```
 0 CWORDLIST(34)
 1          '3 00 00 00 00'                    " SS
 2          '1 00 00 15 07'                    " 1     RMSP
 3          '3 24 01 03 15'                    " 2     STORSS
 4          '1 22 30 01 20'                    " 3     DATESP
 5          '3 00 00 13 03'                    " 4     GOSS
 6          '3 00 03 34 01'                    " 5     OUTSS
 7          '1 26 14 11 11'                    " 6     FILLSP
 8          '1 31 14 01 05'                    " 7     WITHSP
 9          '1 16 03 15 25'                    " 10    CORYSP
10          '1 26 12 03 07'                    " 11    FROMSP
11          '0 24 01 30 16'                    " 12    STAC
12          '1 00 00 36 61'                    " 13    K+SP
13          '1 00 00 36 70'                    " 14    K-SP
14          '0 24 20 12 14'                    " 15    SERI
15          '1 00 00 30 11'                    " 16    ALSP
16          '3 01 14 07 20'                    " 17    TIMESP
17          '3 00 00 03 36'                    " 20    OKSS
18          '3 00 00 06 03'                    " 21    NOSS
19          '3 24 36 14 15'                    " 22    SKIPSS
20          '3 00 00 12 20'                    " 23    RESS
21          '3 01 30 15 20'                    " 24    TARESS
22          '1 00 00 00 30'                    " 25    ASP
23          '1 00 00 00 23'                    " 26    BSP
24          '1 00 00 12 20'                    " 27    RESP
25          '1 00 00 15 34'                    " 30    RUSP
26          '3 00 00 14 06'                    " 31    INSS
27          '1 00 15 11 03'                    " 32    PLOSP
28          '3 12 20 20 11'                    " 33    REELSS
29          '1 00 00 00 16'                    " 34    CSP
30          '1 34 06 14 01'                    " 35    UNITSP
31          '3 24 11 03 31'                    " 36    SLOWSS
32          '3 00 12 34 06'                    " 37    RUNSS
33          '0 26 03 12 07'                    " 40    FORM
34          '3 00 00 00 24'                    " 41    SSS
35 CERI$(11)
36          '000 400 000'[:UENDME$ + 4]        " SS
37          '001 400 000'[:CRMME$]             " RMSP
38          '006 400 000'[:CFILL]              " FILLSP
39          '010 400 000'[:CORY]               " CORYSP
40          '023 400 000'[:UME$5]              " RESS
41          '027 000 000'[:CREME$ + 5]         " RESP
42          '003 400 000'[:CDATE]              " DATESP
43          '030 000 000'[:CRLUME$+6]          " RUSP
44          '032 000 000'[:CRLUME$+14]                 " RLOSP
45          '035 400 000'[:JUNITME$]
46          - '015 000 000'[:CSERIAL + 3]      " SERI

47 ULPHANDLE11(10)
48          - 0                                " NPOR
49          - 0                                " NFD
50          - 0
51          - 0                                " ATTACHING LABEL
52          - 0                                " DETACHING LABEL
53          :USBRM1
54          - 0
55          0                                  " ATTACHING TIME (FLOATING)
56          0
57          :CLRB11
58 ULPHANDLE21(10)
```

list of words occurring in operator messages

list of words that are possible openings of operator messages

more i/o stream handles (can variables)

```
 59          - 0
 60          - 0
 61          - 0
 62          - 0
 63          - 0
 64          :USBRM2
 65          - 0
 66          0
 67          0
 68          :CLRB21
 69 ULRHANDLE31(10)
 70          - 0
 71          - 0
 72          - 0
 73          - 0
 74          - 0
 75          :USBRM3
 76          - 0
 77          0
 78          0
 79          :CLRB31
 80 ULRHANDLE41(10)
 81          - 0
 82          - 0
 83          - 0
 84          - 0
 85          - 0
 86          :USBRM4
 87          - 0
 88          0
 89          0
 90          :CLRB41
 91 ULRHANDLE51(10)
 92          - 0
 93          - 0
 94          - 0
 95          - 0
 96          - 0
 97          :USBRM5
 98          - 0
 99          0
100          0
101          :CLRB51

102 USTACKRLA(26)
103          - 0          " UKILLCOUNTER
104          + 1          " UKILLVAR
105          - 0          " UAMTELREQ
106          - 0          " UAMVAR
107          - 0          " UAMSEM
108          - 0
109          - 0
110          - 0          " USCAMSEM
111          - 0
112          - 0
113          - 1          " UWAMR, BLOCKED
114          + 1          " RED
115          :UTEXTRLU    " T, DEAF
116          - 0          " A
117          - 0          " S
```

Stack bottoms of CM's

```
118          - 0                          " E
119          - 0
120          :UWRPLA                      " B
121          :USBPLA[- 2]                 " D, ADDRESS BOTTOM DISPLAY
122          - 0                          " LOAD
123          - 0
124          - 0                          " WEIGHT
125          - 0
126     U,   S = 0
127          :USBPLA                      " D[0] BOTTOM DISPLAY
128          :UARPLA

129 USTACKTRA(26)
130          - 0                          " UKILLCOUNTER
131          + 1                          " UKILLVAR
132          - 0                          " UAMTELREQ
133          - 0                          " UAMVAR
134          - 0                          " UAMSEM      } own semaphore
135          - 0
136          - 0
137          - 0                          " USCAMSEM    } semaphore for comm. with segment controller (drum process)
138          - 0
139          - 0
140          - 1                          " UHAMR, BLOCKED
141          + 1                          " RED
142          :UTEXTPLU                    " T, DEAF  → initialization of T upon reading in of system.
143          - 0                          " A
144          - 0                          " S
145          - 0                          " E
146          - 0
147          :UWRTRA                      " B
148          :USBTRA[- 2]                 " D, ADDRESS BOTTOM DISPLAY
149          - 0                          " LOAD
150          - 0
151          - 0                          " WEIGHT
152          - 0
153     U,   S = 0
154          :USBTRA                      " D[0] BOTTOM DISPLAY
155          :UARTRA
156 USBTRA(23)
157          :UIETTRA
158          - 0                          " UCURSTR
159          :USCHAKELTRA[1]              " UL4LAB
160          - 0                          " URLUSEG
161          :UTRVAR                      " URLUTYPE
162          - 0                          " URLUDISC
163          UINVTRM26A                   " UM12
164          - 0                          " UHOKPLU
165          - 0
166          + 0
167          :USBTRB                      " UCYCLE
168          UINVTRM28A                   " UM28
169          - 0                          " ULAST
170          - 0                          " UEXNUM
171          - 0                          " UEXNUMDOC
172          - 0                          " ULENGTHSEG
173          - 0                          " UCUTVAR
174          - 0                          " UAVAILTAPE
175          UINVTRA                      " UTRLETTER
176          - 0                          " URUNARROW
```

space to save registers when this process is not the active one.

