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 2                                    /    REDAC SOFTWARE LIMITED
 3                                    /
 4                                    /1   SUITE         : P.C.B. SUITE
 5                                    /2   PROGRAM TITLE : REDAL3 MK5
 6                                    /3   ROUTINE TITLE : MANHT
 7                                    /
 8                                    /    THIS PROGRAM SOURCE FILE IS SUPPLIED IN CONFIDENCE TO THE
 9                                    /    CUSTOMER; THE CONTENTS OR DETAILS OF ITS OPERATION MAY
10                                    /    ONLY BE DISCLOSED TO PERSONS EMPLOYED BY THE CUSTOMER WHO
11                                    /    REQUIRE A KNOWLEDGE OF THE SOFTWARE CODING TO CARRY OUT
12                                    /    THEIR JOB. DISCLOSURE TO ANY OTHER PERSON MUST HAVE PRIOR
13                                    /    AUTHORISATION FROM THE DIRECTORS OF REDAC SOFTWARE LIMITED.
14                                    /
15                                    /4   AUTHOR: TRANSLATED FROM FORTRAN BY K. FOSTER
16                                    /5   DATE  : DEC 1974
17                                    /
18                                    /6   PURPOSE: DRIVES CHECKING ROUTINES
19                                    /
20                                    /7   CALLING SEQUENCE AND DESCRIPTION OF PARAMETERS
21                                    /
22                                    /    CALL MANHT
23                                    /
24                                    /8   REGISTERS USED: XR,LR,MQ
25                                    /
26                                    /9   LOCAL GLOBALS
27                                         .GLOBL MANHT
28                                    /
29                                    /10  EXTERNAL GLOBALS
30                                         .GLOBL MESS2,DFLPK,MANHAT,BUTTON,PTCOMP,DRAWCP
31                                    /
32                                    /11  COMMON AREAS
33      00000 R 000000 A             .XXMON .CBD .XX 1
34      00001 R 000000 A             PADS .CBD PADS 1
35      00002 R 000000 A             TRAKS .CBD TRAKS 1
36      00003 R 000000 A             EOCOPP .CBD EOCOPP 1
37      00004 R 000000 A             EOBRD .CBD EOBRD 1
38      00005 R 000000 A             EOLIB .CBD EOLIB 1
39      00006 R 000000 A             EOCONN .CBD EOCONN 1
40      00007 R 000000 A             EOCOMP .CBD EOCOMP 1
41      00010 R 000000 A             EOROUT .CBD EOROUT 1
42                                    /
43                                    /
44              641000 A             ECLA=641000
45                                           .EJECT
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46      00011 R 000000 A    MANHT   0
47      00012 R 735000 A            CLX
48      00013 R 200253 R            LAC     (6
49      00014 R 722000 A            PAL
50      00015 R 230000 R    LUP     LAC*    .XXMON,X        /COPY D.S. ADDRESSES ETC TO LOCAL VARIABLES
51      00016 R 050237 R            DAC     COPPER,X
52      00017 R 725001 A            AXS     1
53      00020 R 600015 R            JMP     LUP
54      00021 R 120251 E    AGAIN   JMS*    MESS2   /DISPLAY MESSAGE
55      00022 R 600024 R            JMP     .+1+1
56      00023 R 000234 R            .DSA    THOU
57      00024 R 600065 R            JMP     FOR1
58      00025 R 241566 A            .ASCII  /(72H KEY  OP, 1  CHK ONE, 2, 3   CHK/
        00026 R 244100 A
        00027 R 456133 A
        00030 R 120100 A
        00031 R 476405 A
        00032 R 420142 A
        00033 R 201010 A
        00034 R 344226 A
        00035 R 202371 A
        00036 R 642530 A
        00037 R 201445 A
        00040 R 420146 A
        00041 R 201010 A
        00042 R 344226 A
59      00043 R 202472 A            .ASCII  / SQUARE, 4  CHK ROUND, 5  PTHOLE, 6  EXIT_)/
        00044 R 152602 A
        00045 R 512125 A
        00046 R 420150 A
        00047 R 201010 A
        00050 R 344226 A
        00051 R 202451 A
        00052 R 752634 A
        00053 R 421304 A
        00054 R 032500 A
        00055 R 202412 A
        00056 R 444236 A
        00057 R 462125 A
        00060 R 420154 A
        00061 R 201010 A
        00062 R 554222 A
        00063 R 522765 A
        00064 R 100000 A
60      00065 R 120245 E    FOR1    JMS*    BUTTON  /READ KEYS
61      00066 R 040235 R            DAC     N1      /
62      00067 R 721000 A            PAX
63      00070 R 610070 R            JMP     .+0,X   /DISPATCH ON NO OF KEY HIT
64      00071 R 600077 R            JMP     CHKONE  /CHECK ONE
65      00072 R 600021 R            JMP     AGAIN   /NO OPERATION
66      00073 R 600121 R            JMP     CHECK   /CHECK ROUND
67      00074 R 600121 R            JMP     CHECK   /CHECK SQUARE
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68        00075 R 600223 R              JMP     ▸THCHK   /CHECK P.T.H.
