

November 1984

AN ARGUS SPECIALIST PUBLICATION

# COMPUTING

The magazine for those who take their computer and video games seriously

85p

**BBC brain-bending  
with the fantastic  
Interplanetary  
Miner**

**Special FREE  
supplement  
1984's TOP 100 games**

**Gripping games  
to play on Atari,  
VIC 20, Oric,  
BBC, Amstrad,  
Atmos, Spectrum**

As seen in the national press

**WIN a  
DREAM  
HOLIDAY**

in our  
**GREAT  
COMPETITION**

**PLUS Part 1  
of 'What Wigits  
you'll Want for Christmas' —  
on the joystick trail**



# CONTENTS

**NOVEMBER 1984**

## PROGRAMS TO PLAY

**Visitors From Space..... Amstrad/10**  
See how you get on with this alien.

**Beach Hunt..... Spectrum/18**  
Find the hidden diamonds amongst the dunes.


**Interplanetary Miner..... BBC/37**  
Try out your trading skills in outer space.

**Shares..... CBM 64/80**  
Play at stocks and shares in this mammoth mind game.

**Hide It..... Oric/86**  
Find out what by playing the game.

**Nuclear Race..... Texas/90**  
You'll need nimble fingers indeed to win at this game.

**Balloonist..... Spectrum/94**  
Reach for the sky, but don't let your balloon burst.



**Editor** Elspeth Madden  
**Editorial Assistant** Mike Roberts  
**Software Assistant** Simon Rockman  
**Advertisement Manager** Julie Bates  
**Assistant Advertisement Manager** Jane Edmunds  
**Copy Control** Ann McDermott  
**Chief Executive** Jim Connell  
**Origination and Design** MM Design  
**Cover Illustration** Paul Desmond  
**Editorial/Advertisement Telephone:** 01-437 0626

**Published by:** Argus Specialist Publications Ltd  
No 1, Golden Square, London W1R 3AB  
**Printed by:** Alabaster Passmore & Sons Ltd, London & Maidstone  
**Distributed by:** Argus Press & Distributors Ltd 12-18 Paul Street London EC2A 4JS



# The Runaway Robot Replies



Dear Games Computing,  
We have recently completed a program for the 48K Oric Atmos computer with a view to it being published in your magazine. However, we do not have access to a printer, and thus a listing cannot be obtained to send to you. The program is quite large, (11K), and would take a lot of writing out manually which could incur human error.

Hence, our query: Is it possible to send the program, comprising a cassette and documentation, excluding the listing to be, hopefully, published.

Thank you for your consideration,  
Yours faithfully,  
A. Smith and I. Bland  
Mansfield

*All we really need is a tape as we print the listings directly from a working copy of the program. We never print a program from a supplied listing as we can never be sure that it is the same program that we have evaluated, this is why our listings are highly accurate and have very few errors (there are obviously certain exceptions, but by and large they are very unusual).*

*A listing can be helpful when evaluating a program but it is not really necessary. No program will ever be considered without it being supplied on tape or disk. What is really important is well written documentation, typed if possible, this aids other people in typing in your masterpiece, and us in evaluating it.*

Dear Sir,  
On reading our July edition of *Games Computing* I was appalled to see the number of Spectrum reviews in your software column, why not call your magazine 'Spectrum Computing'?

The number of Spectrum games reviewed was a massive total of 22 games!!! beating all the other games, even when they were added up, by 18 reviews!

I do not only speak for myself as I am sure that other VIC, Commodore, Atari, Dragon, and BBC owners will second my opinion.

So come on *Games Computing*. Lets have equal reviews of software for all machines.

Other than that you have an ace Mag!  
Simon Bently  
West Yorkshire

*We do not favour any particular machine at all. July had a lot of Spectrum reviews in it because a lot of Spectrum games were released that month. We can't ask the software industry to release its games in a nice spread so that we can have a balanced review section, so occasionally there are 'runs' of a particular type of game, machine, or manufacturer.*

Dear Sir,  
TI HOME COMPUTER USERS CLUB  
PO Box 190, MAIDENHEAD, Berks  
Tel: 0628-71696

It may be appropriate to warn your readers not to send any money to the above organisation.

The original TI Users Group, "TI-HOME", was transferred to this organisation, without the consent of its members, shortly before TI withdrew

Have you got any opinions to air, has someone somewhere upset you and you want to grizzle and gripe? Or maybe you're full of the joys of spring and feel like telling a happy story?

Whatever you want to say, be it good, bad or indifferent drop us a line here at Games Computing and get it off your shoulders.