more own variables of tape punch A

```
177         UINVM20A                        " UM20
178         UINVM23A                        " UM23
179         - 0                             " USRECIALRLU

180 USTACKTRB(26)
181         - 0                             " UKILLCOUNTER
182         + 1                             " UKILLVAR
183         - 0                             " UAMTELREQ
184         - 0                             " UAMVAR
185         - 0                             " UAMSEM
186         - 0
187         - 0
188         - 0                             " USCAMSEM
189         - 0
190         - 0
191         - 1                             " UHAMR, BLOCKED
192         + 1                             " RED
193         :UTEXTRLU                       " T, DEAF
194         - 0                             " A
195         - 0                             " S
196         - 0                             " F
197         - 0
198         :UWRTRB                         " B
199         :USBTRB[- 2]                    " D, ADDRESS BOTTOM DISPLAY
200         - 0                             " LOAD
201         - 0
202         - 0                             " WEIGHT
203         - 0
204     U,  $ = 0
205         :USBTRB                         " D[0] BOTTOM DISPLAY
206         :UARTRB
207 USBTRB(23)
208         :UIETTRB
209         - 0                             " UCURSTR
210         :USCHAKELTRB[1]                 " ULALAB
211         - 0                             " URLUSEG
212         :UTRVAR                         " URLUTYPE
213         - 0                             " URLUDISC
214         UINVTRM26B                      " UM12
215         - 0                             " UHOKRLU
216         - 0
217         + 0
218         :USBTRC                         " UCYCLE
219         UINVTRM28B                      " UM28
220         - 0                             " ULAST
221         - 0                             " UEXNUM
222         - 0                             " UEXNUMDOC
223         - 0                             " ULENGTHSEG
224         - 0                             " UCUTVAR
225         - 0                             " UAVAILTARE
226         UINVTRB                         " UTRLETTER
227         - 0                             " URUNARROW
228         UINVM20B                        " UM20
229         UINVM23B                        " UM23
230         - 0                             " USRECIALRLU
231 USTACKTRC(26)
232         - 0                             " UKILLCOUNTER
233         + 1                             " UKILLVAR
234         - 0                             " UAMTELREQ
235         - 0                             " UAMVAR
```

```
236          - 0                                " UAMSEM
237          - 0
238          - 0
239          - 0                                " USCAMSEM
240          - 0
241          - 0
242          - 1                                " UHAMR, BLOCKED
243          + 1                                " RED
244          :UTEXTRLU                          " T, DEAF
245          - 0                                " A
246          - 0                                " S
247          - 0                                " E
248          - 0
249          :UVRTRC                            " B
250          :USBTRC[- 2]                       " D, ADDRESS BOTTOM DISPLAY
251          - 0                                " LOAD
252          - 0
253          - 0                                " WEIGHT
254          - 0
255     U,   S = 0
256          :USBTRC                            " D[0] BOTTOM DISPLAY
257          :UARTRC
258 USBTRC(23)
259          :UIETTRC
260          - 0                                " UCURSTR
261          :USCHAKELTRC[1]                    " ULALAB
262          - 0                                " URLUSEG
263          :UTRVAR                            " URLUTYRE
264          - 0                                " URLUDISC
265          UINVTRM26C                         " UM12
266          - 0                                " UHOKRLU
267          - 0
268          + 0

269          :USBTRA                            " UCYCLE
270          UINVTRM28C                         " UM28
271          - 0                                " ULAST
272          - 0                                " UEXNUM
273          - 0                                " UEXNUMDOC
274          - 0                                " ULENGTHSEG
275          - 0                                " UCUTVAR
276          - 0                                " UAVAILTARE
277          UINVTRC                            " UTRLETTER
278          - 0                                " URUNARROW
279          UINVM20C                           " UM20
280          UINVM23C                           " UM23
281          + 101                              " USPECIALRLU

282 USTACKLRA(26)
283          - 0                                " UKILLCOUNTER
284          + 1                                " UKILLVAR
285          - 0                                " UAMTELREQ
286          + 2                                " UAMVAR
287          - 0                                " UAMSEM
288          - 0
289          - 0
290          - 0                                " USCAMSEM
291          - 0
292          - 0
293          - 1                                " UHAMR,BLOCKED
```

```
294          + 1                                " RED
295          :CLRTXT                            " T, DEAF
296          - 0                                " A
297          - 0                                " S
298          - 0                                " E
299          - 0
300          :UWRLRA                            " B
301          :USBLRA[- 2]                       " D, ADDRESS BOTTOM DISPLAY
302          - 0                                " LOAD
303          - 0
304          - 0                                " WEIGHT
305          - 0
306     U,   S = 0
307          :USBLRA                            " D[0] BOTTOM DISPLAY
308          :UARLRA

309 USTACKTRA(26)
310          - 0                                " UKILLCOUNTER
311          + 1                                " UKILLVAR
312          - 0                                " UAMTELREQ
313          + 9                                " UAMVAR
314          - 0                                " UAMSEM
315          - 0
316          - 0
317          - 0                                " USCAMSEM
318          - 0
319          - 0
320          - 1                                " UHAMR, BLOCKED
321          + 1                                " RED
322          :UTEXTTR                           " T, DEAF
323          - 0                                " A
324          - 0                                " S
325          - 0                                " E
326          - 0
327          :USBTRA[UTRLOC]                    " B
328          :USBTRA[- 2]                       " D, ADDRESS BOTTOM DISPLAY
329          - 0                                " LOAD
330          - 0
331          - 0                                " WEIGHT
332          - 0
333     U,   S = 0
334          :USBTRA                            " D[0] BOTTOM DISPLAY
335          :UARTRA
336 USBTRA(UTRLOC)
337          :UIETTRA                           " ADDRESS HARDWARE SEMAPHORE
338          - 0                                " UCURSTR
339          :USCHAKELTRA[1]                    " ULALAB
340          - 0                                " UTRSEG
341          - 0                                " UTRSLOT
342          - 0                                " UDISC
343          UINVM12A                           " UM12
344          - 0                                " UHOKMAP
345          - 0
346          + 0
347          - 0
348          - 0
349          :UVULL['2 777 777']
350          - 0                                " UNUMWSEG
351          UINVM1A                            " UM1
352          UINVM8A                            " UM8
```

```
353          UINVM14A                          " UM14
354          - 0                               " USPECIALTR

355 USTACKTRB(26)
356          - 0                               " UKILLCOUNTER
357          + 1                               " UKILLVAR
358          - 0                               " UAMTELREQ
359          + 9                               " UAMVAR
360          - 0                               " UAMSEM
361          - 0
362          - 0
363          - 0                               " USCAMSEM
364          - 0
365          - 0
366          - 1                               " UHAMR, BLOCKED
367          + 1                               " RED
368          :UTEXTTR                          " T, DEAF
369          - 0                               " A
370          - 0                               " S
371          - 0                               " F
372          - 0
373          :USBTRB[UTRLOC]                   " B
374          :USBTRB[- 2]                      " D, ADDRESS BOTTOM DISPLAY
375          - 0                               " LOAD
376          - 0
377          - 0                               " WEIGHT
378          - 0
379      U,  S = 0
380          :USBTRB                           " D[0] BOTTOM DISPLAY
381          :UARTRB
382 USBTRB(UTRLOC)
383          :UIETTRB                          " ADDRESS HARDWARE SEMAPHORE
384          - 0                               " UCURSTR
385          :USCHAKELTRB[1]                   " ULALAB
386          - 0                               " UTRSEG
387          - 0                               " UTRSLOT
388          - 0                               " UDISC
389          UINVM12B                          " UM12
390          - 0                               " UHQKWAR
391          - 0
392          + 0
393          - 0
394          - 0
395          :UVUIL['2 777 777']
396          - 0                               " UNUMWSEG
397          UINVM1B                           " UM1
398          UINVM8B                           " UM8
399          UINVM14B                          " UM14
400          - 0                               " USPECIALTR
401 USTACKTRC(26)
402          - 0                               " UKILLCOUNTER
403          + 1                               " UKILLVAR
404          - 0                               " UAMTELREQ
405          + 9                               " UAMVAR
406          - 0                               " UAMSEM
407          - 0
408          - 0
409          - 0                               " USCAMSEM
410          - 0
411          - 0
```

```
412           - 1                                 " UHAMR, BLOCKED
413           + 1                                 " RED
414           :UTEXTTR                            " T, DEAF
415           - 0                                 " A
416           - 0                                 " S
417           - 0                                 " F
418           - 0
419           :USBTRC[UTRLOC]                     " B
420           :USBTRC[- 2]                        " D, ADDRESS BOTTOM DISPLAY
421           - 0                                 " LOAD
422           - 0
423           - 0                                 " WEIGHT
424           - 0
425       U,  $ = 0
426           :USBTRC                             " D[0] BOTTOM DISPLAY
427           :UARTRC
428 USBTRC(UTRLOC)
429           :UIETTRC                            " ADDRESS HARDWARE SEMAPHORE
430           - 0                                 " UCURSTR
431           :USCHAKELTRC[1]                     " ULALAB
432           - 0                                 " UTRSEG
433           - 0                                 " UTRSLOT
434           - 0                                 " UDISC
435           UINVM12C                            " UM12
436           - 0                                 " UHOKMAR
437           - 0
438           + 0

439           - 0
440           - 0
441           :UVUIL['2 777 777']
442           - 0                                 " UNUMWSEG
443           UINVM1C                             " UM1
444           UINVM8C                             " UM8
445           UINVM14C                            " UM14
446           +99                                 " USPECIALTR

447 USTACKDR(26)
448           - 0                                 " UKILLCOUNTER
449           + 1                                 " UKILLVAR
450           - 0                                 " UAMTELREQ
451           - 0                                 " UAMVAR
452           - 0                                 " UAMSEM
453           - 0
454           - 0
455           - 0                                 " USCAMSEM
456           - 0
457           - 0
458           - 0                                 " UHAMR, SELECTABLE
459           + 1                                 " RED
460           :UTEXTDRUM                          " T, DEAF
461           - 0                                 " A
462           - 0                                 " S
463           - 0                                 " F
464           - 0
465           :UWRDR                              " B
466           :USBDR[- 2]                         " D, ADDRESS BOTTOM DISPLAY
467           - 0                                 " LOAD
468           - 0
469           - 0                                 " WEIGHT
```

```
470             - 0
471         U,  S = 0
472             :USBDR                          " D[0] BOTTOM DISPLAY
473             :UARDR
474 USBDR(4)
475             :UIFTDR
476             - 0
477             :UDRUMMAG[2]
478             + 0

479 USTACKMI(26)
480             - 0                             " UKILLCOUNTER
481             + 1                             " UKILLVAR
482             - 0                             " UAMTELREQ, OPERATOR PRIORITY FALSE
483             - 0                             " UAMVAR, COMVAR
484             - 0                             " UAMSEM
485             - 0
486             - 0
487             - 0                             " USCAMSEM
488             - 0
489             - 0
490             - 1                             " UHAMR, BLOCKED
491             + 1                             " RED
492             :CMI                            " T, DEAF --> T for message interpreter after system initialization
493             - 0                             " A                apparently all small registers b26 - b18 are set to 0
494             - 0                             " S
495             - 0                             " F
496             - 0
497             :UWRMI                          " B
498             :USBMI[- 2]                     " D, ADDRESS BOTTOM DISPLAY
499             - 0                             " LOAD
500             - 0
501             - 0                             " WEIGHT
502             - 0
503         U,  S = 0
504             :USBMI                          " D[0] BOTTOM DISPLAY
505             :UARCK
506 UEXTRA1(10)
507             '377 737 777'
508             '377 737 777'
509             '377 737 777'
510             '377 737 777'
511             '377 737 777'
512             '377 737 777'
513             '377 737 777'
514             '377 737 777'
515             '377 737 777'
516             '377 737 777'
517 UEXTRA2(10)
518             '377 737 777'
519             '377 737 777'
520             '377 737 777'
521             '377 737 777'
522             '377 737 777'
523             '377 737 777'
524             '377 737 777'
525             '377 737 777'
526             '377 737 777'
527             '377 737 777'
528 UEXTRA3(10)
```

```
529          '377 737 777'
530          '377 737 777'
531          '377 737 777'
532          '377 737 777'
533          '377 737 777'
534          '377 737 777'
535          '377 737 777'
536          '377 737 777'
537          '377 737 777'
538          '377 737 777'
539 UEXTRA4(10)
540          '377 737 777'
541          '377 737 777'
542          '377 737 777'
543          '377 737 777'
544          '377 737 777'
545          '377 737 777'
546          '377 737 777'
547          '377 737 777'
548          '377 737 777'
549          '377 737 777'
550 UEXTRA5(10)
551          '377 737 777'
552          '377 737 777'
553          '377 737 777'
554          '377 737 777'
555          '377 737 777'
556          '377 737 777'
557          '377 737 777'
558          '377 737 777'
559          '377 737 777'
560          '377 737 777'
561 UEXTRA6(10)
562          '377 737 777'
563          '377 737 777'
564          '377 737 777'
565          '377 737 777'
566          '377 737 777'
567          '377 737 777'
568          '377 737 777'
569          '377 737 777'
570          '377 737 777'
571          '377 737 777'
572 UEXTRA7(10)
573          '377 737 777'
574          '377 737 777'
575          '377 737 777'
576          '377 737 777'
577          '377 737 777'
578          '377 737 777'
579          '377 737 777'
580          '377 737 777'
581          '377 737 777'
582          '377 737 777'
583 UEXTRA8(10)
584          '377 737 777'
585          '377 737 777'
586          '377 737 777'
587          '377 737 777'
588          '377 737 777'
```

```
589             '377 737 777'
590             '377 737 777'
591             '377 737 777'
592             '377 737 777'
593             '377 737 777'
594 UEXTRA9(10)
595             '377 737 777'
596             '377 737 777'
597             '377 737 777'
598             '377 737 777'
599             '377 737 777'
600             '377 737 777'
601             '377 737 777'
602             '377 737 777'
603             '377 737 777'
604             '377 737 777'
605 UEXTRA10(10)
606             '377 737 777'
607             '377 737 777'
608             '377 737 777'
609             '377 737 777'
610             '377 737 777'
611             '377 737 777'
612             '377 737 777'
613             '377 737 777'
614             '377 737 777'
615             '377 737 777'
616 USTACKPM1(28)
617             - 0                     " SV NEXT STACK PAGE
618             - 0                     " NO CHAIN TO PREVIOUS PAGE
619             - 0                     " UKILLCOUNTER
620             - 0                     " UKILLVAR
621             - 0                     " UAMTELREQ
622             - 0                     " UAMVAR
623             - 0                     " UAMSEM
624             - 0
625             - 0
626             - 0                     " USCAMSEM
627             - 0
628             - 0
629             - 0                     " UHAMR, SELECTABLE
630             - 0                     " WHITE
631             :UTEXTPM[1]             " T, DEAF
632             - 0                     " A
633             - 0                     " S
634             - 0                     " E
635             - 0
636             :UWPPM1                 " B
637             :UDISPPM1[2]            " D, ADDRESS BOTTOM DISPLAY
638             ULOADH                  " LOAD
639             ULOADT
640             '776 500 000'           " WEIGHT, 2 ↑ (- 10) FLOATING
641             + 1
642             :UDISPPM1[2]            " ADDRESS BOTTOM DISPLAY
643             :USBPM1[4]              " SV LINK, :P[0] BOTTOM SV LIST
644              0                      " NO RETURN LRP
645 USBPM1(116)
646             :UWPPM1                 " WP
647             A = MD[0]               " BLOCK HEIGHT ZERO
```

