
251          $ = T
252          $ '*' HRAG
253          M[B - 1] + $
254          $ = - MA[3]
255          GOTOR(MC[- 1])              " EINDE SUBROUTINE

256                                                              " 7.2
257                                                              " HBOODSCHAR - 0
258 HBOODSCHAR(337)   sending out of error messages
259          A = 4
260          $ = 8
261          $E18                        " CREATE DISPLAY
262          $ = 24                      " ANON RUIMTE
263          $E1
264          $ = ULRSTREAMS
265          $ = MS
266          $ = MS[12]
267          MC = $                      " RED DE REGELPOSITIE VAN DE PRINTER
268          G = MT[127]                 " INVARIANT ADRES STRING REGELNUMMER
269          SUBC(:MT[92])               " PRINTTEXT
270          $ = HREGELDEL
271          SUBC(:MT[96])               " ABSFIXT
272          G = MT[124]                 " INVARIANT ADRES STRING DELIMITER
273          SUBC(:MT[88])               " PRINTTEXT
274          $ = HNEXTDEL
275      U,  $ = HPASS, Z
276      N,  $ = - $
277      N,  JUMP(302)
278      U,  $ - 93, Z                   " LIBRARY ?
279      Y,  $ = 124
280      U,  $ - 88, Z                   " IS NEXTDEL = BECOMES?
281      Y,  $ = 90                      " COLON
282      Y,  SUBC(:MT[99])               " PRSYM
283      Y,  $ = 70                      " EQUAL
284      U,  $ - 343, P                  " IS NEXTDEL = .. OF '?
285      Y,  $ - 256
286          SUBC(:MT[95])               " PRSYM
287          G = MT[110]                 " INV. ADR. STRING RANGNUMMER
288          SUBC(:MT[73])               " PRINTTEXT
289          $ = HRANGDEL, P
290      Y,  SUBC(:MT[77])               " ABSFIXT

291                                                              " 7.2
292                                                              " HBOODSCHAR - 1
```

```
293          $ = HPOSID
294          $ + 1, P                          " POSID > - 1?
295      N,  JUMP(13)
296          G = MT[104]                       " INV. ADR. PARITIE IDENTIFIER
297          SUBC(:MT 66])                     " PRINTTEXT
298          B + 2
299          $ = :HPOSID
300          $E78
301          $ = 13
302          $E73
303          HIDPRINT
304          G = MT[97]       " INV. ADDRESS STRING RELATIEF REGELNR
305          SUBC(:MT[58])                     " PRINTTEXT
306          $ = HREGELDEL
307          $ - HREGPOSID
308          SUBC(:MT[61])                     " ABSFIXT
309          $ = HCIN
310          $ + 1, P                          " CIN > - 1?
311      N,  JUMP(8)
312          G = MT[90]                        " INV. ADR. STRING LAATSTE IDENTIFIER
313          SUBC(:MT[50])                     " PRINTTEXT
314          $ = :HCIN
315          B + 2
316          $E78
317          $ = 13
318          $E73
319          HIDPRINT
320          $ = HFOUT
321      U,  $ + 1, Z
322      Y,  $ = 20
323      U,  $ + 2, Z
324      Y,  $ = 45

325                                                                  " 7.2
326                                                                  " HBOODSCHAR - 2
327          HFOUT = $, P
328      N,  $ = - $
329          $ + :MT[115]                      " $ + BASISADRES RIJTJE INV. ADR.
330          G = M$
331          SUBC(:MT[34])                     " PRINTTEXT
332          $ = HFOUT
333          $ + 89, Z
334      N,  JUMP(11)
335          $ = 119
336          SUBC(:MT[49])                     " PRSYM
337          $ = MC[- 1]                       " REGELPOSITIE VAN DE REGELDRUKKER
338          HTELLER = $
339          B + 2
340          $ = :HTELLER
341          $E78
342          $ = 13
343          $E73
344          CSPACE
345          JUMP(246)
346          $ = HPASS, Z
347      Y,  HTEXTGEWENST = - B
348          HERRORFOUND = B
349          JUMP(242)
350      Y,  HCOMFOUND = B                     " FOUT 20 NET GEGEVEN
351      N,  $ - 45, Z
```

```
351     N,  $ - 45, Z



352     N,  $ + 12, Z
353     N,  JUMP(3)
354         HBANDCORRECT = - B
355         SE33
356         HAL40
357         $ = HPASS, Z                    " IN PASS 1 ?
358     Y,  $ = MT[5]

359                                                                 " 7.2
360                                                                 " HBOODSCHAR - 3
361     N,  $ = MT[5]
362         GL0 = $
363         $ = MD[3]
364         GL1 = $
365         SE34                            " GENERAL GOTO
366         HBACKRAILS
367         HAZOEKSROOR
368         B + 2                           " SUBROUTINE PRINTTEXT
369         SE112                           " FILL FORMAL STRING
370         $ = 13
371         SE73
372         CPRINTTEXT
373         JUMP(21)
374         HTELLER = $                     " SUBROUTINE ABSEIXT(4, 0, HTELLER)
375         B + 2
376         SE76
377         0
378         4
379         SE76
380         0
381         0
382         $ = :HTELLER
383         SE78
384         $ = 21
385         SE73
386         CABSEIXT
387         JUMP(7)
388         B + 2                           " SUBROUTINE PRSYM
389         HTELLER = $
390         $ = :HTELLER
391         SE78
392         $ = 13