Send your letters to:

'Postman Pat', Games Computing, 1 Golden Square, London W1.

from the market. This new group is understood to be in the hands of a PR Company, headed by Ms Ray Hodges(?). The first newsletter was late arriving, and the second. The third newsletter was due APRIL 1984, redated to MAY 1984 after the late arrival of the 2nd issue. There is currently no news of this third newsletter, and I understand new subscriptions are still being sought. The sub is five pounds p.a. for a quarterly newsletter.

The telephone number above leads to the Club Manager, Katie Lomax, who has no idea when the next newsletter will be published, although she does say there will be one: financed by new subscribers? She was not prepared to comment on the liquidity of the company.

For a limited company it is: the headed notepaper is in breach of the Companies Acts by not indicating that liability is limited, and by not stating the registration number, registered office, and names of directors. Ms. Lomax was unable to provide this information.

Ms Lomax does indicate that any users fed up of waiting, and applying for a refund, will receive one. If any of your readers have applied for a refund and NOT received one, I should like to hear of it.

TI owners who are tired of being led a merry dance may wish to know that there IS a TI User Group producing REGULAR newsletters... the current one being 64 pages thick. This is TI\* MES, published by Clive Scally, at 40 Barrhill, Patcham, BRIGHTON, East Sussex, BN1 8UF.

Those who formerly wrote for Tldings, the publication of TI-Home, are now writing for TI\* MES. TI\* MES is Six Pounds per year, for a THICK quarterly newsletter.

Thank you for your time.

Best wishes,  
Stephen Shaw  
Author & contributor to Tldings and TI\* MES.  
Proprietor of STAINLESS SOFTWARE.

*The TI Home Computer User's Club was set up last year in reponse to consumer demand for a professionally run club for TI-99/4A owners. We have published two issues of the club magazine to date, which was well received by our members.*

*This year we were not able to print one issue of the magazine for internal administrative reasons, but the next one will be out in October. We have advised all our members in that issue that the expiry date of their subscriptions will be extended to cover four magazines, which is what they have paid for.*

*If anyone has phoned into the club we have given them this information, and we have had no complaints. Any member wishing to have a proportion of their membership subscription refunded is welcome to write to us.*

*The club certainly has every intention of keeping going, and we would not allow our members to suffer financially in any way.*

Ray Hodges  
Chairman, TI Home Computer Users Club.



## LIONEL AND THE LADDERS

**Runs on:** TI99/4A  
**Made by:** Intrigue  
**Price:** £7.95 (Extended basic)

Having fallen for the princess from Andromeda, Lionel sets out to rescue her from deep in the labyrinth where she is imprisoned by the suns of Mars. Under keyboard control, Lionel can be made to go left and right along pathways, climb ladders (but not descend), jump to retrieve keys and leapfrog nasties, unlock doors and finally release the princess. In his pursuit he has to avoid the suns of Mars, the shades of wrath and the death stars. To reach the princess he must collect keys to unlock blue doors. On being opened, they become green and thereafter allow free passage to and fro. Red doors are exits which cannot be reentered. If Lionel falls down two levels or bumps into an adversary, he loses one of his three lives.

Both door keys collected and lives left are displayed at the bottom of the screen. Lionel can also collect treasure on the way for bonus points. Only after all doors are unlocked, can Lionel release the princess, in which case he gains an extra life and the game repeats until he loses all his lives. Since the long program is written in TI Extended Basic, there is a time lapse between keyboard entry and screen action, which is frustrating to say the least. However, with a little practice, this can be overcome and, to some extent, conquering the

delay becomes an addictive part of the game. A couple of manoeuvres were found which go unpenalized. It is relatively easy to accumulate a good score without opening a door or losing a life by repeating the same circular tour of ascending a ladder, walking a pathway, jumping down only one level and walking back to where you started. Nasties can also be avoided by moving Lionel between adjacent screens indefinitely until they pose the least threat.

High scores can be entered into a Hall of Fame and the keys controlling Lionel altered to your own choosing. But beware, because if you press return as a default when setting your keys you will end up stuck in a game with no controls. Apparently, this occurs because the main program fills the whole TI memory and error checking routines had to be limited by necessity.

The game is stylishly packaged with full instructions and is challenging, if somewhat constrained by the TI Basic. That apart, well done Intrigue for supporting the TI with a good value game.

being played, but this Teddy is the sort of Teddy that kills all your other soft toys!