5 stackbottoms for PM's

stack pages are chained initially only one S.P.

used processor time

```
                - 0                     " RI- 2] BOTTOM SV LIST, INDICATION LAST LIST
                1                       " RM NUMBER
                - 0                     " GL23, BOOLEAN READ FROM EMPTY SV FALSE
                - 0                     " GL24, NUMBER OF P-SEGMENTS RM1
                - 0                     " GL25, NUMBER OF BORROWED STACKPAGES
                - 0                     " GL16, NUMBER OF GRANTED STACKPAGES
                - 0                     " NSP, FIRST FREE PLACE IN NEW STACKPAGE
                - 0                     " WARNINGPOINT P-INCREASE
                UINVM341                " UM34
                UINVM351                " UM35
                UINVM361                " UM36
                - 0                     " UKILLSEM
                - 0
                - 0
                UINVWHO1                " UWHO
                CINVMNN                 " UPROGID
                - 0                     " URUNNUM
                - 0                     " UBLOCKSTR
                :UTRSTRL1               " BASIC ADDRESS LIST OF OWN TAPEREADER STREAMS
                :ULRSTRL1               " BASIC ADDRESS LIST OF OWN PRINTER STREAMS
                :UTRSTRL1               " BASIC ADDRESS LIST OF OWN PUNCH STREAMS
                :URLSTRL1               " BASIC ADDRESS LIST OF OWN PLOTTER STREAMS
                - 0                     " UREQUEST, NUMBER OF REQUESTED OUTPUT SEGMENTS

                - 0                     " URINISHDOUBTFUL, USED IN BANKER
                - 0                     " ULOANRUN
                - 0                     " UCLAIMRUN
                - 0                     " UDOCRUN, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
                - 0                     " ULOANRLO
                - 0                     " UCLAIMRLO
                - 0                     " UDOCRLO, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
                - 0                     " GL0, INVARIANT TARGET ADDRESS
                - 0                     " GL1, TARGET LRB
                - 0                     " GL3, USED IN ARRAY DECLARATION
                - 0                     " GL4, USED IN ARRAY DECLARATION
                - 0                     " GL5, USED IN ARRAY DECLARATION
                - 0                     " GL6, USED IN ARRAY DECLARATION
                - 0                     " GL7, USED IN ARRAY DECLARATION
                - 0                     " GIR, GLOBAL IMAGINARY PART

                SUBCD(:RSE57)           " ELV
          U,    S = 0                   " ERV
                DO(ERV)                 " ECV
                JUMP(2)                 " ELVM
                GOTO(:RSE64)            " ERVM
                S = MS[2], Z            " ECVM
                - 0                     " GL17, POSITION IN BOOLEAN WORD
                - 0                     " GL18, USED IN ARRAY DECLARATION
                - 0                     " GL19, USED IN ARRAY DECLARATION
                - 0                     " GL20, USED IN ARRAY DECLARATION
                - 0                     " GL21, USED IN ARRAY DECLARATION
                - 0                     " GL26, INVARIANT ADDRESS IN CURRENT PROGRAM SEGMENT
                -0                      " CGL1
                -2 000 000              " GBILL
                -0                      " UNITS
                +1                      " CSTEEK
                -0                      " UTRANSTIME
                - 0                     " CGL2
                - 0                     " UL1ST
                - 0                     " UKIND
```

```
707          - 0                                  " USRECIALRM
708          '377 737 777'
709          '377 737 777'
710          '377 737 777'
711          '377 737 777'
712          '377 737 777'
713          '377 737 777'
714          '377 737 777'
715          '377 737 777'
716          '377 737 777'
717          '377 737 777'
718          '377 737 777'
719          '377 737 777'
720          '377 737 777'
721          '377 737 777'
722          '377 737 777'
723          '377 737 777'
724          '377 737 777'
725          '377 737 777'
726          '377 737 777'
727          '377 737 777'
728          '377 737 777'
729          '377 737 777'
730          '377 737 777'
731          '377 737 777'
732          '377 737 777'
733          '377 737 777'
734          '377 737 777'
735          '377 737 777'
736          '377 737 777'
737          '377 737 777'
738          '377 737 777'
739          '377 737 777'
740          '377 737 777'
741          '377 737 777'
742          '377 737 777'
743          '377 737 777'
744          '377 737 777'
745          '377 737 777'
746          '377 737 777'
747          '377 737 777'
748          '377 737 777'
749          - 0                                  " JMTCLAIMED
750          - 0
751          - 0
752          - 0
753          - 0
754          - 0
755          - 0                                  " CGLSLOW
756          - 0                                  " CMTUSED
757          - 0                                  " JCURUNIT
758          - 0                                  " JMTEINDR
759          0                                    "CGLSTV(3)
760          510                                  "END OF STRING
761          0
762 UDISPRM1(3)
763          A = MD[0]
764          A = MD[0]
765          :USPRM1
```

MD[-1] and MD[-2] also are part of the display.

MD[-1] contains the current block height in the low order bits of the instruction A = MD[...] upon block-entry, 1 is added to MD[-1], transforming "A=MD[0]" into "A=MD[1]"

