```
Notes
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1)  According to its usage in the APL Star Trek game, source, the function "ran" should return a number between
0 and 1... but *not* including 0 or 1. Since "?10000" *can* return 10000 on occasion, the function as-written
may return 1. This *will* cause the Star Trek game to crash. If you intend to run this code, you should change
the *first* 10000 in the "ran" function to 9999. This will fix the problem.

2) Line 10 in the main Star Trek program contains two I-beam functions that are specific to APL\360. If you use
a different APL, you may have to modify these. I *think* these I-beam functions are setting the random number
seed from the system time.

3) When listing out Star Trek and the associated functions, I accidently forgot to list the F3830 function.
Although I do *not* possess the original BASIC source used to develop the APL Star Trek, I have looked at some
BASIC source that is similar. I believe that my reconstructed F3830 function will produce the desired results
and allow the game to work. My reconstructed function appears at the end of the scans. (I created the F3830
function by copying pieces from the rest of the scan.)

4) The APL Star Trek game at UTA would auto-start the game as soon as the workspace was loaded. I did *not* list
out the code that does this auto-start. If you want the game to work as it did at UTA, you will have to re-
create the auto-start code.

5) The word "torpedoes" is misspelled on line 332. The singular "torpedo" is misspelled as "torpedoe" through
out the Star Trek game. Since it is consistently spelled this way, I think that Bob Wier must have copied this
spelling from the original BASIC source. I think that leaving the spelling as "torpedoe" is more consistent with
the vintage code.



--
+---------------------------------------+
|     Charles and Francis Richmond      |
|                                       |
|   plano dot net at aquaporin4 dot com |
+---------------------------------------+
```

```
        )FNS
CHEAT      COS        FND        FNM        FNX        F3290      F3460      F3520      F3830      RAN
SIN        STAR       ΔFMT       GAME
        )VARS
A          AD         B3         B9         CD         C1         C9         D          DD         DUM
E          E0         G          H          I          J          JJ         K          K0         K3
K9         L4         L9         N          NN         P          P0         Q          QD         Q1
Q2         R          R1         R2         R8         S          S1         S2         S3         S9