393                                                                 " 7.2
394                                                                 " HBOODSCHAR - 4
395         SE73
396         CPRSYM
397         $ = MC[- 1]
398         $ '*' - HPAG
399         G = $
400         $ = :MT[0]
401         $ '*' HPAG
402         $ + G
403         GOTOR($)
404         HBOODSCHAR[143]                 " NLCR NLCR REGELNUMMER
405         HBOODSCHAR[148]                 " ␣␣DELIMITER
406         HBOODSCHAR[153]                 " ␣␣␣RANGNUMMER
407         HBOODSCHAR[158]                 " NLCR POSITIE ␣ IDENTIFIER
408         HBOODSCHAR[166]                 " ␣␣␣RELATIEF␣REGELNUMMER
409         HBOODSCHAR[174]                 " NLCR LAATSTE␣IDENTIFIER
```

```
410         '167 167 033'
411         '016 020 016'
412         '025 027 036'
413         '026 026 016'
414         '033 776 000'
415         '135 135 015'                   "   DELIMITER
416         '016 025 022'
417         '026 022 035'
418         '016 033 135'
419         '776 000 000'
420         '135 135 135'                   "    RANGNUMMER
421         '033 012 027'
422         '020 027 036'
423         '026 026 016'
424         '033 776 000'
425         '167 031 030'                   " NLGB POSITIE IDENTIFIER:
426         '034 022 035'

427                                                          " 7.2
428                                                          " WBOODSCHAR - 5
429         '022 016 135'
430         '022 015 016'
431         '027 035 022'
432         '017 022 016'
433         '033 132 135'
434         '135 776 000'
435         '135 135 135'                   "    RELATIEF REGELNUMMER
436         '033 016 025'
437         '012 035 022'
438         '016 017 135'
439         '033 016 020'
440         '016 025 027'
441         '036 026 026'
442         '016 033 776'
443         '167 025 012'                   " NLGB LAATSTE IDENTIFIER:
444         '012 035 034'
445         '035 016 135'
446         '022 015 016'
447         '027 035 022'
448         '017 022 016'
449         '033 132 135'
450         '135 776 000'
451         HLYST[0]                        " 167 IS BASISADRES. GEBRUIKT IN 63.
452         HLYST[17]
453         HLYST[38]
454         HLYST[66]
455         HLYST[79]
456         HLYST[100]
457         HLYST[122]
458         HLYST[145]
459         HLYST[160]
460         HLYST[184]

461                                                          " 7.2
462                                                          " WBOODSCHAR - 6
463         HLYST[213]
464         HLYST[227]
465         HLYST[241]
466         HLYST[275]
467         HLYST[293]
```

list of message-strings (their invariant addresses)
(The strings themselves have not been reproduced ~~printed out~~)

```
468         HLYST[307]
469         HLYST[327]
470         HLYST[337]
471         HLYST[379]
472         HLYST[420]
473         HLYST[462]                  " BOODSCHAP 20; T/M 495
474         HLYSTA[0]                   " BEGIN BOODSCHAP 21
475         HLYST[496]                  " BEGIN BOODSCHAP 22; T/M 508
476         HLYSTA[26]
477         HLYSTA[37]
478         HLYSTA[56]
479         HLYSTA[87]
480         HLYSTA[104]
481         HLYSTA[118]
482         HLYSTA[132]
483         HLYSTA[143]
484         HLYSTA[163]
485         HLYSTA[182]
486         HLYSTA[199]
487         HLYSTA[215]
488         HLYSTA[232]
489         HLYSTA[255]
490         HLYSTA[275]
491         HLYSTA[294]
492         HLYSTA[314]
493         HLYSTA[332]
494         HLYSTA[352]
495                                     " 7.2
496                                     " HBOODSCHAP - 7
497         HLYSTA[374]
498         HLYSTA[394]
499         HLYSTA[411]
500         HLYSTA[433]
501         HLYSTA[450]                 " BOODSCHAP 46 T/M 482
502         HLYSTB[0]                   " BOODSCHAP 47
503         HLYSTB[35]
504         HLYSTB[79]
505         HLYSTA[483]                 " BOODSCHAP 50 T/M 509
506         HLYSTB[98]
507         HLYSTB[117]
508         HLYSTB[127]
509         HLYSTB[149]
510         HLYSTB[180]
511         HLYSTB[214]
512         HLYSTB[244]
513         HLYSTB[263]
514         HLYSTB[283]
515         HLYSTB[305]
516         HLYSTB[319]
517         HLYSTB[340]
518         HLYSTB[361]
519         HLYSTB[386]
520         HLYSTB[406]
521         HLYSTB[424]
522         HLYSTB[435]                 " BOODSCHAP 67 T/M 476
523         HLYSTC[0]                   " BOODSCHAP 68
524         HLYSTC[28]
525         HLYSTC[45]
526         HLYSTB[477]                 " T/M 509; BOODSCHAP 71
```

```
527         HLYSTC[77]
528         HLYSTC[96]