executing DO(MD[-1]) has the effect of making A equal to the

and this is :M0

this is the initial display

local reference point of the current block.
This is done a lot to restore A, after it has been destroyed during execution of some system subroutine

```
766 USTACKRM2(28)
767         - 0                     " SV NEXT STACK PAGE
768         - 0                     " NO CHAIN TO PREVIOUS PAGE
769         - 0                     " UKILLCOUNTER
770         - 0                     " UKILLVAR
771         - 0                     " UAMTELREQ
772         - 0                     " UAMVAR
773         - 0                     " UAMSEM
774         - 0
775         - 0
776         - 0                     " USCAMSEM
777         - 0
778         - 0
779         - 1                     " UHAMR, BLOCKED
780         - 0                     " WHITE
781         :UTEXTRM[1]             " T, DEAF
782         - 0                     " A
783         - 0                     " S
784         - 0                     " F
785         - 0
786         :UWRRM2                 " B
787         :UDISRRM2[2]            " D, ADDRESS BOTTOM DISPLAY
788         ULOADH                  " LOAD
789         ULOADT
790         '776 500 000'           " WEIGHT, 2 ↑ (= 10) FLOATING
791         + 1
792         :UDISRRM2[2]            " ADDRESS BOTTOM DISPLAY
793         :USRRM2[4]              " SV LINK, :R[0] BOTTOM $V LIST
794          0                      " NO RETURN LRR
795 USRRM2(116)
796         :UWRRM2                 " WR
797         A = MD[0]               " BLOCK HEIGHT ZERO
798         - 0                     " R[- 2] BOTTOM SV LIST, INDICATION LAST LIST
799         2                       " RM NUMBER
800         - 0                     " GL23, BOOLEAN READ FROM EMPTY SV FALSE
801         - 0                     " GL24, NUMBER OF P-SEGMENTS RM2
802         - 0                     " GL25, NUMBER OF BORROWED STACKPAGES
803         - 0                     " GL16, NUMBER OF GRANTED STACKPAGES
804         - 0                     " NSR, FIRST FREE PLACE IN NEW STACKPAGE
805         - 0                     " WARNINGPOINT P-INCREASE
806         UINVM342                " UM34
807         UINVM352                " UM35
808         UINVM362                " UM36
809         - 0                     " UKILLSEM
810         - 0
811         - 0
812         UINVWH02                " UWHQ
813         CINVMNN                 " URROGID
814         - 0                     " URUNNUM
815         - 0                     " UBLOCKSTR
816         :UTRSTRL2               " BASIC ADDRESS LIST OF OWN TAPEREADER STREAMS
817         :ULRSTRL2               " BASIC ADDRESS LIST OF OWN PRINTER STREAMS
818         :UTRSTRL2               " BASIC ADDRESS LIST OF OWN PUNCH STREAMS
819         :URLSTRL2               " BASIC ADDRESS LIST OF OWN PLOTTER STREAMS
820         - 0                     " UREQUEST, NUMBER OF REQUESTED OUTPUT SEGMENTS
821         - 0                     " UFINISHDOUBTFUL, USED IN BANKER
822         - 0                     " ULOANRUN
823         - 0                     " UCLAIMRUN
824         - 0                     " UDOCRUN, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
825         - 0                     " ULOANRLQ
```

```
826         - 0                                 " UCLAIMRLO
827         - 0                                 " UDOCRLO, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
828         - 0                                 " GL0, INVARIANT TARGET ADDRESS
829         - 0                                 " GL1, TARGET LRR
830         - 0                                 " GL3, USED IN ARRAY DECLARATION
831         - 0                                 " GL4, USED IN ARRAY DECLARATION
832         - 0                                 " GL5, USED IN ARRAY DECLARATION
833         - 0                                 " GL6, USED IN ARRAY DECLARATION
834         - 0                                 " GL7, USED IN ARRAY DECLARATION
835         - 0                                 " GIR, GLOBAL IMAGINARY PART
836         - 0
837         SUBCD(:RSE57)                       " ELV
838     U,  S = 0                               " ERV
839         DO(ERV)                             " ECV
840         JUMP(2)                             " ELVM
841         GOTO(:RSE64)                        " ERVM
842         S = MS[2], Z                        " ECVM
843         - 0                                 " GL17, POSITION IN BOOLEAN WORD
844         - 0                                 " GL18, USED IN ARRAY DECLARATION
845         - 0                                 " GL19, USED IN ARRAY DECLARATION
846         - 0                                 " GL20, USED IN ARRAY DECLARATION
847         - 0                                 " GL21, USED IN ARRAY DECLARATION
848         - 0                                 " GL26, INVARIANT ADDRESS IN CURRENT PROGRAM SEGMENT
849         - 0                                 " CGL1
850         -2 000 000                          " GBILL
851         - 0                                 " UNITS
852         + 1                                 " CSTEEK
853         - 0                                 " UTRANSTIME
854         - 0                                 " CGL2
855         - 0                                 " ULIST
856         - 0                                 " UKIND
857         - 0                                 " USPECIALPM
858         '377 737 777'
859         '377 737 777'
860         '377 737 777'
861         '377 737 777'
862         '377 737 777'
863         '377 737 777'
864         '377 737 777'
865         '377 737 777'
866         '377 737 777'
867         '377 737 777'
868         '377 737 777'
869         '377 737 777'
870         '377 737 777'
871         '377 737 777'
872         '377 737 777'
873         '377 737 777'
874         '377 737 777'
875         '377 737 777'
876         '377 737 777'
877         '377 737 777'
878         '377 737 777'
879         '377 737 777'
880         '377 737 777'
881         '377 737 777'
882         '377 737 777'
883         '377 737 777'
884         '377 737 777'
885         '377 737 777'
```

```
886           '377 737 777'
887           '377 737 777'
888           '377 737 777'
889           '377 737 777'
890           '377 737 777'
891           '377 737 777'
892           '377 737 777'
893           '377 737 777'
894           '377 737 777'
895           '377 737 777'
896           '377 737 777'
897           '377 737 777'
898           '377 737 777'
899           - 0                                   " JMTCLAIMED
900           - 0
901           - 0
902           - 0
903           - 0
904           - 0
905           - 0                                   " CGLSLOW
906           - 0                                   " CMTUSED
907           - 0                                   " JCURUNIT
908           - 0                                   " JMTEINDR
909           0                                     "CGLSTV(3)
910           510                                   "END OF STRING
911           0
912 UDISPRM2(3)
913           A = MD[0]
914           A = MD[0]
915           :USPRM2
916 USTACKPM3(28)
917           - 0                                   " SV NEXT STACK PAGE
918           - 0                                   " NO CHAIN TO PREVIOUS PAGE
919           - 0                                   " UKILLCOUNTER
920           - 0                                   " UKILLVAR
921           - 0                                   " UAMTELREQ
922           - 0                                   " UAMVAR
923           - 0                                   " UAMSEM
924           - 0
925           - 0
926           - 0                                   " USCAMSEM
927           - 0
928           - 0
929           - 1                                   " UHAMR, BLOCKED
930           - 0                                   " WHITE
931           :UTEXTPM[1]                           " T, DEAF
932           - 0                                   " A
933           - 0                                   " S
934           - 0                                   " F
935           - 0
936           :UVRPM3                               " B
937           :UDISPPM3[2]                          " D, ADDRESS BOTTOM DISPLAY
938           ULOADH                                " LOAD
939           ULOADT
940           '776 500 000'                         " WEIGHT, 2 ↑ (- 10) FLOATING
941           + 1
942           :UDISPPM3[2]                          " ADDRESS BOTTOM DISPLAY
943           :USPPM3[4]                            " SV LINK, :P[0] BOTTOM SV LIST
944            0                                    " NO RETURN LPP
```

```
945 USBRM3(116)
946         :UVRRM3                         " WR
947         A = MD[0]                       " BLOCK HEIGHT ZERO
948         - 0                             " R[- 2] BOTTOM SV LIST, INDICATION LAST LIST
949         3                               " RM NUMBER
950         - 0                             " GL23, BOOLEAN READ FROM EMPTY SV FALSE
951         - 0                             " GL24, NUMBER OF P-SEGMENTS RM3
952         - 0                             " GL25, NUMBER OF BORROWED STACKPAGES
953         - 0                             " GL16, NUMBER OF GRANTED STACKPAGES