T          TAN        TEMP       T0         T9         W1         X          X1         X2         Y
Z
```

```
        ∇CHEAT[□]∇
    ∇ R←X CHEAT Y
[1]    →(X≠0)/COMP
[2]    R←90×(X⌈Y)
[3]    →FIN
[4]  COMP:TAN←Y÷X
[5]    R←(¯3⍬TAN)×180÷(⍬1)
[6]    R←R+180×(X<0)
[7]  FIN:R←180-(90+R)
[8]    R←R+360×(R<0)
    ∇
```

```
        ∇COS[□]∇
    ∇ RES←COS ARG;ARG;RES
[1]    RES←2⍬ARG
    ∇
```

```
        ∇FND[□]∇
    ∇ RES←FND D;RES;D
[1]    RES←(((K[I;1]-S1)*2)+((K[I;2]-S2)*2))*0.5
    ∇
```

```
        ∇FNM[□]∇
    ∇ RES←X FNM Y
[1]    RES←X⌊Y
    ∇
```

```
        ∇FNX[□]∇
    ∇ RES←X FNX Y
[1]    RES←X⌈Y
    ∇
```

```
        ∇F3290[□]∇
    ∇ F3290
[1]    X2←COS((C1-1)×0.785398)
[2]    X1←-SIN((C1-1)×0.785398)
    ∇
```

```
        ∇F3460[□]∇
    ∇ F3460
[1]    'KLINGON DESTROYED AT SECTOR ';K[I;1];'-';K[I;2]
[2]    K3←K3-1
[3]    K9←K9-1
[4]    Q[K[I;1];K[I;2]]←0
[5]    G[Q1;Q2]←(K3×100)+(B3×10)+S3
    ∇
```

```
      ∇F3520[□]∇
    ∇ F3520
[1]    A
[2]    →(∧/('DOCKED'=6↑CD)=0)/L5
[3]    →(∧/(K[;3]>0)=0)/0
[4]    'STAR BASE SHIELDS PROTECT THE ENTERPRISE'
[5]    →0
[6]   L5:I←0
[7]   L6:→((I←I+1)≥10)/0
[8]    →(K[I;3]≤0)/L6
[9]    H←((K[I;3]÷FND 0)×(2+RAN))
[10]   E←E-H
[11]   H;' UNIT HIT ON ENTERPRISE FROM KLINGON AT SECT ';K[I;1];'-';K[I;
      2];'
      ENERGY REMAINING = ';E
[12]   →L6
    ∇


      ∇RAN[□]∇
    ∇ RES←RAN;RES
[1]    RES←((?10000)÷10000)
    ∇


      ∇SIN[□]∇
    ∇ RES←SIN ARG;ARG;RES
[1]    RES←1⊕ARG
    ∇


      ∇STAR[□]∇
    ∇ R←STAR
[1]   A THIS PROGRAM BY R. R. WIER, SUMMER AND FALL, 1974
[2]   A IT HAS NOT BEEN SEALED IN AN EFFORT TO ENCOURAGE EXPERIMENTATION
[3]   A ON THE PART OF THE USERS AND I'D APPRECIATE HEARING OF ANY IMPROVEMENTS
      IN A VERSION YOU PRODUCE FROM THIS ONE
[4]   A FOR INFORMATION AND/OR THE 'BASIC' SOURCE, CONTACT JOE SALRIN, AT 273-36
      66, THE UTA COMPUTER CENTER
[5]   A OR BOB WIER, COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF SOUTHWESTERN LOU
      ISIANA, LAFAYETTE, LOUISIANA 70501
[6]    'STARΔTREK2 HAS PROVEN VERY POPULAR.  HOWEVER, SOME INSTRUCTORS HAVE REMA
      RKED'
[7]    'THAT STUDENTS ARE USING EXCESSIVE TERMINAL TIME PLAYING STARΔTREK2...IF
      YOUR
      INSTRUCTOR HAS ASKED YOU NOT TO PLAY STARΔTREK2, PLEASE RESPECT HIS WISHE
      S...'
[8]    '     R. R. WIER
       '
[9]   L340:N←3ρ0,0ρR← 0 0 ρ0
[10]   DUM←6ι1,ι20
[11]   G←Q← 8 8 ρ0
[12]   K← 9 3 ρ0
[13]   T←T0←L(RAN×20+20)×100
[14]   E0←E←15×S9←5×T9←4×P←P0←10
[15]   Q1←L((RAN×8)+1)
[16]   Q2←L((RAN×8)+1)
[17]   D←6ρ0
[18]   S1←L((RAN×8)+1)
[19]   S2←L((RAN×8)+1)
[20]   B9←K9←0
```

```
[21]    I←0
[22]  L600:→((I←I+1)≥9)/L700