The object of the game is to move your Teddy around the screen killing water snakes. But to kill them you must bite them on the behind! (This ruins the image of a Teddy being a lovable, cuddly animal). If Teddy misses and bites the snake in the middle, the snake becomes two snakes. If the snake bites Teddy, he loses a life. There are also goodies left behind by the picnickers which Teddy has to gobble up for bonuses. Picnic baskets etc. (Eat your heart out Yogi Bear).

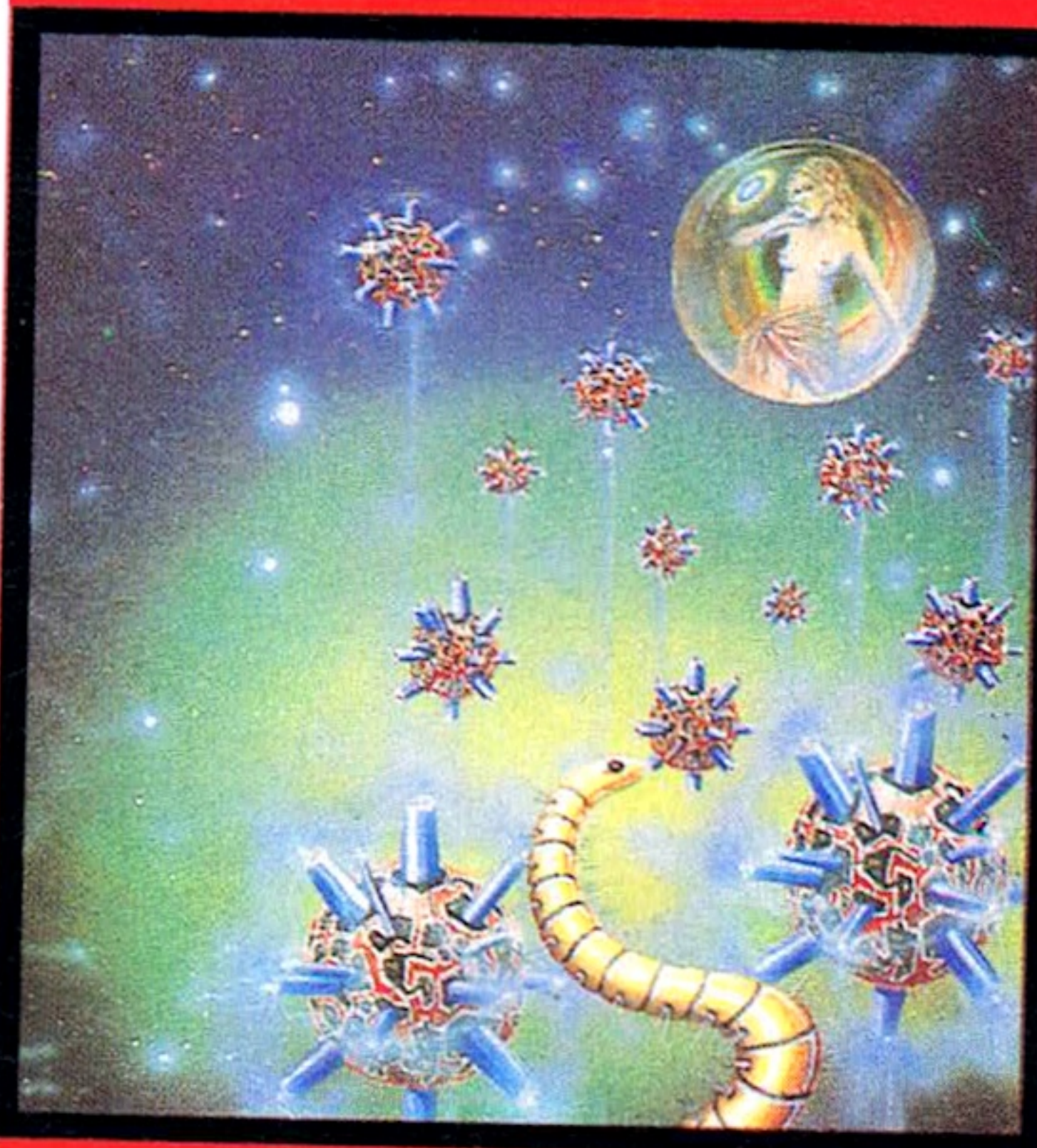
After each stage the last line of the Teddy Bears' Picnic is played and Teddy goes on to the next stage with different coloured and more intelligent snakes.

The graphics and sound effects are good and the game has a brilliant high score table. I have one small complaint, however: the high score table and the instructions are a little blurred. It's the choice of screen and ink colour.