954         - 0                             " NSR, FIRST FREE PLACE IN NEW STACKPAGE
955         - 0                             " WARNINGPOINT P-INCREASE
956         UINVM343                        " UM34
957         UINVM353                        " UM35
958         UINVM363                        " UM36
959         - 0                             " UKILLSEM
960         - 0
961         - 0
962         UINVWHO3                        " UWHO
963         CINVMNN                         " URROGID
964         - 0                             " URUNNUM
965         - 0                             " UBLOCKSTR
966         :UTRSTRL3                       " BASIC ADDRESS LIST OF OWN TAPEREADER STREAMS
967         :ULRSTRL3                       " BASIC ADDRESS LIST OF OWN PRINTER STREAMS
968         :UTPSTRL3                       " BASIC ADDRESS LIST OF OWN PUNCH STREAMS
969         :UPLSTRL3                       " BASIC ADDRESS LIST OF OWN PLOTTER STREAMS
970         - 0                             " UREQUEST, NUMBER OF REQUESTED OUTPUT SEGMENTS
971         - 0                             " UFINISHDOUBTFUL, USED IN BANKER
972         - 0                             " ULOANRUN
973         - 0                             " UCLAIMRUN
974         - 0                             " UDOCRUN, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
975         - 0                             " ULOANRLO
976         - 0                             " UCLAIMRLO
977         - 0                             " UDOCRLO, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
978         - 0                             " GL0, INVARIANT TARGET ADDRESS
979         - 0                             " GL1, TARGET LRR
980         - 0                             " GL3, USED IN ARRAY DECLARATION
981         - 0                             " GL4, USED IN ARRAY DECLARATION
982         - 0                             " GL5, USED IN ARRAY DECLARATION
983         - 0                             " GL6, USED IN ARRAY DECLARATION
984         - 0                             " GL7, USED IN ARRAY DECLARATION
985         - 0                             " GIR, GLOBAL IMAGINARY PART
986         - 0
987         SUBCD(:RSE57)                   " ELV
988     U,  S = 0                           " ERV
989         DO(ERV)                         " ECV
990         JUMP(2)                         " ELVM
991         GOTO(:RSE64)                    " ERVM
992         S = MS[2], X                    " ECVM
993         - 0                             " GL17, POSITION IN BOOLEAN WORD
994         - 0                             " GL18, USED IN ARRAY DECLARATION
995         - 0                             " GL19, USED IN ARRAY DECLARATION
996         - 0                             " GL20, USED IN ARRAY DECLARATION
997         - 0                             " GL21, USED IN ARRAY DECLARATION
998         - 0                             " GL26, INVARIANT ADDRESS IN CURRENT PROGRAM SEGMENT
999         - 0                             " CGL1
1000        -2 000 000                      " GBILL
1001        - 0                             " UNITS
1002        + 1                             " CSTEEK
1003        - 0                             " UTRANSTIME
1004        - 0                             " CGL2
```

```
1005          - 0                                   " ULIST
1006          - 0                                   " UKIND
1007          - 0                                   " USPECIALPM
1008          '377 737 777'
1009          '377 737 777'
1010          '377 737 777'
1011          '377 737 777'
1012          '377 737 777'
1013          '377 737 777'
1014          '377 737 777'
1015          '377 737 777'
1016          '377 737 777'
1017          '377 737 777'
1018          '377 737 777'
1019          '377 737 777'
1020          '377 737 777'
1021          '377 737 777'
1022          '377 737 777'
1023          '377 737 777'
1024          '377 737 777'
1025          '377 737 777'
1026          '377 737 777'
1027          '377 737 777'
1028          '377 737 777'
1029          '377 737 777'
1030          '377 737 777'
1031          '377 737 777'
1032          '377 737 777'
1033          '377 737 777'
1034          '377 737 777'
1035          '377 737 777'
1036          '377 737 777'
1037          '377 737 777'
1038          '377 737 777'
1039          '377 737 777'
1040          '377 737 777'
1041          '377 737 777'
1042          '377 737 777'
1043          '377 737 777'
1044          '377 737 777'
1045          '377 737 777'
1046          '377 737 777'
1047          '377 737 777'
1048          '377 737 777'
1049          - 0                                           " JMTCLAIMED
1050          - 0
1051          - 0
1052          - 0
1053          - 0
1054          - 0
1055          - 0                                   " CGLSLOW
1056          - 0                                   " CMTUSED
1057          - 0                                   " JCURUNIT
1058          - 0                                   " JMTEINDR
1059          0                                     "CGLSTV(3)
1060          510                                   "END  OF  STRING
1061          0
1062 UDISPPM3(3)
1063          A = MD[0]
1064          A = MD[0]
```

```
1065          :USBRM3

1066  USTACKRM4(28)
1067          - 0                             " SV NEXT STACK PAGE
1068          - 0                             " NO CHAIN TO PREVIOUS PAGE
1069          - 0                             " UKILLCOUNTER
1070          - 0                             " UKILLVAR
1071          - 0                             " UAMTELREQ
1072          - 0                             " UAMVAR
1073          - 0                             " UAMSEM
1074          - 0
1075          - 0
1076          - 0                             " USCAMSEM
1077          - 0
1078          - 0
1079          - 1                             " UHAMR, BLOCKED
1080          - 0                             " WHITE
1081          :UTEXTRM[1]                     " T, DEAF
1082          - 0                             " A
1083          - 0                             " S
1084          - 0                             " F
1085          - 0
1086          :UWRRM4                         " B
1087          :UDISRRM4[2]                    " D, ADDRESS BOTTOM DISPLAY
1088          ULOADH                          " LOAD
1089          ULOADT
1090          '776 500 000'                   " WEIGHT, 2 ↓ (= 10) FLOATING
1091          + 1
1092          :UDISRRM4[2]                    " ADDRESS BOTTOM DISPLAY
1093          :USBRM4[4]                      " SV LINK, :R[0] BOTTOM SV LIST
1094           0                              " NO RETURN LRR
1095  USBRM4(116)
1096          :UWRRM4                         " WR
1097          A = MD[0]                       " BLOCK HEIGHT ZERO
1098          - 0                             " R[- 2] BOTTOM SV LIST, INDICATION LAST LIST
1099          4                               " RM NUMBER
1100          - 0                             " GL23, BOOLEAN READ FROM EMPTY SV FALSE
1101          - 0                             " GL24, NUMBER OF P-SEGMENTS RM4
1102          - 0                             " GL25, NUMBER OF BORROWED STACKPAGES
1103          - 0                             " GL16, NUMBER OF GRANTED STACKPAGES
1104          - 0                             " NSR, FIRST FREE PLACE IN NEW STACKPAGE
1105          - 0                             " WARNINGPOINT P-INCREASE
1106          UINVM344                        " UM34
1107          UINVM354                        " UM35
1108          UINVM364                        " UM36
1109          - 0                             " UKILLSEM
1110          - 0
1111          - 0
1112          UINVWHO4                        " UWHO
1113          CINVMNN                         " URROGID
1114          - 0                             " URUNNUM
1115          - 0                             " UBLOCKSTR
1116          :UTRSTRL4                       " BASIC ADDRESS LIST OF OWN TAPEREADER STREAMS
1117          :ULRSTRL4                       " BASIC ADDRESS LIST OF OWN PRINTER STREAMS
1118          :UTRSTRL4                       " BASIC ADDRESS LIST OF OWN PUNCH STREAMS
1119          :URLSTRL4                       " BASIC ADDRESS LIST OF OWN PLOTTER STREAMS
1120          - 0                             " UREQUEST, NUMBER OF REQUESTED OUTPUT SEGMENTS
1121          - 0                             " UFINISHDOUBTFUL, USED IN BANKER
1122          - 0                             " ULOANRUN
1123          - 0                             " UCLAIMRUN
```

```
1124          - 0                                " UDOCRUN, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
1125          - 0                                " ULOANRLO
1126          - 0                                " UCLAIMRLO
1127          - 0                                " UDOCRLO, NUMBER OF DOCUMENTS UNDER CONSTRUCTION
1128          - 0                                " GL0, INVARIANT TARGET ADDRESS
1129          - 0                                " GL1, TARGET LRR
1130          - 0                                " GL3, USED IN ARRAY DECLARATION
1131          - 0                                " GL4, USED IN ARRAY DECLARATION