529                                                                 " 7.2
530                                                                 " HBOODSCHAR - 8
531         HLYSTC[119]
532         HLYSTC[138]
533         HLYSTC[166]
534         HLYSTC[204]
535         HLYSTC[239]
536         HLYSTC[264]
537         HLYSTC[299]
538         HLYSTC[326]
539         HLYSTC[362]
540         HLYSTC[402]
541         HLYSTC[437]
542         HLYSTC[477]                     " BOODSCHAP 85; T/M 508
543         HLYSTD[0]
544         HLYSTD[21]
545         HLYSTD[54]
546         HLYSTD[76]                      " BOODSCHAP 89 T/M 116
547         HLYSTE[490]
548         HLYSTD[150]
549         HLYSTD[177]
550         0
551         0
552         0
553         0
554         0
555         0
556         0
557         HLYSTE[432]
558         HLYSTE[0]
559         HLYSTE[20]
560         HLYSTE[46]
561         HLYSTE[74]
562         HLYSTE[101]

563                                                                 " 7.2
564                                                                 " HBOODSCHAR - 9
565         HLYSTE[139]
566         HLYSTE[162]
567         HLYSTE[207]
568         HLYSTE[219]
569         HLYSTE[247]
570         HLYSTE[285]
571         HLYSTE[315]
572         HLYSTE[347]
573         HLYSTE[361]
574         HLYSTE[378]
575         HLYSTE[405]
576         HLYSTE[417]
577         HLYSTE[444]
578         HLYSTE[473]
579         HLYSTE[0]
580         HLYSTE[17]
581         HLYSTE[46]
582         HLYSTE[80]
583         HLYSTE[121]
584         HLYSTE[153]
```

```
585           HLYSTE[179]
586           HLYSTE[197]
587           HLYSTE[229]
588           HLYSTE[259]
589           HLYSTE[284]
590           HLYSTE[310]
591           HLYSTE[340]
592           HLYSTE[355]
593           HLYSTE[384]
594           HLYSTE[413]
595           HLYSTE[441]
596           HLYSTE[460]

597                                                    " 7.2
598                                                    " HBOODSCHAP - 10
599           HLYSTD[117]
600           S '*' 255
601      U,   S - 116, Z
602      Y,   S = 65
603      U,   S - 89, Z
604      Y,   S = 95
605      U,   S - 93, Z
606      Y,   S = 96
607           JUMP( - 310)
608           S = 93
609           GBILL + S, R
610           SE115
611           S = HFOUT, R
612      N,   SUBCD(:RSE71)
613      U,   S - 20, Z
614      N,   HCOMFOUND = - 8
615           JUMP(- 250)

616                                                    " 7.3
617                                                    " HRUND - 0
618 HRUND(424)
619           A = 4
620           S = 8
621           SE18
622           S = 12                                   " LOCALS HLID, HASWOORD, HIDLENGTH, HNEXTSYM, HSUB, HCIJFER, HSTATUS
623           SE0
624           S = 12                                   " ANONIEMEN
625           SE1
626           SUBC(:MT[195])                           " HNEXTSYM := G := HSYM
627           S = - G
628      U,   S + 63, R
629      N,   S + 88, Z
630      N,   S + 1, Z
631      N,   S + 31, Z
632      N,   JUMP(307                                 " NO DELIMITER
633           F = 0
634           HASWOORD[HA5] = G
635           G = - HCNT
636           S = :HCL, Z
637           SUBC(MS)
638           SE39
639           HSUB[HA5] = G
640           HIDLENGTH[HA5] = G
641           S = HCIJFER
642           HLID[HA5] = S
```

read until next delimiter
assembles identifiers and numbers in the process.
the delimiter read is delivered in the global variable "hnextdel"

```
643         S = 0
644         HSTATUS[HA5] = S
645         S = HNEXTSYM[HA5]
646     U,  S - 62, R
647     Y,  JUMP(100)                       " NAAR GETALLEN LEZEN
648     U,  S - 9, R
649     N,  JUMP(98)                        " NAAR GETALLEN LEZEN
650         S = 1

651                                                                     " 7,3
652                                                                     " HRUND - 1
653         HWIJZER + S
654         S = HREGELNR
655         HREGLASTID = S
656         S = HNEXTSYM[HA5]
657         E = 3
658         HTELLER = G, Z                  " A1
659     Y,  JUMP(6)
660         E - 1, Z
661     Y,  LUS(6)
662     Y,  JUMP(3)
663         E - 1, Z
664     Y,  LUS(12)
665     N,  LUS(18)
666         HASWOORD[HA5] + S
667         SUBC(:MT[156])                  " HNEXTSYM := G := HSYM
668         S = G
669         G = HTELLER, Z
670     Y,  JUMP(10)
671     U,  S - 62, R
672     N,  E - 1
673     N,  JUMP(- 16)
674         S = 63
675         E - 1, Z
676     Y,  JUMP(3)
677         E - 1, Z
678     Y,  LUS(6)
679     N,  LUS(12)
680         HASWOORD[HA5] + S
681         SUBC(:MT[148])                  " MT[SUB] := ASWOORD; SUB := SUB + 1
682         S = HNEXTSYM[HA5]
683     U,  S - 62, R
684     N,  JUMP(- 28)