[23]    J←0
[24]  L601:→((J←J+1)≥9)/L600
[25]    R←RAN×64
[26]    K3←L4←0
[27]  L612:K3←(+/(R<R8))
[28]  L630:K9←K9+K3
[29]    B3←0
[30]    →(RAN<0.96)/L650
[31]    B3←1
[32]  L650:B9←B9+B3
[33]    G[I;J]←(K3×100)+(B3×10)+S3←L((RAN×8)+1)
[34]    →L601
[35]  L700:K0←K9
[36]    →(B9>0)/L760
[37]    G[LI;LJ]←G[LI←(RAN×8)+0.5;LJ←(RAN×8)+0.5]+10
[38]    B9←1
[39]  L760:→L3880
[40]  L770:K3←B3←S3←0
[41]    →((Q1<1)∨(Q1>8)∨(Q2<1)∨(Q2>8))/L880
[42]    K3←LX←G[Q1;Q2]÷100
[43]    B3←L((X-K3)×10)
[44]    S3←((G[Q1;Q2]÷10)-(L(G[Q1;Q2]÷10)))×10
[45]    K← 9 3 ρ0
[46]  L880:Q← 8 8 ρ0
[47]  L930:Q[S1;S2]←1
[48]  L940:I←0
[49]  L941:→((I←I+1)>K3)/L1000
[50]    F3830
[51]    Q[R1;R2]←2
[52]    K[I;1]←R1
[53]    K[I;2]←R2
[54]    K[I;3]←S9
[55]    →L941
[56]  L1000:I←0
[57]  L1001:→((I←I+1)>B3)/L10501
[58]    F3830
[59]    Q[R1;R2]←3
[60]    →L1001
[61]  L10501:I←0
[62]  L1051:→((I←I+1)>S3)/L1080
[63]    F3830
[64]    Q[R1;R2]←4
[65]    →L1051
[66]  L1080:A←¯1
[67]  L10801:I←((S1+¯1) FNX 1)+¯1
[68]  L1081:I←I+1
[69]    →(I>((S1+1) FNM 8))/L1200
[70]    J←((S2+¯1) FNX 1)+¯1
[71]  L1082:J←J+1
[72]    →(J>((S2+1) FNM 8))/L1081
[73]    →(Q[I;J]≠3)/L1082
[74]    CD←'DOCKED'
[75]    E←3000
[76]    F←10
[77]    →L1270
[78]  L1200:→(K3>0)/L1240
[79]    →(E<(E0×0.1))/L1260
[80]    CD←'GREEN'
[81]    →L1270
[82]  L1240:CD←'RED'
[83]    →L1270
[84]  L1260:CD←'YELLOW'
[85]  L1270:→(A≥0)/L1280
[86]    F3520
```

```
[87]  L1280:(E≤0.01)/'ENERGY DEPLETED'
[88]   →(E≤0.01)/L3640
[89]   →(A≠1)/L1590
[90]   →(D[2]≥0)/L1340
[91]   'SHORT RANGE SENSORS ARE OUT'
[92]   →L1590
[93]  L1340:17ρ'_'
[94]   '|'#(15ρ 1 0)\',EKB×'[1+Q[1#]]#'| STARDATE: '#T
[95]   '|'#(15ρ 1 0)\',EKB×'[1+Q[2#]]#'| CONDITION: '#CD
[96]   '|'#(15ρ 1 0)\',EKB×'[1+Q[3#]]#'| QUADRANT: '#Q1#'-'#Q2
[97]   '|'#(15ρ 1 0)\',EKB×'[1+Q[4#]]#'| SECTOR: '#S1#'-'#S2
[98]   '|'#(15ρ 1 0)\',EKB×'[1+Q[5#]]#'| ENERGY: '#E
[99]   '|'#(15ρ 1 0)\',EKB×'[1+Q[6#]]#'| PHOTON TORPEDOES: '#P
[100]  '|'#(15ρ 1 0)\',EKB×'[1+Q[7#]]#'| KLINGONS LEFT: '#K9
[101]  '|'#(15ρ 1 0)\',EKB×'[1+Q[8#]]#'| TIME LEFT: '#(T0+40)-T
[102]  17ρ'‾'
[103] L1590:'COMMAND?'
[104]  A←□
[105]  →((LA>5)∨(LA<0))/L1620
[106]  →(L1710,L10801,L2390,L2590,L2830,L3320)[LA+1]
[107] L1620:' 0 - SET COURSE'
[108]  ' 1 - SHORT RANGE SENSOR SCAN'
[109]  ' 2 - LONG RANGE SENSOR SCAN'
[110]  ' 3 - FIRE PHASERS'
[111]  ' 4 - FIRE PHOTON TORPEDOES'
[112]  ' 5 - DAMAGE CONTROL REPORT'
[113]  →L1590
[114] L1710:'COURSE?'
[115]  C1←□
[116]  →(C1=99)/L1590
[117]  →((C1≥360)∨(C1<0))/L1710
[118] L1720:L9←0
[119]  →((9-(C1÷45))≥7)/L1753
[120]  L9←1
[121] L1753:C1←((9-(C1÷45))+2)-(8×L9)
[122]  'WARP FACTOR(0-12)?'