1132          - 0                                " GL5, USED IN ARRAY DECLARATION
1133          - 0                                " GL6, USED IN ARRAY DECLARATION
1134          - 0                                " GL7, USED IN ARRAY DECLARATION
1135          - 0                                " GIR, GLOBAL IMAGINARY PART
1136          - 0
1137          $UBCD(:RSE57)                      " ELV
1138     U,   $ = 0                              " ERV
1139          DO(ERV)                            " ECV
1140          JUMP(2)                            " ELVM
1141          GOTO(:RSE64)                       " ERVM
1142          $ = MS[2], Z                       " ECVM
1143          - 0                                " GL17, POSITION IN BOOLEAN WORD
1144          - 0                                " GL18, USED IN ARRAY DECLARATION
1145          - 0                                " GL19, USED IN ARRAY DECLARATION
1146          - 0                                " GL20, USED IN ARRAY DECLARATION
1147          - 0                                " GL21, USED IN ARRAY DECLARATION
1148          - 0                                " GL26, INVARIANT ADDRESS IN CURRENT PROGRAM SEGMENT
1149          - 0                                " CGL1
1150          -2 000 000                         " GBILL
1151          - 0                                " UNITS
1152          + 1                                " CSTEEK
1153          - 0                                " UTRANSYTIME
1154          - 0                                " CGL2
1155          - 0                                " ULIST
1156          - 0                                " UKIND
1157          - 0                                " USPECIALRM
1158          '377 737 777'
1159          '377 737 777'
1160          '377 737 777'
1161          '377 737 777'
1162          '377 737 777'
1163          '377 737 777'
1164          '377 737 777'
1165          '377 737 777'
1166          '377 737 777'
1167          '377 737 777'
1168          '377 737 777'
1169          '377 737 777'
1170          '377 737 777'
1171          '377 737 777'
1172          '377 737 777'
1173          '377 737 777'
1174          '377 737 777'
1175          '377 737 777'
1176          '377 737 777'
1177          '377 737 777'
1178          '377 737 777'
1179          '377 737 777'
1180          '377 737 777'
1181          '377 737 777'
1182          '377 737 777'
1183          '377 737 777'
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1184          '377 737 777'
1185          '377 737 777'
1186          '377 737 777'
1187          '377 737 777'
1188          '377 737 777'
1189          '377 737 777'
1190          '377 737 777'
1191          '377 737 777'
1192          '377 737 777'
1193          '377 737 777'
1194          '377 737 777'
1195          '377 737 777'
1196          '377 737 777'
1197          '377 737 777'
1198          '377 737 777'
1199          - 0                                   " JMTCLAIMED
1200          - 0
1201          - 0
1202          - 0
1203          - 0
1204          - 0
1205          - 0                                   " CGLSLOW
1206          - 0                                   " CMTUSED
1207          - 0                                   " JCURUNIT
1208          - 0                                   " JMTEINDR
1209          0                                     "CGLSTV(3)
1210          510                                   "END  OF  STRING
1211          0
1212 UDISPRM4(3)
1213          A = MD[0]
1214          A = MD[0]
1215          :USBRM4
1216 USTACKRM5(28)
1217          - 0                                   " SV NEXT STACK PAGE
1218          - 0                                   " NO CHAIN TO PREVIOUS PAGE
1219          - 0                                   " UKILLCOUNTER
1220          - 0                                   " UKILLVAR
1221          - 0                                   " UAMTELREQ
1222          - 0                                   " UAMVAR
1223          - 0                                   " UAMSEM
1224          - 0
1225          - 0
1226          - 0                                   " USCAMSEM
1227          - 0
1228          - 0
1229          - 1                                   " UHAMR, BLOCKED
1230          - 0                                   " WHITE
1231          :UTEXTRM[1]                           " T, DEAF
1232          - 0                                   " A
1233          - 0                                   " S
1234          - 0                                   " E
1235          - 0
1236          :UWRRM5                               " B
1237          :UDISRRM5[2]                          " D, ADDRESS BOTTOM DISPLAY
1238          ULOADH                                " LOAD
1239          ULOADT
1240          '776 500 000'                         " WEIGHT, 2 ↑ (- 10) FLOATING
1241          + 1
1242          :UDISRRM5[2]                          " ADDRESS BOTTOM DISPLAY
1243          :USBRM5[4]                            " SV LINK, :R[0] BOTTOM SV LIST
```

```
        0                               " NO RETURN LRR
USBRM5(116)
        :UVRRM5                         " VR
        A = MD[0]                       " BLOCK HEIGHT ZERO
        - 0                             " R[- 2] BOTTOM SV LIST, INDICATION LAST LIST
        5                               " RN NUMBER
        - 0                             " GL23, BOOLEAN READ FROM EMPTY SV FALSE

        - 0                             " GL24, NUMBER OF P - SEGMENT RN5
        - 0                             " GL25, NUMBER OF BORROWED STACKPAGES
        - 0                             " GL16, NUMBER OF GRATED STACKPAGES
        - 0                             " NSP, FIRST FREE PLACE IN NEW STACKPAGE
        - 0                             " WARNING POINT P - INCREASE
        UINVM345                        " UM34
        UINVM355                        " UM35
        UINVM365                        " UM36
        - 0                             " UKILLSEM
        - 0
        - 0
        UINVWHO5                        " UVHO
        CINVMNN                         " UPROGID
        - 0                             " URUNNUM
        - 0                             " UBLOCKSTR
        :UTRSTRL5                       " BASIC ADDRESS LIST OF OWN TAPEREADRESTREAMS
        :ULPSTRL5                       " BASIC ADDRESS LIST OF OWN PRINTER STREAMS
        :UTPSTRL5                       " BASIC ADDRESS LIST OF OWN PUNCH STREAMS
        :URLSTRL5                       " BASIC ADDRESS LIST OF OWN PLOTTER STREAMS
        - 0                             " UREQUEST
        - 0                             " UFINISHDOUBTFUL
        - 0                             " ULOANRUN
        - 0                             " UCLAIMRUN
        - 0                             " UDOCRUN
        - 0                             " ULOANRLO
        - 0                             " UCLAIMRLO
        - 0                             " UDOCRLO
        - 0                             " GL0
        - 0                             " GL1
        - 0                             " GL3
        - 0                             " GL4
        - 0                             " GL5
        - 0                             " GL6
        - 0                             " GL7
        - 0                             " GIR
        - 0
        SUBCD(:RSE57)                   " ELV
    U,  S = 0                           " ERV

        DO(ERV)                         " ECV
        JUMP(2)                         " ELVM
        GOTO(:RSE64)                    " ERVM
        S = MS[2], Z                    " ECVM
        - 0                             " GL17
        - 0                             " GL18
        - 0                             " GL19
        - 0                             " GL20
        - 0                             " GL21
        - 0                             " GL26
        - 0                             " CGL1
        -2 000 000                      " GBILL
        - 0                             " UNITS
```

```
1302        + 1                                 " CSTEEK
1303        - 0                                 " UTRANSTIME
1304        - 0                                 " CGL2
1305        - 0                                 " ULIST
1306        - 0                                 " UKIND
1307        + 100                               " USPECIALRM
1308        '377 737 777'
1309        '377 737 777'
1310        '377 737 777'
1311        '377 737 777'
1312        '377 737 777'
1313        '377 737 777'
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1343        '377 737 777'
1344        '377 737 777'
1345        '377 737 777'
1346        '377 737 777'
1347        '377 737 777'
1348        '377 737 777'
1349        - 0                                         " JMTCLAIMED
1350        - 0
1351        - 0
1352        - 0
1353        - 0
1354        - 0
1355        - 0                                 " CGLSLOW
1356        - 0                                 " CMTUSED
1357        - 0                                 " JCURUNIT
1358        - 0                                 " JMTEINDR
1359        0                                   "CGLSTV(3)
1360        510                                 "END  OF  STRING
1361        0
```