685                                                                     " 7,3
686                                                                     " HRUND - 2
687         HNIA = - B
688         S = HCNT
689         HTELLER = S
690         S = HIDLENGTH[HA5]
691         HASWOORD[HA5] = S
692         S = 1                           " NEXT
693         MINS(HTELLER)
694     U,  S + 1, Z
695     Y,  JUMP(33)
696         G = - S
697         S = :HCL, Z
698         SUBC(MS)
699         SE39
700         S = - G
```

```
700             $ = - G
701             $ + HASWOORD[HA5]
702             HASWOORD[HA5] = G
703             $ - HSUB[HA5]
704             $ + HIDLENGTH[HA5], Z
705         N,  JUMR(- 14)
706             $ = HASWOORD[HA5]                                   " A2
707             $ + HSTATUS[HA5]
708             G = - $
709             $ = :HIL, Z
710             SUBC(MS)
711             SE39
712             MC = G
713             $ = HIDLENGTH[HA5]
714             $ + HSTATUS[HA5]
715             G = - $
716             $ = :HIL, Z
717             SUBC(MS)
718             SE39
719                                                                 " 7.3
720                                                                 " HRUND - 3
721             G - MC[- 1], Z
722         N,  $ = 0
723         N,  HSTATUS[HA5] = $
724         N,  JUMR(- 31)                          " GOTO NEXT
725             $ = 1
726             RLUSS(HSTATUS[HA5])
727             $ + HIDLENGTH[HA5]
728             $ - HSUB[HA5], Z
729         N,  JUMR(- 22)
730             JUMR(11)
731             $ = HCNI
732             HTELLER = $
733             $ + 1
734             HCNI = $
735             HNIA = B
736             G = - $
737             $ = :HCL, Z
738             SUBC(MS)
739             SE38
740             G = HSUB[HA5]
741             DO(MC[- 1])
742             $ = HTELLER
743             HCIN = $
744             $ = '1704'                          " IDENTIFIER
745             HTELLER = $                         " BEWAREN OM TE STACKEN
746             $ = - HERRORFOUND, R
747         N,  JUMR(200)                           " NAAR DELIMITER VERWERKEN
748             $ = 1
749             RCS(2)
750             $ + HCIN
751             G = - HLID[HA5]
752             SUBC(:MT[92])                       " HIDLENGTH = $; TEXTPASS2[- G] := HIDLENGTH
753                                                                 " 7.3
754                                                                 " HRUND - 4
755             JUMR(194)                           " NAAR DELIMITER VERWERKEN
756             $ = 3                               " GETALLEN LEZEN
757             HWIJZER + $
758             $ = 5
```

```
759          HTELLER = $
760          $ = HNEXTSYM[HA5]
761      N,  JUMP(94)                        " NU CIJFER GEVONDEN
762      U,  $ - 120, Z                      " OKTALE GETALLEN LEZEN?
763      N,  JUMP(109)                       " DAN 10 OF .
764          $ = 0
765          HASWOORD[HA5] = $
766          $ = 12
767          SUBC(:MT:37)                    " A3 : OPTELLEN BIJ ASWOORD EN TELLER AANPASSEN IN $ STAAT WAARDE VAN NEXTSYM
768          SUBC(:MT:61)                    " LEES NEXTSYM := G := WSYM
769          $ = HSTATUS[HA5], Z
770      N,  JUMP(22)                        " EINDE OKTAAL GETAL GEVONDEN
771          $ = G
772      U,  $ - 7, P
773      N,  JUMP(- 7)                       " VOLGENDE CIJFER
774      U,  $ - 120, Z
775      Y,  $ = 1
776      Y,  HSTATUS[HA5] = $
777      Y,  $ = 15
778      Y,  JUMP(- 12)                      " EINDMARKER INVULLEN
779          E = 88
780          $ = HNEXTSYM[HA5]               " INSPRING PUNT 83, 84, 85, 87, 88
781      U,  $ - 90, Z
782      Y,  JUMP(5)
783          HVOORSYM = $
784          $ - 62, P
785      Y,  $ = - 1
786      Y,  HRANGNR + $

787                                                                  " 7.3
788                                                                  " HRUND - 5
789          HVERDERLEZEN = - B
790          HFOUT = G                       " BOODSCHAP 0 EN BOODSCHAP 86
791          B + 2
792          $ = 9
793          SE73
794          HBOODSCHAP
795          E - 62, P
796      N,  E = 87
797      N,  JUMP(- 16)                      " BOODSCHAP 87
798          $ = - HERRORFOUND, P
799      N,  JUMP(4)
800          B + 2
801          $ = 9
802          SE73
803          HCREATENUMBER
804          $ = '2404'                      " NUMBER
805          HTELLER = $                     " BEWAREN OM TE STACKEN
806          JUMP(145)                       " NAAR DELIMITER VERWERKEN
807          HCIJFER[HA5] = $                " SUBROUTINE OM BIJ ASWOORD
808          G = HTELLER, Z                  " OP TE TELLEN, EVT IL INVULLEN, EN
809      Y,  JUMP(12)                        " TELLER AANPASSEN
810          E - 1, Z
811      Y,  LUS(4)
812      Y,  JUMP(9)
813          E - 1, Z
814      Y,  LUS(8)
815      Y,  JUMP(6)
816          E - 1, Z
817      Y,  LUS(12)
```

