

# Just-a-Page

Our regular page of short programs and programming ideas

## Using aliases

No, this isn't a cunning way for us to go unnoticed at Acorn World, but an idea based on a hint from Henry Morgan. Henry suggested that if you regularly format discs from the command line, and you tend to forget the exact syntax, you can set up an alias to do it for you. For example, the following command:

```
Set Alias$1.6Mb Format :0 F
```

sets an alias for the formatting of 1.6Mb discs, so that all you have to do to format a disc from the command line is type:

```
1.6Mb <discname>
```

You can set up similar aliases for other formats in just the same way.

Aliases have many more uses than this, however, since you can substitute virtually any command with an alias. Not only this, but you can include control sequences in the alias, such as |M to force a new line. This allows you to set up an alias which issues several consecutive commands. For example, if you are using the CliSwi module listed in last month's RISC User, you could set up aliases for your favourite SWI calls and show the returned register values at the same time. So to look up the number of a SWI call, for instance, you could set the following alias:

```
Set Alias$ShowSwi Swi "OS_SWINumberFromString",0,%*0|MShow r$0
```

What this does is to set an alias ShowSwi, which when called performs two consecutive commands. The first of these is to call OS\_SWINumberFromString. This requires a pointer to the SWI name in R1, so what we have done here is to set up parameter substitution with %\*0. The effect of this is that when the command is actually issued, any name typed in by the user after the ShowSwi command will be placed in R1 when the number conversion SWI is called.

The SWI number is returned in R2, and the second command in the alias merely displays the returned value (which CliSwi places in the system variable r\$2). So if you now type:

```
ShowSwi "Wimp_OpenWindow"
```

you should see the SWI number displayed. If you can work out a method of setting up an alias so that this number is displayed in hex, let us know!

## Square dancing

by David Bradforth

In the final issue of BEEBUG magazine, a program called Square Dance was published, which provided an attractive random graphic display. The display consists of a series of expanding and contracting rectangles whose form and colour change randomly each time the program is run, and during its execution. The listing given here updates Square Dance for the Archimedes in 256 colours. Pressing the space bar while the program is running changes the pattern - try pressing it several times to see the very different patterns generated each time.

```
REM          >ASqDance
REM Program  Arc Square Dance
REM Version  A 1.00
REM Authors  Martin Richards
REM          and David Bradforth
REM RISC User November 1994
REM Program  Subject to Copyright
REM          Not Public Domain
:
ON ERROR PRINT REPORT$;" at line ";ERL:END
MODE 15
OFF
REPEAT CLS
VDU 29,640;512;
X=0:Y=0
DX=RND(50):DY=RND(50)
C=RND(256)
REPEAT GCOL 3,C
MOVE X,Y:DRAW -X,Y:DRAW -X,-Y
DRAW X,-Y:DRAW X,Y
X=X+DX:Y=Y+DY
IF ABS(X)>640 DX=-DX:C=RND(256)
IF ABS(Y)>512 THEN
DY=-DY
```