Anyway Teddy is "better than the average game".

## MINED-OUT

ORIC 1/ATMOS GAMES FROM QUICKSILVA



RUNS IN 48K ON THE ORIC 1 OR THE ORIC ATMOS

## TEDDY

**Runs on:** Vic 20 + 8K  
**Made by:** Supersoft  
**Price:** £8.95

Teddy. Ah, a nice, innocent gentle game, you think, away from all that violence. If that's the sort of game you were hoping for. I'm afraid you will be disappointed. It all starts off innocently enough with "The Teddy Bears' Picnic"

## MINED OUT

**Runs on:** Oric-1 /Atmos  
**Made by:** Quicksilva  
**Price:** £6.95

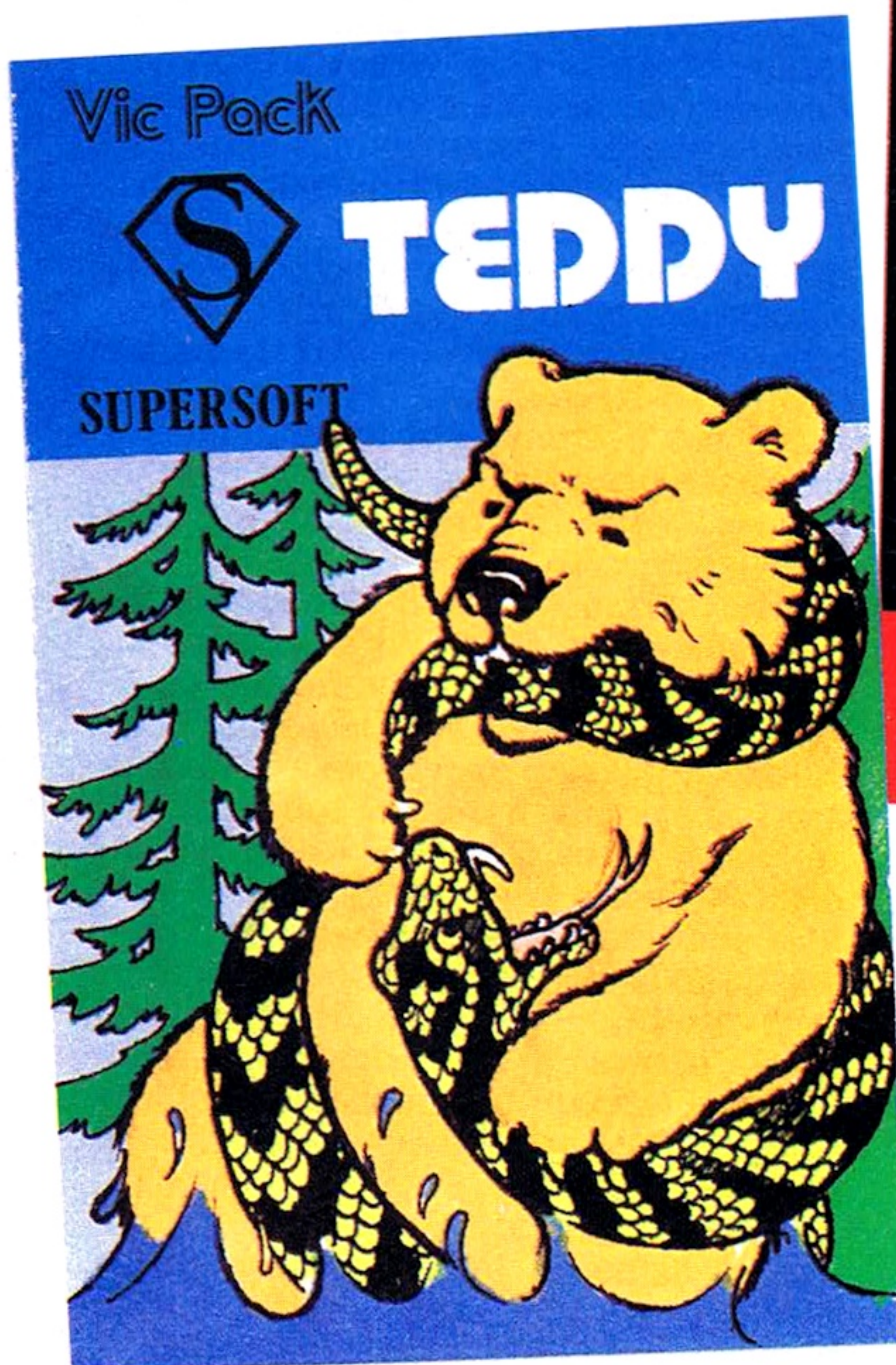
Mined out is unoriginal in concept but is nicely implemented on the Oric machines. The idea of the game is to travel through seemingly endless minefields in order to rescue that star of stage and silver screen, Bill the Worm.