```
818     Y,  JUMP(3)
819         F - 1, Z
820     Y,  LUS(16)

821                                                                  " 7.3
822                                                                  " HRUND - 6
823     N,  LUS(20)
824         HASWOORD[HA5] + S
825         S = HCIJFER[HA5]
826         S - 15, Z
827     N,  S = HTELLER, Z
828     N,  S - 1
829     Y,  S = HSTATUS[HA5], P          " ZIE OPDRACHT 235. ALS HTELLER = 0, DAN BESLIST HSTATUS > 0.
830     Y,  SUBC(:MT[9])                 " IL[SUB] := ASWOORD; SUB := SUB + 1
831     Y,  S = 5
832         HTELLER = S
833         GOTOR(MC[- 1])               " EINDE
834         P + 2                        " SUBROUTINE HNEXTSYM := G := HSYM
835         S = 9
836         SE73
837         HSYM
838         HNEXTSYM[HA5] = G
839         JUMP(206)                    " EINDE
840         G = - HSUB[HA5]              " SUBROUTINE IL[SUB] := ASWOORD; SUB := SUB + 1
841         S = :HIL, Z
842         SUBC(MS)
843         SE38
844         G = HASWOORD[HA5]
845         DO(MC[- 1])
846         S = 1
847         HSUB[HA5] + S
848         S = 0
849         HASWOORD[HA5] = S
850         GOTOR(MC[- 1])               " EINDE
851         HIDLENGTH[HA5] = S           " SUBROUTINE HIDLENGTH = S;
852         S = :HTEXTPASS2, Z           " TEXTPASS2[- G] := HIDLENGTH
853         SUBC(MS)
854         SE38

855                                                                  " 7.3
856                                                                  " HRUND - 7
857         G = HIDLENGTH[HA5]
858         DO(MC[- 1])
859         GOTOR(MC[- 1])               " EINDE
860     U,  S - 9, P
861     Y,  JUMP(17)                     " GEEN CIJFER   not a digit
862         HCIJFER[HA5] = S
863         S = HSTATUS[HA5], Z
864     N,  JUMP(8)
865         S = - HNEXTSYM[HA5]
866         S + 8, P                     " - HNEXTSYM + 8 ≤ 0? DAN N
867     Y,  S = HTELLER
868     Y,  S - 5, Z
869     N,  S = 1
870         HSTATUS[HA5] = S
871         S = HCIJFER[HA5]
872         JUMP(62)                     " NAAR ASWOORD :=
873     U,  S - 2, Z                     " STATUS = 2?
874     Y,  S = 3
875     Y,  JUMP(- 6)
```

```
876     U,  S - 3, P                        " STATUS > 3?
877     Y,  S = 6
878         JUMP(- 9)
879     U,  S - 88, Z                       " DECIMAL POINT?
880     N,  JUMP(13)
881         S = 10
882         HCIJFER[HA5] = S
883         S = HSTATUS[HA5]
884     U,  S - 1, P                        " STATUS ≤ 1? DAN N
885     N,  S = 2
886     N,  JUMP(- 17)
887     U,  S - 3, Z
888     Y,  F = 0                           " NAAR BOODSCHAP(0) UITSTUREN

889                                                                 " 7.3
890                                                                 " HRUND - 8
891     Y,  JUMP(66)
892         S - 2, Z
893     Y,  F = 83
894     N,  F = 84
895         JUMP(- 108)                     " NAAR BOODSCHAP UITSTUREN
896     U,  S - 89, Z                       " DROPPED TEN?
897     N,  JUMP(9)
898         S = 11
899         HCIJFER[HA5] = S
900         S = HSTATUS[HA5]
901     U,  S - 2, Z
902     Y,  JUMP(- 10)                      " BOODSCHAP83
903         S - 3, P                        " STAKEN > 3?
904     Y,  JUMP(- 15)                      " BOODSCHAP 0
905         S = 4
906         JUMP(- 35)                      " STATUS TOEKENNEN EN NAAR ASWOORD :=
907     U,  S - 64, Z                       " +?
908     Y,  JUMP(2)
909     U,  S - 65, Z                       " -?
910     N,  JUMP(12)                        " DAN IS HET WAT ANDERS, MAAR MAG DAT?
911         S - 51
912         HCIJFER[HA5] = S
913         S = HSTATUS[HA5]
914     U,  S - 2, Z
915     Y,  JUMP(- 23)                      " BOODSCHAP 83
916     U,  S - 4, Z
917     Y,  S = 5
918     Y,  JUMP(- 47)                      " STATUS TOEKENNEN EN NAAR ASWOORD :=
919         S - 5, Z
920     Y,  F = 85
921     Y,  JUMP(- 134)                     " NAAR BOODSCHAP UITSTUREN
922         JUMP(12)                        " NAAR CIJFER := 15

923                                                                 " 7.3
924                                                                 " HRUND - 9
925         S = HSTATUS[HA5]
926     U,  S - 2, Z
927     Y,  JUMP(- 33)                      " BOODSCHAP 83
928     U,  S - 4, Z
929     Y,  JUMP(1)
930         S - 5, Z
931     Y,  F = 85
932     Y,  JUMP(- 143)                     " NAAR BOODSCHAP UITSTUREN
933         S = HNEXTSYM[HA5]
```