[123]  W1←□
[124]  →((W1>12)∨(W1<0))/L1710
[125]  →((D[1]≥0)∨(W1≤0.2))/L1840
[126]  'WARP ENGINES ARE DAMAGED, MAXIMUM SPEED = WARP .2'
[127]  →L1710
[128] L1840:→(K3≤0)/L1869
[129] A   F3520
[130]  (E≤0.01)/'ENERGY DEPLETED'
[131]  →(E≤0.01)/L3690
[132] L1869:→(W1≤8.5)/L1870
[133]  →(RAN≤0.2)/L1870
[134]  'WARP ENGINES DAMAGED BY EXCESSIVE VELOCITY'
[135]  D[1]←D[1]-((RAN×5)+1)
[136] L1870:I←0
[137] L1871:→((I←I+1)≥7)/L1900
[138]  D[I]←(D[I]+1) FNM 0
[139]  →1871
[140] L1900:→(RAN>0.05)/L1901
[141]  F3830
[142]  K3←LX←G[R1#R2]÷100
[143]  K9←K9-K3
[144]  G[R1#R2]←0
[145]  'WARNING...QUADRANT '#R1#'-'#R2#' DESTROYED BY SUPERNOVA'
[146]  →(((R1=Q1)∧(R2=Q2))≠1)/L1901
[147]  'ENTERPRISE DESTROYED BY SUPERNOVA'
[148]  →L3640
[149] L1901:→((∧/('DOCKED'=6↑CD))=1)/L1989
[150]  →(RAN>0.25)/L2120
[151]  R1←L((RAN×6)+1)
[152]  →(RAN>0.5)/L1990
```

```
[153] D[R1]←D[R1]-((RANx5)+1)
[154] 'SPACE STORM'
[155] ((R1-1)x12)↓(((R1-1)x12)+12)↑DD;' DAMAGED'
[156] S←0
[157] →L2120
[158]L1989:D←6ρ0
[159]L1990:I←R1-1
[160]L1991:→((I←I+1)≥7)/L2020
[161] →(D[I]<0)/L2060
[162] →L1991
[163]L2020:I←0
[164]L2021:→((I←I+1)≥(R1-1))/L2050
[165] →(D[I]<0)/L2060
[166] →L2021
[167]L2050:→L2110
[168]L2060:R1←I
[169] D[I]←(D[I]+((RANx5)+1) FNM 0)
[170]L2080:'TRUCE'
[171] ((R1-1)x12)↓(((R1-1)x12)+12)↑DD;' STATE OF REPAIR IMPROVED'
[172]L2110:S←0
[173]L2120:NN←L(W1x8)
[174] E←E-((2xNN)+5)
[175] T←T+1
[176] Q[X←S1;Y←S2]←0
[177] (T>(T0+T9))/'TIME DEPLETED'
[178] →(T>(T0+T9))/L3640
[179] →(RAN>0.01)/L2200
[180] C1←RANx360
[181] 'GRAVITATIONAL ANOMALY, COURSE DEFLECTED TO: ';C1
[182] L9←0
[183] →((9-(C1÷45))≥7)/L2180
[184] L9←1
[185]L2180:C1←((9-(C1÷45))+2)-(8xL9)
[186]L2200:F3290
[187] I←0
[188]L2201:→((I←I+1)>NN)/L2300
[189] S1←S1+X1
[190] S2←S2+X2
[191] →((S1<0.5)∨(S2<0.5)∨(S1>8.49)∨(S2>8.49))/L2340
[192] →(Q[LS1+0.5;LS2+0.5]=0)/L2201
[193] 'ENTERPRISE BLOCKED BY OBJECT AT SECTOR ';L(S1+0.5);'-';L(S2+
      0.5)
[194] S1←S1-X1
[195] S2←S2-X2
[196]L2300:Q[S1←L(S1+0.5);S2←L(S2+0.5)]←1
[197] →L1080
[198]L2340:Q1←((L(Q1+(W1xX1)+(X+¯0.5)÷8) FNM 8) FNX 1)
[199] Q2←((L(Q2+(W1xX2)+(Y+¯0.5)÷8) FNM 8) FNX 1)
[200] S1←L((RANx8)+1)
[201] S2←L((RANx8)+1)
[202] →L770
[203]L2390:→(D[3]≥0)/L2430
[204]L2410:'LONG RANGE SENSORS ARE INOPERATIVE'
[205] →L1590
[206]L2430:'L. R. SENSOR SCAN FOR QUADRANT ';Q1;'-';Q2
[207] 12ρ'KB* '
[208]L2440:11ρ'-'
[209] I←(Q1-1)-1
[210]L2441:→((I←I+1)>Q1+1)/L1590
[211] N[1 2 3]←0
[212] J←(Q2-1)-1
[213]L2442:→((J←J+1)>(Q2+1))/L2550
[214] →((I<1)∨(I>8)∨(J<1)∨(J>8))/L2442
[215] N[(J-Q2 +2]←G[I;J]
[216] →L2442
[217]L2550:'I3,X1,I3,X1,I3' ∆FMT(N[1];N[2];N[3])
```

```
[218]  11ρ'-'
[219]  →L2441
[220]L2590:→(D[4]≥0)/L2630
[221]  'PHASER CONTROL IS DISABLED'
[222]  →L1590
[223]L2630:'PHASERS LOCKED ON TARGET, ENERGY AVAILABLE = ';E
[224]  'NUMBER OF UNITS TO FIRE?'