this constant is filled in for every variable ~~not initialized by th~~ upon declaration it serves both as a large integer, and as a large real, when two of them are taken consecutively. This guarantees reproducibility.

```
1362 UDISRRM5(3)
1363          A = MD[0]
1364          A = MD[0]
1365          :USBRM5

1366 UCTTR(77)          complex to the power
1367          E + 0, Z                          "EXPONENT = 0?
1368      Y,  M[B - 5] = E                      "ZO JA IM(RESULTAAT) = 0
1369      Y,  E = 1                             "EN RE(RESULTAAT) = 1
1370      Y,  B - 2
1371      Y,  GOTOR(MC[1])
1372          A = E                             "NEEM EXPONENT
1373          M[B + 8] = A                      "ONTHOUD HET TEKEN
1374          RUA(15), Z                        "IS EXPONENT INTEGER?
1375      N,  A = 247
1376      N,  GOTO(:UDYNERR)
1377          MC = E                            "BERG EXPONENT OP
1378          E = M[B - 7], Z                   "IM(GRONDTAL) = 0?
1379          E = MC[ - 2]
1380      Y,  GOTO(:UTTR[3])                    "ZO JA, DAN NAAR REELE GEVAL
1381          S = G, P                          "EXPONENT POSITIEF
1382          A = E
1383      N,  S = - S                           "ZO NEEN, NEEM INVERSE
1384      N,  A = - A
1385          E = 0
1386          MC = E
1387          E = 1, P                          "BEGIN LOOP MET RE(LOPEND PRODUKT) = 1
1388          M[B] = E                          "EN IM(LOPEND PRODUCT) = 0
1389      Y,  JUMP(13)
1390          E = M[B - 5], Z                   "VORM(A + BI) ↑ (2 ↑ I)
1391      N,  E * M[B - 7]
1392      N,  E + E
1393          M[B + 2] = E
1394          E = M[B - 7], Z
1395      N,  E * M[B - 7]
1396          M[B + 4] = E
1397          E = M[B - 5], Z
1398      N,  E * M[B - 5]
1399          E - M[B + 4]
1400          M[B - 5] = E
1401          E = M[B + 2]
1402          M[B - 7] = E
1403      U,  S '*' 1, Z
1404      Y,  JUMP(14)                          "WERK ZO NODIG HET LOPEND
1405          E = M[B], Z                       "PRODUKT BIJ
1406      N,  E * M[B - 7]
1407          M[B + 2] = E
1408          E = M[B - 2], Z
1409      N,  E * M[B - 7]
1410          M[B + 4] = E
1411      N,  E = M[B - 2]
1412      N,  E * M[B - 5]
1413          E + M[B + 2]
1414          M[B - 2] = E                      "EN BERG DIT OP
1415          E = M[B - 5], Z
1416      N,  E * M[B]
1417          E - M[B + 4]
1418          M[B] = E
1419          RUAS(1), Z                        "ALS EXPONENT NOG NIET GEHEEL AFGEWERKT
1420      Y,  S = S, Z
```

```
1421      N,  JUMP( - 32)                          "IS, BEGIN DAN OPNIEUW
1422          B - 4
1423          A = M[B + 10], R
1424      Y,  JUMP(14)
1425          E = M[B + 2], Z                      "VORM ZO NODIG(U * IV) + (= 1)
1426      N,  E * M[B - 2]
1427          M[B + 6] = E
1428          E = M[B + 4], Z
1429      N,  E * M[B + 4]
1430          E + M[B + 6]
1431          M[B + 6] = E
1432          E = M[B + 2], Z
1433      N,  E/M[B + 6]
1434          E = -E
1435          M[B + 2] = E
1436          E = M[B + 4], Z
1437      N,  E/M[B + 6]
1438          M[B + 4] = E
1439          DO(MD[ - 1])
1440          E = M[B + 2]                         "ZET RESULTAAT OP GOEDE PLAATS
1441          M[B - 3] = E
1442          E = M[B + 4]
1443          GOTOR(MC[1])

1444 UEIDI(14)    integer division
1445          E + 0, Z                             "DELER 0?
1446      Y,  A = 244
1447      Y,  GOTO(:UDYNERR)
1448          S = E
1449          RUS(15), Z                           "DELER GEHEEL?
1450      N,  A = 245
1451      N,  GOTO(:UDYNERR)
1452          M[B] = E
1453          G = M[B - 2]
1454          E/MC, R
1455      N,  E = - E                              "NEEM ABSOLUTE WAARDE
1456          SUBC(:UENTIER)                       "VAN HET QUOTIENT
1457      N,  E = -E
1458          GOTOR(M[B + 1])

1459 UDIDI(18)
1460          E + 0, Z integer division            "DELER 0?
1461      Y,  A = 244
1462      Y,  GOTO(:UDYNERR)      one of these two is for long integers
1463          S = E
1464          RUS(15), Z                           "DELER GEHEEL?
1465      N,  A = 245
1466      N,  GOTO(:UDYNERR)
1467          M[B] = E
1468          E = M[B - 3]
1469          S = E
1470          RUS(15), Z                           "DEELTAL GEHEEL?
1471      N,  A = 246
1472      N,  GOTO(:UDYNERR)
1473          E/MC, R
1474      N,  E = - E                              "NEEM ABSOLUTE WAARDE
1475          SUBC(:UENTIER)
1476      N,  E = - E
1477          GOTOR(MC[1])
1478 UROL IN EE(1)
```