```
934          S - 62, P
935      N,  E = 87
936      N,  JUMP(- 147)                    " NAAR BOODSCHAP UITSTUREN
937          S = 15
938          HCIJFER[HA5] = S
939          SUBC(:MT[- 124])               " HIER BEGINT ASWOORD :=
940          S = HCIJFER[HA5]
941          S - 15, Z
942      N,  SUBC(:MT[- 103])               " NEXTSYM := G := HSYM
943      N,  S = G
944      N,  JUMP(- 81)
945          S = - HERRORFOUND, P
946      N,  JUMP(- 135)                    " STACK (NUMBER) ENZ.
947          S = HSTATUS[HA5], Z
948      N,  JUMP(- 141)                    " CREATENUMBER; STACK (NUMBER) ENZ.
949          G = - HLID[HA5]
950          S = 1
951          SUBC(:MT[- 95])                " HIDLENGTH = S; TEXTPASS2[-G] := HIDLENGTH
952          E = - 1
953          G - HLID[HA5]
954          S = HASWOORD[HA5]
955          RUS(20)
956          SUBC(:MT[- 100])               " ZELFDE ALS BIJ 314
                                                                  " 7,3
                                                                  " HRUND - 10
957
958
959          JUMP(- 146)                    " STACK (NUMBER) ENZ.
960          S = 0
961          HTELLER = S                    " GEEN IDENTIFIER OF NUMBER
962          S = HREGELNR
963          HREGELDEL = S
964          S = HRANGNR
965          HRANGDEL = S
966          S = HNEXTSYM[HA5]
967          HNEXTDEL = S
968      U,  S - 88, Z                      " PUNT? decimal point
969      N,  S - 89, Z                      " LAAG TIENTJE? dipped 10 ---> starts an octal number
970      N,  S - 31, Z                      " APOSTROPHE?
971      N,  JUMP(3)
972          S = 256
973          HNEXTDEL + S
974          JUMP(86)                       " BOODSCHAP(0) error(0)
975          S - 224, Z                     " BECOMES?
976      Y,  S = 88
977      Y,  HNEXTDEL = S
978      N,  S = HNEXTDEL
979      U,  S - 120, P
980      Y,  E = 86                         " BOODSCHAP(86) errormessage(86)
981      Y,  JUMP(- 182)
982          S + :MT[- 47]
983          S = MS
984          G = - S
985          S '*' - '17777'
986          G + S
987          HIDLENGTH[HA5] = G
988          RUS(13)
989          HPRIORITY = S
990          S = - HERRORFOUND, P
```

```
                                                                          " HRUND - 11
           G = - HWIJZER
      Y,   SUBC(:MT(- 133))                " HTEXTPASS2[- G] := HIDLENGTH
           S = 1
           HWIJZER + S
           SE6
           S = 95
           GBILL + S, P
           SE71
           114239                          " MIABE
           86592                           " PLUS
           86593
           95298
           95299
           95300
           104005
           77894
           77895
           77896
           77897
           77898
           77899
           69196
           34381
           43086
           51791
           60496
           112721
           112722
           25171
           25172
           25173
           25174

                                                                          " 7.3
                                                                          " HRUND - 12
           25175
           112728                          " BECOMES
           25177                           " ETHEN
           25178
           8795
           114268
           114269                          " LIBRARY; IN TEXTPASS2 KOMT -7773
           112734
           25183                           " STHEN
           16992                           " SELSE
           112737                          " COMMENT
           112738                          " (
           25187                           " )
           112740                          " [
           25189                           " ]
           114278
           114279                          " >
           112744
           8809
           114282
           114283
           114284
           114285
           114286
```

```
1050          114286
1051          114287
1052          114288
1053          114289
1054          114290
1055          114291
1056          114292                          " IBUE
1057          114293                          " EALSE
1058          S = MC[- 1]

1059                                                                  " 7.3
1060                                                                  " HRUND - 13
1061          S '*' - HRAG
1062          MC = S
1063          S = T
1064          S '*' HRAG
1065          S + MC[- 1]
1066          GOTOR(S)
1067          E = 0
1068          JUMP(- 263)

1069                                                                  " 7.4
1070                                                                  " HCREATENUMBER - 0

1071 HCREATENUMBER(256)
1072          A = 6                           " GEDECLAREERD IN PROC. HRUND
1073          S = 10
1074          SE18
1075          S = 17                          " HK, HE, HA, HDEXP, HPOWER, HPUNT,
1076          SE0                             " HNEGEXP, HIN, HLASTE
1077          S = 12
1078          SE1
1079          E = 0
1080          HK[HA7] = G
1081          HDEXP[HA7] = G
1082          HE[HA7] = E
1083          HA[HA7] = G
1084          SUBC(:MT[39])                   " VUL ASWOND EN HK := 5
1085          E = 1
1086          HPOWER[HA7] = E
1087          HPUNT[HA7] = - B
1088          HNEGEXP[HA7] = - B
1089          SUBC(:MT[29])                   " IN := S := NEXT
1090     U,   S - 12, Z                       " APOSTROPH? DAN OCTAAL
1091     N,   JUMP(77)
1092          SUBC(:MT[26])                   " NEXT
1093          S = S, Z
1094     Y,   JUMP(-3)
1095          S - 15, Z                       " EINDE?
1096          E = HE[HA7]                     " DAN IN EREG ZETTEN EN OOK PROC BLOCK VERLATEN
1097     Y,   JUMP(216)
1098          S = M[57]                       " EKOP IN S
1099     U,   S - 2047, B                     " E ≥ 2 ↑ 37?
1100     Y,   JUMP(3)
1101          E * 8
1102          G + HIN[HA7]
1103          JUMP(62)