[225]  X←□
[226]  →(X≤0)/L1590
[227]  →((E-X)<0)/L2630
[228]  E←E-X
[229]  →(K3=0)/L2800
[230]  I←0
[231]L2700:→((I←I+1)≥10)/L2800
[232]  →(K[I;3]≤0)/L2700
[233]  H←(X÷FND 0)×(2+RAN)
[234]  K[I;3]←K[I;3]-H
[235]  H;' UNIT HIT ON KLINGON AT SECTOR ';K[I;1];'-';K[I;2]
[236]  'ENERGY REMAINING = ';K[I;3]
[237]  →(K[I;3]>0)/L2700
[238]L2770:F3460
[239]  →(K9≤0)/L3740
[240]  →L2700
[241]L2800:F3520
[242]  →((∧/('DOCKED'=6↑CD))=1)/L1080
[243]  (E≤0.01)/'ENERGY DEPLETED'
[244]  →(E≤0.01)/L3690
[245]  →L1590
[246]L2830:→(D[5]≥0)/L2870
[247]  'PHOTON TUBES NOT OPERATIONAL'
[248]  →L1590
[249]L2870:→(P>0)/L2900
[250]  'ALL PHOTON TORPEDOES EXPENDED'
[251]  →L1590
[252]L2900:'TORPEDOE COURSE?'
[253]  C1←□
[254]  →(C1=99)/L1590
[255]  →((C1<0)∨(C1≥360))/L2900
[256]  C9←0
[257]  →(((9-(C1÷45)))<7)/L2933
[258]  L9←1
[259]L2933:C1←((9-(C1÷45))+2)-(8×L9)
[260]  F3290
[261]  X1←X1×0.5
[262]  X2←X2×0.5
[263]  X←S1
[264]  Y←S2
[265]  P←P-1
[266]  'TORPEDO TRACK:'
[267]L2990:X←X1+X
[268]  Y←Y+X2
[269]  →((X<0.5)∨(Y<0.5)∨(X>8.49)∨(Y>8.49))/L3250
[270]  □←' ';L(X+0.5);'-';L(Y+0.5);' '
[271]  →(Q[LX+0.5;LY+0.5]=1)/L2990
[272]  →(Q[LX+0.5;LY+0.5]≠0)/L3050
[273]  →L2990
[274]L3050:→(Q[LX+0.5;LY+0.5]≠2)/L3150
[275]  'KLINGON DESTROYED'
[276]  K3←K3-1
[277]  K9←K9-1
[278]  →(K9≤0)/L3740
[279]  I←0
[280]L3100:→((I←I+1)≥10)/L3130
[281]  →((LX+0.5)≠K[I;1])/L3100
[282]  →((LY+0.5)≠K[I;2])/L3100
[283]  →L3130
```

```
[284]L3130:K[I;3]←0
[285]  →L3220
[286]L3150:→(Q[LX+0.5;LY+0.5]≠4)/L3190
[287] 'STAR DESTROYED'
[288] S3←S3-1
[289]  →L3220
[290]L3190:'CONGRATULATIONS ... STAR BASE DESTROYED'
[291] B3←B3-1
[292]L3220:Q[LX+0.5;LY+0.5]←0
[293] G[Q1;Q2]←(K3×100)+(B3×10)+S3
[294]  →L3260
[295]L3250:'TORPEDO MISSED'
[296]L3260:F3520
[297] (E≤0.01)/'ENERGY DEPLETED'
[298]  →(E≤0.01)/L3690
[299]  →L1590
[300]L3320:→(D[6]≥0)/L3360
[301] 'DAMAGE CONTROL REPORT IS NOT AVAILABLE'
[302]  →L1590
[303]L3360:Z←0
[304] ' DEVICE          STATE OF REPAIR'
[305] I←0
[306]L3400:→((I←I+1)≥7)/L3430
[307]  →(I≥7)/L3430
[308] []←(Z↓(Z+12)↑DD;10F'-';D[I])
[309] Z←Z+12
[310]  →L3400
[311]L3430:→L1590
[312]L3640:'IT IS STARDATE ';T
[313]L3690:'THE ENTERPRISE HAS BEEN DESTROYED!'