The game loads and the instructions are clear and easy to understand. You are able to define your own keys for movements around the screen — a nice touch that other software houses should take note of. As usual you have to travel from the bottom of the screen to the top avoiding the invisible mines. An indicator lights up when you find yourself adjacent to one or more mines so it does not take much mental power to reach the exit at the top.

Once this has been achieved you move on to the next level and by rescuing lost maidens you gain extra points. In level 3 little creatures occasionally run across the screen and these clear away invisible mines and also lay visible ones. Other features include a bug that starts to chase you, so it becomes increasingly essential to keep on the move. However, it is also important to note that the bug is not very bright and hardly matches the speed of Carl Lewis.

The graphics are satisfactory and the sound is minimal, but neither stretches the Oric to its considerable limits. There is no Hall of Fame although the highest score is remembered. The idea is simple, the game fairly addictive and is best suited to family participation.

The arcade fanatic would be best advised to look for something more challenging.



# REVIEWS



# SOFTWARE

hours to respond. Luckily there is a save game feature which comes in very handy.

The graphics are superb with each piece clearly defined and all the moves are recorded on the left of the screen. If in trouble you are able to resign and several other options allow you to change sides at any time, set up the board in a special way or wipe out various sections of the chess board. All in all this is an excellent game: good graphics, nice screen display and speech make it one of the best offerings for the Oric machines. If you like chess this is for you.

## ADVANCE TO MAYFAIR

**Runs on:** 48 K Spectrum  
**Made by:** Amazing Games  
**Price:** £5.50

An excellent program like this is tremendous value at £5.50, I would have expected to pay more for it. It is a version of the internationally famous property trading game which most of us have spent so many wet afternoons playing. I found it more entertaining than the original board game in fact, and games definitely take a lot less time as it is impossible to cheat or quarrel when the game is between you and your micro. Thankfully no graphic representation of the board is attempted, as this would be time and memory consuming and no doubt confusing.

There are many features which make play easier: full status reports (including assets of each player, unsold properties, which sets are completely owned by one player, how many buildings are on each site, what their mortgage values are, etc. etc.), SAVE and LOAD of prolonged games, voluntary mortgages at any stage etc.

The object is to bankrupt the computer — something which the instructions say is a rare event, but I succeeded in doing so on both of my first two games on both occasions by an asset margin of around £4500. On the second occasion the victory print out read: I HAVE 17 POUNDS, I MUST PAY YOU £1100 on one of my built up areas.

Most of the game is enjoyable and faultless. There is however one bug (apart from spelling errors) which I found in the hotel buying option on the menu. This resulted in a error statement every time this option was chosen. Thankfully a minor alteration to the program on loading can cure this error. Another thing which I would like to see changed concerns the voluntary and

compulsory mortgage routine. I would like to be free to consult the status reports before deciding which property to mortgage, but at present this is not possible, and if you are not careful to remember which property you own, you may find yourself playing guessing games when you have to type in the name of one of your properties to be mortgaged.

On the hole this is a challenging, high quality product, and the original strategy, which is not lost by the conversion to computer, makes a welcome change to arcade games.

## FUN-PACS 2 and 3

**Runs on:** T1 99/4A  
(unexpanded)  
**Made by:** Virgin Games  
**Price:** £6.95 each

T1 owners should take heart that Virgin of the records fame is producing software to support their machines after production has stopped. Each of these two tapes contain three games.

On Fun Pac two you will first find Escape the Mugger, a topical is somewhat inflammatory title for a game in which, as the would-be victim trapped in a locked room, you must avoid being caught. Points are gained by picking up the muggers' spoils, like handbags and wallets, which he drops in pursuit of you. He may also drop the key to the room which you must acquire to release yourself. You can build walls to protect yourself, but after a time you'll find the bricks run out. Once you've discovered how to trap the mugger the game loses much of its appeal. Control of movement is by keyboard or joystick.

Starship Supernova, the second program is a text adventure in which, as captain of a space salvage tug you spy a likely prize in an apparently deserted cruiser heading for destruction in a supernova. After entering the cruiser to shut down the engines you find yourself trapped and are doomed if you can't find the flight controls before the clock runs out. Despite occasional misplaced clues and some irritating spelling mistakes, which should have been vetted out, the game provides a tricky challenge.