1104                                                                  " 7.4
1105                                                                  " HCREATENUMBER - 1
1106     U,   S = HPUNT[HA7], B               " OVERFLOW?
```

the actual assemblage of decimal and octal numbers in the algol text

```
:107          HPUNT[HA7] = B                    " OVERFLOW := IBUE
:108     Y,   F * 8
:109     Y,   JUMP(58)
:110     U,   S - 4095, P                       " F ≥ 2 ↑ 38?
:111     Y,   JUMP(7)
:112          F * 4
:113          S = HIN[HA7]
:114     U,   S '*' 1, Z
:115     N,   S + 1
:116          G + S
:117          F * 2
:118          JUMP(49)
:119     U,   S - 8191, P                       " F ≥ 2 ↑ 39?
:120          JUMP(35)
:121          G = HK[HA7], Z                    " SUBROUTINE IN := S := NEXT
:122          S = HASWOORD
:123     N,   JUMP(13)
:124          S '*' 15
:125          HIN[HA7] = S
:126          G = - HIDLENGTH                   " HIER SPRINGT INITIERING IN
:127          S =: MIL, Z
:128          SUBC(MS)
:129          SE39
:130          HASWOORD = G
:131          S = 1
:132          HIDLENGTH + S
:133          F = 5
:134          HK[HA7] = G
:135          S = HIN[HA7]
:136          GOTOR(MC[-1])
:137          F - 1, Z                          " HK = 1?

:138                                                                  " 7.4
:139                                                                  " HCREATENUMBER - 2
:140     Y,   RUS(4)
:141     Y,   JUMP(9)
:142          F - 1, Z                          " HK = 2?
:143     Y,   RUS(8)
:144     Y,   JUMP(6)
:145          F - 1, Z                          " HK = 3?
:146     Y,   RUS(12)
:147     Y,   JUMP(3)
:148          F - 1, Z                          " HK = 4?
:149     Y,   RUS(16)
:150     N,   RUS(20)                           " DAN HK = 5
:151          S '*' 15
:152          HIN[HA7] = S
:153          G = HK[HA7]
:154          F - 1
:155          HK[HA7] = G
:156          GOTOR(MC[-1])                     " EINDE SUBROUTINE
:157          JUMP(0)                           " OVERGEHOUDEN
:158          S = HIN[HA7]
:159     Y,   JUMP(7)
:160          F * 2
:161          RUS(1)
:162     U,   S '*' 2, Z
:163     N,   S - 1
:164          G + S
:165          F * 4
```

```
1166          JUMP(3)
1167          S '*' 4, Z
1168     N,   E + 1
1169          E * 8
1170          HE[HA7] = E
1171          SUBC(:MT[-49])                  " IN := S := NEXT
1172          JUMP(-74)

1173                                                                  " 7.4
1174                                                                  " HCREATENUMBER - 3
1175     U,   S - 11, Z                       " IN = LAAG TIENTJE?
1176     Y,   E = 1
1177     Y,   HE = E
1178     Y,   JUMP(47)                        " GOTO NA TIENTJE
1179     U,   S - 10, Z                       " IN = PUNT?
1180     Y,   HPUNT[HA7] = B
1181     Y,   SUBC(:MT[-57])                  " IN := S := NEXT
1182          E = HE[HA7]
1183          HLASTE[HA7] = E
1184          E * 10
1185          G + S
1186          HE[HA7] = E
1187          S = HPUNT[HA7], P
1188     Y,   S = 1
1189     Y,   HDEXP[HA7] - S
1190          S = M[57]
1191          S '*' - 32767, Z                " E ≤ 2 ↑ 40 - 1
1192     Y,   SUBC(:MT[-68])                  " IN := S := NEXT
1193     Y,   JUMP(28)
1194          E = HLASTE[HA7]
1195          HE[HA7] = E
1196          S = 1
1197          HDEXP[HA7] + S
1198          S = HIN[HA7]
1199          S - 4, P
1200     N,   JUMP(11)
1201          E + 1
1202          S = M[57]
1203          S '*' - 32767, Z                " E ≤ 2 ↑ 40 - 1
1204     Y,   JUMP(8)
1205          S = 1

1206                                                                  " 7.4
1207                                                                  " HCREATENUMBER - 4
1208          HDEXP[HA7] + S
1209          JUMP(2)
1210          '000003146'                     " = 109951162778 =
1211          '146314632'                     " ENTIER(2 ↑ 40/10 + .5)
1212          E = MT[-3]
1213          HE[HA7] = E
1214          SUBC(:MT[-88])                  " IN := S := NEXT
1215     U,   S - 10, Z                       " PUNT?
1216     Y,   HPUNT[HA7] = B
1217     Y,   SUBC(:MT[-91])                  " IN := S := NEXT
1218     U,   S - 9, P                        " IN > 9
1219     Y,   JUMP(4)
1220          S = - HPUNT[HA7], P
1221     Y,   S = 1
1222     Y,   HDEXP[HA7] + S
1223          JUMP(-10)
```