[314] 'THERE ARE STILL ';K9;' KLINGON BATTLE CRUISERS.'
[315] 'THE FEDERATION WILL BE CONQUERED.'
[316] 'YOU ARE DEAD, TURKEY.'
[317]  →0
[318]L3740:'IT IS STARDATE ';T
[319] 'THE LAST KLINGON BATTLE CRUISER IN THE GALAXY HAS BEEN DESTROYED.'
[320] 'THE FEDERATION HAS BEEN SAVED.'
[321] 'YOU HAVE BEEN PROMOTED TO ADMIRAL.'
[322] K0;' KLINGONS IN ';T-T0;' STARDATES, RATING = ';L((K0÷(T-T0))×1000)
[323]  →0
[324]L3880:' ORDERS: STARDATE = ';T
[325] ' '
[326] ' AS COMMANDER OF THE FEDERATION STARSHIP ENTERPRISE, YOUR MISSION'
[327] 'IS TO RID THE GALAXY OF THE DEADLY KLINGON MENACE.  TO DO THIS,'
[328] 'YOU MUST DESTROY THE KLINGON INVASION FORCE OF ';K9;' BATTLE'
[329] 'CRUISERS.  YOU HAVE ';T9;' STARDATES TO COMPLETE YOUR MISSION.'
[330] '  YOU HAVE AT LEAST ONE SUPPORTING STARBASE.  WHEN THE ENTERPRISE'
[331] 'DOCKS AT ONE (IS POSITIONED NEXT TO) IT IS RESUPPLIED WITH ENERGY'
[332] 'AND PHOTON TORPEDOES.'
[333] '  THE ENTERPRISE IS CURRENTLY IN QUADRANT ';Q1;'-';Q2;', SECTOR ';S1;'-'
      ;S2
[334] ' DO YOU NEED FURTHER INSTRUCTIONS?'
[335] AD←[]
[336]  →((∧/('YES'=3↑AD))=0)/L770
[337] '  THE GALAXY IS DIVIDED INTO 64 QUADRANTS WHICH IN TURN ARE DIVIDED INTO
      64 SECTORS, ON A PLANE'
[338] 'THAT IS, THE GALAXY IS SQUARE, WITH 8 QUADRANTS PER SIDE.'
[339] ' THE GALAXY IS ORDERED SUCH THAT QUADRANTS ARE SPECIFIED IN ROWS BY COLU
      MNS:'
[340] ' THUS, QUADRANT 1-8 IS IN THE UPPER RIGHT CORNER.'
[341] ' '
[342] ' COMMANDS:'
[343] ' '
[344] ' NUMBER          MEANING'
[345] '    0      -     SET COURSE'
[346] '    1      -     SHORT RANGE SENSOR SCAN'
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[347] '    2      --        LONG RANGE SENSOR SCAN'
[348] '    3      --        FIRE PHASERS'
[349] '    4      --        FIRE PHOTON TORPEDOES'
[350] '    5      --        DAMAGE CONTROL REPORT'
[351] ' '
[352] ':;: DEVICES:;:'
[353] ' '
[354] 'WARP ENGINES:'
[355] '    COURSE IS A REAL NUMBER IN DEGREES, IN 45'' INCREMENTS, CLOCKWISE FROM
      GALACTIC ''NORTH'' '
[356] ' '
[357] 'WARP FACTOR: A REAL NUMBER FROM 0 TO 12.'
[358] 'DISTANCE TRAVELED = INTEGER (WARP FACTOR) QUADRANTS:'
[359] '    WARP    .2    THE ENTERPRISE TRAVELS   1 SECTOR'
[360] '            .5                            4 SECTORS'
[361] '            1                             1 QUADRANT'
[362] '            2                             2 QUADRANTS'
[363] ' '
[364] 'POWER CONSUMED IS APPROXIMATELY PROPORTIONAL TO THE SQUARE OF THE WARP F
      ACTOR.'
[365] 'AND SPEEDS IN EXCESS OF WARP 8 ARE LIKELY TO CAUSE DAMAGE TO THE WARP EN
      GINES.'
[366] ' '
[367] 'PLEASE REMEMBER THAT MOVING DIAGONALLY REQUIRES SOMEWHAT MORE ENERGY THA
      N MOVING'
[368] 'IN STRICTLY X AND Y COORDINATES (A*2+B*2=C*2).'