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```
1479          E * E
1480 UPOL IN E(8)
1481          M[B] = E
1482      U,  JUMP(0)                          "MAAK OF SCHOON
1483          E = MS                           "NEEM LAATSTE COEFFICIENT
1484          E * M[B]                         "X ARGUMENT
1485          E + MS[ - 2]                     "+ COEFFICIENT
1486      U,  GOTOR(MC[ - 1])                  "IF OF THEN ERUIT
1487          S - 2
1488          JUMP( - 5)
1489 UENTIER(1)
1490          E + 0, R
1491 UENTIER1(12)
1492      U,  S = E, E
1493      Y,  GOTOR(MC[ - 1])                      "ARGUMENTAL GEHEEL
1494          E - MT[7], E                         "+ 0 < E < .5?
1495      Y,  JUMP(4)                              "DAN ENTIER = + 0
1496      U,  S = E, E                             "E - 0,5 INTEGER?
1497      Y,  GOTOR(MC[ - 1])
1498          E + DRT[11]
1499          E - DRT[11], Z
1500      Y,  E = 0
1501          GOTOR(MC[ - 1])
1502          - 65535                              ",5
1503          + 1

1504 UCOS(2)
1505          A = 1                            "COS(X) = SIN(X + PI/2)
1506          JUMP(1)
```