```
1224      U,  $ - 15, Z                          " EINDE?
1225      Y,  JUMP(16)                           " GOTO VERWERK
1226      U,  $ - 11, Z                          " = LAAG TIENTJE?
1227      N,  JUMP(- 47)                         " GOTO TERUG
1228          SUBC(:MT[- 102])                   " IN := $ := NEXT
1229      U,  $ - 14, Z
1230      Y,  HNEGEXP[HA7] = B
1231      N,  $ - 13, Z
1232      Y,  SUBC(:MT[-106])                    " IN := $ := NEXT
1233          $ = HA[HA7]
1234          TENS
1235          $ + HIN[HA7]
1236      U,  $ - 10000, R
1237      Y,  $ = 10000
1238          HA[HA7] = $
1239          SUBC(:MT[- 113])                   " IN := $ := NEXT

1240                                                                  " 7,4
1241                                                                  " HCREATENUMBER - 5
1242          $ - 9, R
1243       N, JUMP(-9)
1244          $ = HNEGEXP[HA7], R                " VERWERK
1245          $ = HA[HA7]
1246      Y,  $ = - $
1247          HDEXP[HA7] + $
1248          E = HE[HA7], Z
1249      Y,  $ = 0
1250      Y,  HDEXP[HA7] = $
1251          $ = HDEXP[HA7], Z
1252      Y,  JUMP(71)                           " GOTO KLAAR
1253          E = HE[HA7]
1254          HLASTE[HA7] = E
1255          E * 10
1256          HE[HA7] = E
1257          $ = M[57]
1258          $ '*' - 32767, Z                   " E ≤ 2 ↑ 40 - 1
1259      Y,  $ = 1
1260      Y,  HDEXP[HA7] - $
1261      Y,  JUMP(-11)
1262          E = HLASTE[HA7]
1263          HE[HA7] = E
1264          $ = HDEXP[HA7], Z
1265      N,  $ = $, R
1266      N,  HDEXP[HA7] = - $
1267      N,  HNEGEXP[HA7] = B
1268      Y,  HNEGEXP[HA7] = - B
1269      U,  $ - 630, R                         "HDEXP > 630?
1270      Y,  $ = 768
1271      Y,  HDEXP[HA7] = $
1272          $ = -1
1273          HK[HA7] = $

1274                                                                  " 7,4
1275                                                                  " HCREATENUMBER - 6
1276          $ = HDEXP[HA7], Z
1277      Y,  JUMP(12)
1278      U,  $ '*' 1, Z                         " EVEN?
1279          RUS(1)
1280          HDEXP[HA7] = $
1281          $ = 1
```

```
1282          PLUSS(HK[HA7])
1283      Y,  JUMP(-8)
1284          S + S
1285          S +: MT[10]
1286          E = MS
1287          E * HPOWER[HA7]
1288          HPOWER[HA7] = E
1289          JUMP(- 14)
1290          E = HE[HA7]
1291          S = HNEGEXP[HA7], P
1292      Y,  E/HPOWER[HA7]
1293      N,  E * HPOWER[HA7]
1294          HE[HA7] = E
1295          JUMP(30)
1296          '0'                                 "
1297          '12'                                " 10
1298          '0'
1299          '144'                               " 100
1300          '0'
1301          '23420'                             " 10000
1302          '1'
1303          '175 360 400'                       " 10 ↑ 8
1304          '002 004 341'
1305          '274 467 701'                       " 10 ↑ 16
1306          '010 323 561'
1307          '153 324 053'                       " 10 ↑ 32
1308                                                                  " 7.4
1309                                                                  " HCREATENUMBER - 7
1310          '025 530 236'                       "
1311          '007 645 000'                       " 10 ↑ 64
1312          '060 222 356'                       "
1313          '221 744 601'                       " 10 ↑ 128
1314          '145 325 237'                       "
1315          '272 775 636'                       " 10 ↑ 256
1316          '317 534 306'                       "
1317          '150 127 246'                       " 10 ↑ 512
1318          HIN[HA7] = S                        " SUBROUTINE TEXTPASS2[LID] := S; LID + 1
1319          G = - HLID
1320          S = :HTEXTPASS2, Z
1321          SUBC(MS)
1322          SE38
1323          G = HIN[HA7]
1324          DO(MC[-1])
1325          S = 1
1326          HLID + S
1327          GOTOR(MC[-1])                       " EINDE SUBROUTINE
1328          S = M[57], Z
1329      Y,  S = 1
1330      N,  S = 2
1331          SUBC(:MT[- 14])
1332          E = HE[HA7]
1333          S = M[57], Z
1334      N,  SUBC(:MT[- 17])
1335          S = HE[HA7][1]                      " STAART
1336          SUBC(:MT[- 19])
1337          SE6
1338          S = 50
1339          GBILL - S, P
1340          SE115
```

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1841 SE71

VERTAALTIJD 3
EXECUTIETIJD 124

AANTAL OVER STROOM 1 GELEZEN GETALLEN 0

AANTAL OVER STROOM 2 GELEZEN GETALLEN 0