69        00076 R 620011 R    EXIT      JMP*    MANHT    /EXIT
70                                       /
71                                       /
72        00077 R 120251 E    CHKONE    JMS*    MESS2    /DISPLAY MESSAGE
73        00100 R 600102 R              JMP     .+1+1
74        00101 R 000234 R              .DSA    THOU
75        00102 R 600113 R              JMP     FOR2
76        00103 R 241426 A              .ASCII  /(14H SELECT ROUTE_)/
          00104 R 444100 A
          00105 R 516131 A
          00106 R 442606 A
          00107 R 521012 A
          00110 R 247652 A
          00111 R 522133 A
          00112 R 724400 A
77        00113 R 120246 E    FOR2      JMS*    DFLPK    /LOOK FOR LIGHT PEN SEE
78        00114 R 600116 R              JMP     .+1+1
79        00115 R 000254 R              .DSA    (4
80        00116 R 040236 R              DAC     N2
81        00117 R 741300 A              SPA!SNA
82        00120 R 600021 R              JMP     AGAIN    /EDGE OF PICTURE SEEN
83                                       /
84        00121 R 200235 R    CHECK     LAC     N1
85        00122 R 723775 A              AAC     -3
86        00123 R 040235 R              DAC     N1
87        00124 R 120251 E              JMS*    MESS2
88        00125 R 600127 R              JMP     .+1+1
89        00126 R 000234 R              .DSA    THOU
90        00127 R 600136 R              JMP     FOR3
91        00130 R 241571 A              .ASCII  /(7H  BUSY_)/
          00131 R 020100 A
          00132 R 412532 A
          00133 R 354676 A
          00134 R 244000 A
          00135 R 000000 A
92        00136 R 220002 R    FOR3      LAC*    TRAKS
93        00137 R 040153 R              DAC     TADD
94        00140 R 220001 R              LAC*    PADS
95        00141 R 040154 R              DAC     PADD
96        00142 R 120250 E              JMS*    MANHAT
97        00143 R 600157 R              JMP     .+1+13
98        00144 R 400243 R              .DSA    COMP!400000
99        00145 R 400007 R              .DSA    EOCOMP!400000
100       00146 R 400242 R              .DSA    CONN!400000
101       00147 R 400006 R              .DSA    EOCONN!400000
102       00150 R 400241 R              .DSA    LIB!400000
103       00151 R 000244 R              .DSA    ROUTE
104       00152 R 400010 R              .DSA    EOROUT!400000
105       00153 R 000000 A    TADD
106       00154 R 000000 A    PADD
107       00155 R 000236 R              .DSA    N2
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108        00156 R 000235 R              .DSA    N1
109        00157 R 200236 R              LAC     N2
110        00160 R 741200 A              SNA
111        00161 R 600166 R              JMP     L8        /N2=0
112        00162 R 741100 A              SPA
113        00163 R 600171 R              JMP     L10       /N2>0
114        00164 R 140235 R              DZM     N1
115        00165 R 600176 R              JMP     DRAW2
116                              /
117        00166 R 651000 A      L8      ECLA!CLQ
118        00167 R 120247 E              JMS*    DRAWCP  /REDRAW PICTURE
119        00170 R 600021 R              JMP     AGAIN
120                              /
121        00171 R 750030 A      L10     CLA!IAC
122        00172 R 040235 R              DAC     N1
123        00173 R 200236 R              LAC     N2
124        00174 R 740031 A              TCA
125        00175 R 040236 R              DAC     N2
126        00176 R 750030 A      DRAW2   CLA!IAC
127        00177 R 652000 A              LMQ
128        00200 R 200236 R              LAC     N2
129        00201 R 120247 E              JMS*    DRAWCP  /REDRAW RELEVANT PARTS OF DISPLAY
130        00202 R 200235 R              LAC     N1
131        00203 R 741300 A              SPA!SNA
132        00204 R 600220 R              JMP     FORM1
133        00205 R 120251 E              JMS*    MESS2   /DISPLAY MESSAGE
134        00206 R 600210 R              JMP     .+1+1            .
