1190 Albany Avenue
Brooklyn, New York 11203
April 26, 1984

THE ARCADIAN
3626 Morrie Drive
San Jose, California 95127

Dear Robert Fabris:

Thank you very much for placing my ads in your journal. I have enclosed a different ad that I hope you can place in the next issue. This one is a photostat and should reproduce better. I have some one working on a better drawing of a cyclops and overall appearance of the ad itself. A smaller size too.

The cassette enclosed has the graphics program Video:Video that the Arcadian is welcome to print. It is basically an extension of Lesson 7 of the manual 6004. A different plot formula was used in which X & Y vary. Very complex patterns appear with a value 1 for every value of Z in line 4. These take a very long time to draw so Z varies between 2 and 5. Another difference is that all lines return to 0,0 before being drawn to the opposite end of the screen.

I'll do my best to have another program for you by the end of May.

Sincerely,

Fred Rodney

Fred Rodney

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1 .    VIDEO : VIDEO   . 1
2 . FRED RODNEY, 1984 . 2

3 NT=0;CLEAR ;&(9)=-10;FO
R N=130TO -130STEP -10;BC=
246;FC=0;GOSUB 4;BC=0;FC=7
;GOSUB 5;GOTO 6
4 L=ABS(N);Z=5-3x(N<0);FO
R X=-L+ZTO LSTEP Z;LINE 0,
0,4;LINE X,ABS(X)-L,3;LINE
0,0,4;LINE -X,L-ABS(X),3;
NEXT X
5 FOR Q=0TO 3xABS(N);NEXT
Q;RETURN
6 BC=7;FC=0;GOSUB 5;&(0)=
7;&(1)=7;&(2)=0;&(3)=0;BC=
0;FC=7;&(9)=84;GOSUB 5;BOX
-40,22,80,44,3;BOX 40,-22
,80,44,3;GOSUB 5;FC=0
7 BC=246;&(0)=55;&(1)=55;
GOSUB 5;FC=67;&(2)=235;&(3
)=235;GOSUB 5;FC=0;&(2)=0;
&(3)=0;BOX -40,22,80,44,3;
BOX 40,-22,80,44,3
8 GOSUB 5;&(9)=-10;BC=55;
GOSUB 4;IF N<0GOTO 12
9 IF N=0FOR L=3TO 156STEP
4;BC=RND (243);FC=BC+12;B
OX 0,0,L,L+2,3;NEXT L;CLEA
R;NEXT N
10 LINE 0,0,4;BC=127;FOR C
=1TO 3STEP 2;FOR X=-L+2TO
L+2STEP C+2+1;LINE X,ABS(X
)-38,C;LINE 0,0,C
11 LINE -X,38-ABS(X),C;LIN
E 0,0,C;NEXT·X;GOSUB 5;NEX
T C;FOR L=0TO 5;BOX 0,0,13
7,77,3;GOSUB 5;NEXT L;GOSU
B 5;CLEAR ;NEXT N
12 LINE 0,0,4;BC=127;FOR X
=-L+5TO L+5;LINE X,ABS(X)-
26,1+(X>0);LINE 0,0,1;LINE
-X,26-ABS(X),1+(X>0);LINE
0,0,1;NEXT X;GOSUB 5;FOR
L=0TO 9
13 BOX 0,0,Lx2+Xx2,66,3;GO
SUB 5;NEXT L;GOSUB 5;CLEAR
;NEXT N;BC=55;N=-230;GOSU
B 4;BC=0;FC=246;GOSUB 5;GO
SUB 4
14 PRINT ;FOR L=0TO 2;BC=R
ND (243);FC=BC+12;LIST ,2;
NEXT L;BC=0;FC=7;FOR L=0TO
44;BOX 0,4,160,19,3;NEXT
L;N=333;GOSUB 5;RUN
15 FOR X=-130TO 130;LINE 0
,0,1;LINE X,ABS(X)-130,4;L
INE 0,0,1;LINE -X,130-ABS(
X),4;NEXT X;BOX 0,0,160,35
,2;CY=4;LIST ,2;BOX 0,0,15
6,31 3;:PRINT
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This is a graphics only program. No sound. It takes about 16 minutes to run and will continually re-cycle itself. So before running this program, turn on the radio or put your favorite record on and enjoy the "Video."

On the Astrocade screen, with 0,0, at its center, the formula N=ABS(X)+ABS(Y) will result in a diamond whose points will be at a distance of N & -N from 0,0, Plotting lines to all pixels between these four points should yield a solid diamond. But the Astrocade only draws a straight line when X=Y, X=0 or Y=0. At all other times, the line will assume a "stair-case" shape. This shaped line will miss some pixels as X & Y vary between N and -N. The line will be a mirror image of itself if the vector of the plot is reversed. The pixels that are skipped or re-drawn (LINE X,Y,3) result in a top-bottom, right-left symmetrical image within a diamond-shaped border.

If N is varied between -130 and 130 (the LINE command is not limited by the screen border as is the BOX command) the diamond will completely fill the screen. The program begins at this point and a series of lines are drawn to every 5th pixel. As N decreases, smaller and smaller diamonds are drawn. These alternate with similar patterns. When N=0 a short BOX routine follows. When N<0 lines are drawn to the diamonds border (every other pixel) with a tighter spacing alternating with similar patterns. Finally, When N is set to more than 130, a patterned "X" appears as in Line 13.

Subroutine 5 is a variable delay (varies with pattern size). The bulk of the program that remains involves changes to the colors and &(9) so that the patterns are highlighted in different ways. The redrawing of a pattern over itself (LINE X,Y,3) will erase the pattern line by line.

Save on tape with CLEAR ;GOTO 15 GO. When the corners are filled, start the tape (record) and a nice looking title page will be on tape. The program uses 1005 bytes.

FRED RODNEY 1190 ALBANY AVE. BROOKLYN, N.Y.