The final program on this tape, called Gunfighter, is a novel text game for up to six players. The object is to use your wits and guns to out-flight wild west cowboys generated by the computer or created by the other players who are your opponents. Each character has ratings on courage, muscle power, speed, etc. If you wipe out the lot

you're the winner. The presentation of this game is probably the most interesting of the three, but since I've always ended up dead immediately, I feel a bit put out at having to endure the instructions all over again before I can seek revenge.

Fun-pac three consists of three graphics games, all of which unfortunately suffer from the limitations of TI Basic. The task in Game one, Nuclear Disaster, is to remove ten unconscious scientists, one at a time, from the research centre where there is a leaky reactor to a decontamination chamber. You must then make it safe by sealing the six exits with blocks from an adjacent room before the radiation level reaches 100% and the earth is destroyed. The robot you use to move the scientists and blocks is not affected by radiation but scientists die if they make contact with it. There are six levels of difficulty. It's o.k. but not exciting.

On game two up to four can play up to 18 holes of golf and, as on any real course, hazards include water, trees, bushes and bunkers. After keying in the direction and strength of strike and club selection (which confusingly has the reverse weighting to real golf) the shot is taken by pressing the space bar. There's a chance you might miss or slice the ball though, if you hit it full strength. A score card for each player appears at the end of every round. Most enjoyment is derived if playing against opponents.

In game three, Sea Wolf, as commander of a submarine, your job is to torpedo somewhat disjointed tankers and supply ships as they jerk their way across the screen. You up and down periscope to get this view of them and at the same time by using your radar screen you must steer clear of an enemy destroyer which is tracking you down. Points scored depend on where you hit the ships with your torpedoes. It's not a game of addictive qualities.

Part of the blurb on both Fun-Pac tapes is given over to a rather contrived biography of the author of the programs, when perhaps more complete instructions would have been appreciated. A good point in Virgin's favour is the offer of free membership to its "Games Gang" for one year, with free quarterly newspapers and special offers in return for some details about you and your computer. If the information is used properly, it should help Virgin to produce quality software to satisfy the demands of TI owners. These present offerings are reasonable value for money, but are not awe inspiring.

# REVIEWS







RUNS ON  
TI-99/4A

# NUCLEAR RACE

Nuclear Race is set in the control room of a computerised reactor that is out of control and about to go critical. Your job is to damp down the reactor by picking up all ten damping rods, one at a time, and placing them in the reactor core on the right of the screen. The main computer will signal where to place each rod at the start of each run.

The rods will leave an invisible patch of radiation on the floor, which must be avoided. Touch one of these patches and your personal radiation level will increase; if it reaches the limit shown at the bottom of the screen the game will end.

You start with five lives and will lose

one each time you place a rod in the wrong core, try to pick up two rods at once or crash into the walls of the control room.

While moving around keep an eye on the time display at the top of the screen. If time is running short it can be reset by the button on the left of the screen, otherwise if time runs out you and the reactor are finished.

Once you have placed all ten rods correctly the reactor will be safe until you wish to play again.

If you find the standard cursor keys uncomfortable change the values of K in lines 270 and 280 to those of keys you prefer.



D.H.N.E.



## RUNdown

Lines	Action
160-190	GOSUBS to initialise game.
210-340	Check key-presses, increment timer and check new position of man.
360-460	Reset timer.
480-600	Hit radiation patch.
690-860	Place rod in reactor core.
880-1020	Lose life.
1040-1160	End of game.
1180-1230	Timer count-down.
1250-1320	Select and flash core.
1400-1610	Define characters and colours.
1640-1710	Initialise variables.
1730-1830	Screen set-up.
1850-2120	Print strings to screen.
2140-2240	Randomly place rods on floor.
2260-2330	'Print at' routines.

```

100 REM      NUCLEAR RACE
110 REM
120 REM      GRAHAM BALDWIN
130 REM
140 REM      1984
150 REM
160 GOSUB 1330
170 CALL CLEAR
180 GOSUB 1640
190 GOSUB 1250
200 REM *KEY PRESSES*
210 CALL KEY(3,K,S)
220 T=T+1
230 IF T>30 THEN 1180
240 IF S=0 THEN 210
250 RE=R
260 CE=C
270 R=R+(K=69)-(K=88)
280 C=C+(K=83)-(K=68)
290 CALL GCHAR(R,C,H)
300 CALL HCHAR(RE,CE,32)
310 CALL HCHAR(R,C,M)
320 IF H=32 THEN 210
330 IF (H=120)*(M=96) THEN 620
340 IF (H=120)*(M=97) THEN 880
350 REM *RESET TIME*
360 IF H<>128 THEN 480
370 CALL HCHAR(6,8,128)
380 R=6
390 C=9
400 CALL HCHAR(R,C,M)
410 FOR I=TD TO 26
420 CALL HCHAR(2,I,136)
430 CALL SOUND(-100,110+(I*25),1)
440 NEXT I
450 TD=26
460 GOTO 210
470 REM *RADIATION*
480 IF H<>113 THEN 690
490 CALL COLOR(9,14,1)
500 RDN=RDN+1
510 FOR I=8 TO 0 STEP -1