135        00207 R 000234 R              .DSA    THOU
136        00210 R 600217 R              JMP     FORM
137        00211 R 241631 A              .ASCII  /(9H  FAILED_)/
           00212 R 020100 A
           00213 R 432031 A
           00214 R 146212 A
           00215 R 422765 A
           00216 R 100000 A
138        00217 R 120245 E      FORM    JMS*    BUTTON  /WAIT FOR KEY HIT
139        00220 R 750030 A      FORM1   CLA!IAC
140        00221 R 040235 R              DAC N1
141        00222 R 600077 R              JMP     CHKONE
142                              /
143                              /
144        00223 R 120252 E      PTHCHK  JMS*    PTCOMP  /CHECK THRO' HOLES
145        00224 R 600233 R              JMP     .+1+6
146        00225 R 400241 R              .DSA    LIB!400000
147        00226 R 400005 R              .DSA    EOLIB!400000
148        00227 R 400243 R              .DSA    COMP!400000
149        00230 R 400007 R              .DSA    EOCOMP!400000
150        00231 R 000244 R              .DSA    ROUTE
151        00232 R 400010 R              .DSA    EOROUT!400000
152        00233 R 620011 R              JMP*    MANHT
153                                      .EJECT
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154                                    .DEC
155          00234 R 001750 A    THOU  1000
156                                    .OCT
157          00235 R 000000 A    N1
158          00236 R 000000 A    N2
159                              /
160                              /     DATA STRUCTURE ADDRESS AND LENGTHS
161                              /
162          00237 R 000000 A    COPPER
163          00240 R 000000 A    BOARD
164          00241 R 000000 A    LIB
165          00242 R 000000 A    CONN
166          00243 R 000000 A    COMP
167          00244 R 000000 A    ROUTE
168                000000 A            .END
             00245 R 000245 E *E
             00246 R 000246 E *E
             00247 R 000247 E *E
             00250 R 000250 E *E
             00251 R 000251 E *E
             00252 R 000252 E *E
             00253 R 000006 A *L
             00254 R 000004 A *L
                SIZE=00255      NO ERROR LINES
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AGAIN    00021    54*    65      82     119
BOARD    00240    163*
BUTTON   00245    30     60      138
CHECK    00121    66     67      84*
CHKONE   00077    64     72*     141
COMP     00243    98     148     166*
CONN     00242    100    165*
COPPER   00237    51     162*
DFLPK    00246    30     77
DRAWCP   00247    30     118     129
DRAW2    00176    115    126*
ECLA     641000   44*    117
EOBRD    00004    37*    37
EOCOMP   00007    40*    40      99     149
EOCONN   00006    39*    39      101
EOCOPP   00003    36*    36
EOLIB    00005    38*    38      147
EOROUT   00010    41*    41      104    151
EXIT     00076    69*
FORM     00217    136    138*
FORM1    00220    132    139*
FOR1     00065    57     60*
FOR2     00113    75     77*
FOR3     00136    90     92*
LIB      00241    102    146     164*
LUP      00015    50*    53
L10      00171    113    121*
L8       00166    111    117*
MANHAT   00250    30     96
MANHT    00011    27     46*     69     152
MESS2    00251    30     54      72     87    133
N1       00235    61     84      86     108   114   122   130   140
                  157*
N2       00236    80     107     109    123   125   128   158*
PADD     00154    95     106*
PADS     00001    34*    34      94
PTCOMP   00252    30     144
PTHCHK   00223    68     144*
ROUTE    00244    103    150     167*
TADD     00153    93     105*
THOU     00234    56     74      89     135   155*
TRAKS    00002    35*    35      92
.XXMON   00000    33*    50
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