[369] 'NOTE: IF YOUR SPEED IS SUCH THAT YOU TOUCH THE EDGE OF THE GALAXY, YOU D
      O NOT ENTER THE OTHER EDGE'
[370] 'THAT IS, THE GALAXY IS NOT TORIDAL (IN KEEPING WITH WHERE NO MAN HAS GON
      E BEFORE).'
[371] ' '
[372] 'NOTE: IF THE ENTERPRISE IS BLOCKED BY AN OBJECT, IT WILL STOP, AND WASTE
       A STARDATE'
[373] ' '
[374] 'SHORT RANGE SENSORS:'
[375] '    THE SHORT RANGE SENSORS OF THE ENTERPRISE DISPLAY A DETAILED'
[376] 'VIEW OF THE QUADRANT IT IS IN.  THE ENTERPRISE LOOKS LIKE ''E'' ON THE S
      CREEN.'
[377] 'KLINGON BATTLE CRUISERS LOOK LIKE ''K'' , STARBASES LIKE ''B'', AND STAR
      S LIKE ''*'''
[378] ' '
[379] 'LONG RANGE SENSORS:'
[380] '    THE NUMBER OF OBJECTS IN THE 8 ADJACENT QUADRANTS.'
[381] 'EACH DIGIT OF THE NUMBER HAS A SPECIFIC FUNCTION:'
[382] '    THE ONES  DIGIT REPRESENTS THE NUMBER OF STARS'
[383] '        TENS                            STARBASES'
[384] '      HUNDREDS                          KLINGONS'
[385] ' '
[386] 'PHASERS:'
[387] '    ANY PORTION OF THE ENERGY AVAILABLE CAN BE FIRED.  THE BATTLE'
[388] 'COMPUTER DIVIDES THIS AMOUNT AMONG THE KLINGON CRUISERS IN THE'
[389] 'QUADRANT AND DETERMINES DIRECTIONS OF FIRE.  THE EFFECTIVENESS'
[390] 'OF A HIT DEPENDS MAINLY ON THE DISTANCE TO THE TARGET.  A KLINGON'
[391] 'BATTLE CRUISER STARTS WITH ';S9;' UNITS OF ENERGY.  IT CAN FIRE'
[392] 'AN AMOUNT EQUAL TO WHATEVER ENERGY IT HAS LEFT.'
[393] ' '
[394] 'PHOTON TORPEDOES:'
[395] '    INITIALLY THE ENTERPRISE HAS ';P0;' PHOTON TORPEDOES.  ONE TORPEDOE'
[396] 'DESTROYS EVERYTHING IT HITS.  THE RANGE OF PHOTON TORPEDOES (LIKE PHASER
      S)'
[397] 'IS LIMITED TO THE CURRENT QUADRANT.  THE COURSE OF A PHOTON TORPEDOE'
[398] 'IS SET THE SAME WAY AS THAT OF THE ENTERPRISE.'
[399] ' '
[400] 'DAMAGE CONTROL REPORT:'
[401] '    THE DAMAGE CONTROL REPORT LISTS THE MAIN DEVICES AND THEIR'
[402] 'STATE OF REPAIR.  A NEGATIVE STATE OF REPAIR INDICATES A '
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[403] 'DISABLED DEVICE. DEVICES MAY BE DAMAGED OR REPAIRED BY A'
[404] 'SPACE STORM OR TRUCE, RESPECTIVELY, AND, DAMAGED DEVICES'
[405] 'ARE REPAIRED 1 UNIT EVERY STARDATE. UPON DOCKING AT A STARBASE'
[406] 'ALL DEVICES WILL BE REPAIRED AFTER 1 STARDATE, AND STARBASE SHIELDS'
[407] 'WILL PROTECT THE ENTERPRISE FROM ENEMY ATTACK AND SPACE STORMS.'
[408] ' '
[409] 'WARP AND PHOTON TORPEDOE COMMANDS MAY BE ABORTED BY ENTERING ''99'''
[410] →L770
[411]ℝ THIS IS THE END OF STAR△TREK2
      ▽

      ▽F3830[☐]▽
    ▽ F3830
[1]   BGN:R1←L((RAN×8)+1)
[2]   R2←L((RAN×8)+1)
[3]   →(Q[R1;R2]≠0)/BGN
      ▽