```

## Conversion Clues

TI BASIC is fairly standard but has some unique sound and graphics routines. Multi-statement lines are not supported. The screen is made up of 24 rows and 32 columns, starting at top left.

CALL CLEAR — Clears the screen.  
CALL CHAR(ASCII, "HEX-STRING") — Defines or re-defines a character with a 16-digit hex string derived from an 8X8 grid.

CALL HCHAR(ROW, COL, ASCII, REPEAT) — Places a character on the screen at the give co-ordinates and optionally repeats it horizontally.

CALL VCHAR — Similar to HCHAR but repeats character vertically.

CALL GCHAR(ROW, COL, VARIABLE) — Places the code of the character on the screen position given into a variable.

CALL COLOR(CHAR SET, FOREGROUND, BACKGROUND) — Assigns colours to a character set.

CALL SOUND(DUR, FREQ, VOL) — Produces up to three sounds and one noise.

CALL KEY(SCAN, VARIABLE, STATUS) — Scans the keyboard and places the code of the key pressed into the variable. The status is zero if no key is pressed.

## Variables Used

R	Row of man.
C	Column of man.
RE,CE	Erase man.
L	Lives remaining.
DR	Damping rods placed.
TD	Time display.
PP	Time display.
PP	Identify 'target' reactor core.
M\$	String to be printed.

```

520 CALL SOUND(-100,110,5,-7,0)
530 NEXT I
540 CALL COLOR(9,16,1)
550 CALL HCHAR(23,RDN,136)
560 IF RDN>11 THEN 1040
570 CALL HCHAR(R,C,113)
580 R=R-1
590 CALL HCHAR(R,C,M)
600 GOTO 210
610 REM *TAKE ROD*
620 M=97
630 CALL SOUND(50,-6,0)
640 CALL HCHAR(R,C,113)
650 R=R-1
660 CALL HCHAR(R,C,M)
670 GOTO 210
680 REM *PLACE ROD*
690 IF (H<>152)+(M=96) THEN 880
700 FOR J=1 TO 3
710 FOR I=330 TO 500 STEP 25
720 CALL SOUND(-100,I,1)
730 NEXT I
740 NEXT J
750 FOR I=7 TO 16
760 CALL HCHAR(I,30,144)
770 NEXT I
780 DR=DR+1
790 IF DR>9 THEN 1130
800 R=20
810 C=9
820 M=96
830 CALL HCHAR(R,C,M)
840 FOR I=1 TO 300
850 NEXT I
860 GOTO 190
870 REM *LOSE LIFE*
880 FOR I=10 TO 16
890 CALL COLOR(9,I,1)
900 CALL SOUND(-200,110,I,113,I,-7,I-9)
910 NEXT I
920 L=L-1
930 IF L<1 THEN 1040

```



**NUCLEAR**  
**RUNS ON**  
**TI-99/4A**

```

940 CALL HCHAR(R,C,H)
950 R=20
960 C=9
970 CALL HCHAR(R,C,M)
980 CALL HCHAR(24,32,48+L)
990 FOR I=7 TO 16
1000 CALL HCHAR(I,30,144)
1010 NEXT I
1020 GOTO 190
1030 REM *GAME OVER*
1040 CALL CLEAR
1050 PRINT TAB(10);"GAME OVER":::::
1060 PRINT TAB(5);"YOU PLACED ";DR;" ROD
S":::::
1070 PRINT TAB(6);"PLAY AGAIN? (Y/N)"
1080 CALL KEY(3,K,S)
1090 IF S=0 THEN 1080
1100 IF K=89 THEN 170
1110 IF K<>78 THEN 1080
1120 END
1130 CALL CLEAR
1140 PRINT " YOU PLACED ALL TEN RODS":::
1150 PRINT " AND SAVED THE WORLD":::::
1160 GOTO 1070
1170 REM *TIMER*
1180 CALL HCHAR(2,TD,32)
1190 CALL SOUND(-10,1000,5)
1200 T=0
1210 TD=TD-1
1220 IF TD<4 THEN 1040
1230 GOTO 210
1240 REM *SELECT TUBE*
1250 PP=INT(RND*10)+1
1260 CALL HCHAR(PP+6,30,152)
1270 FOR I=1 TO 8
1280 CALL COLOR(16,16,9)
1290 CALL SOUND(80,-3,1)
1300 CALL COLOR(16,16,4)
1310 NEXT I
1320 RETURN
1330 CALL CLEAR
1340 RANDOMIZE
1350 CALL SCREEN(2)
1360 FOR I=2 TO 10
1370 CALL COLOR(1,16,1)
1380 NEXT I
1390 REM *DEF CHARS*
1400 CALL CHAR(96,"18187EBD3C242424")
1410 CALL CHAR(97,"19197FBD3D252525")
1420 CALL CHAR(104,"00000000FF8181FF")
1430 CALL CHAR(105,"0101010101010101")
1440 CALL CHAR(106,"0000000000000000")
1450 CALL CHAR(107,"0400111111110004")
1460 CALL CHAR(109,"FF000000000000FF")
1470 CALL CHAR(110,"FF8181FF")
1480 CALL CHAR(112,"00FF00000000FF")
1490 CALL CHAR(113,"0")
1500 CALL CHAR(120,"00007E7E")
1510 CALL CHAR(121,"FF000000000000FF")
1520 CALL CHAR(128,"040707FFFF070704")
1530 CALL CHAR(136,"00FFFFFFF")
1540 CALL CHAR(144,"FF8181818181FF")
1550 CALL CHAR(152,"FF8181818181FF")
1560 CALL COLOR(11,11,1)
1570 CALL COLOR(12,11,1)
1580 CALL COLOR(13,7,1)
1590 CALL COLOR(14,9,1)
1600 CALL COLOR(15,16,4)
1610 CALL COLOR(16,16,9)
1620 RETURN
1630 REM *VARIABLES*
1640 M=96

```

```

1650 DR=0
1660 TD=26
1670 RDN=3
1680 P=5
1690 L=5
1700 R=20
1710 C=9
1720 REM *SET UP SCREEN*
1730 CALL HCHAR(3,1,104,32)
1740 CALL HCHAR(22,1,110,32)
1750 CALL VCHAR(4,7,105,18)
1760 CALL VCHAR(4,31,106,18)
1770 CALL HCHAR(6,8,128)
1780 CALL HCHAR(2,4,136,23)
1790 CALL HCHAR(R,C,M)
1800 FOR I=7 TO 16
1810 CALL HCHAR(I,30,144)
1820 CALL HCHAR(I,31,112,2)
1830 NEXT I
1840 REM *TEXT TO SCREEN*
1850 M$="RADIATION"
1860 RW=24
1870 CW=3
1880 GOSUB 2260
1890 M$="< LIMIT"
1900 RW=23
1910 CW=12
1920 GOSUB 2260
1930 M$="LIVES"&" "&STR$(L)
1940 RW=24
1950 CW=25
1960 GOSUB 2260
1970 M$="TIME"
1980 RW=1
1990 CW=3
2000 GOSUB 2260
2010 M$="RESET"
2020 RW=5
2030 CW=1
2040 GOSUB 2260
2050 M$="NUCLEAR"
2060 RW=8
2070 CW=3
2080 GOSUB 2300
2090 M$="RACE"
2100 RW=15
2110 CW=4
2120 GOSUB 2300
2130 REM *POSITION RODS*
2140 FOR I=1 TO 10
2150 RR=INT(RND*13)+6
2160 CR=INT(RND*20)+9
2170 CALL GCHAR(RR,CR,CH)
2180 CALL GCHAR(RR-1,CR,CH2)
2190 CALL GCHAR(RR+1,CR,CH3)
2200 IF (CH<>32)+(CH2<>32)+(CH3<>32) THEN
2210 CALL HCHAR(RR,CR,120)
2220 CALL SOUND(10,-6,5)
2230 NEXT I
2240 RETURN
2250 REM *PRINT AT*
2260 FOR I=1 TO LEN(M$)
2270 CALL HCHAR(RW,CW+1,ASC(SEG$(M$,I,1)
))
2280 NEXT I
2290 RETURN
2300 FOR I=1 TO LEN(M$)
2310 CALL HCHAR(RW+1,CW,ASC(SEG$(M$,I,1)
))
2320 NEXT I
2330 RETURN

```