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STRINGY FLOPPY

NEWSLETTER

Issue 1 May, 1981

Welcome to the first issue of SFN. The Newsletter is intended to serve owners of all varieties of Stringy Floppy and act as a forum for your ideas and views. ASP is producing this in-house and very much on a part-time basis so we welcome your contributions to make the task easier and increase the frequency of publication.

SF for TANDY TRS-80 - AUTO START OF BASIC PROGRAMS (contributed by Alf West, Balmoral, Queensland)

With the following method, BASIC programmes will automatically start Running when loaded by the SF in the same manner as SYSTEM programmes when the Entry point is given.

A small Assembly Language routine (18 bytes) is added to the Basic Programme in the following general terms.

```
START      LD      HL,XXxx
            LD      (40A4H),HL
            LD      HL,YYyy
            LD      (40F9H),HL
            CALL    1B5DH
            JP      3079H
```

where XXxx = Address of Start of Basic Program
and YYyy = " " End " " "

A reasonably convenient method of implementing this follows:

(takes about 5 mins. plus Loading and Saving time)

- Load a suitable Monitor to high Memory. (The ESF-80 Monitor relocated is suitable)
- Load the Basic Programme then add a Remark Line right at the beginning of the programme, say Line No. 0 or 1 viz :-
1 '..... (not less than 12 chars.)
- Revert back to the Monitor and examine Memory at 42E9H and 42EAH and note the values. (xx and XX respectively). These addresses will point to the start of the Original first Line of the Basic Programme and will be FD and 42, i.e., pointing to 42FDH if exactly 12 characters were inserted in the Remarks Line.
- Using the Monitor run through to determine the end of the Basic Programme. (Last line pointer plus 2). If this was the only job on the Computer since power-up and the Basic Programme has not been Run after it was Loaded and Listed, the end of Basic will be the Address where a string of "7F" or "80" commence. Note this Address = YYyy.
- With the Monitor change the values at Addresses from 42E9H as follows:-
42E9 21 xx XX 22 A4 40 21 yy YY 22 F9 40 CD 5D 1B C3
42F9 79 30 00(00)
- The length of the new programme in Hex, is:-
YYyy - 42E9 + 1
Convert this to Decimal = mmmmm, Reset from the Monitor to basic and save the Programme viz:-
@SAVE(n),17129,mmmm,17129

The Programme is now in effect in System format with Auto-start. Normal System programmes may be re-entered from Basic by typing SYSTEM then /Entry address. This also applies to the "System Basic" programme, i.e. /17129 but the important point is that RUN will re-run the programme and all the Basic Commands apply just the same as before the Original Basic programme was amended as above.

..... Thank you Alf.

TECHNICAL TIP - ALL MODELS - HEAD CLEANING

HEAD - Turn off power supply and use a cotton bud soaked in methylated spirits (cheaper than head cleaning kits and more efficient) to swab the bright square head surface that can be seen from the mouth of the drive. No disassembly is required. Oxide/lubricant build-up from tape can usually be seen as brown streaks across the head surface. Clean the head on a regular basis, probably at least once a week.

CAPSTAN - The formulation of the tape in the wafer combined with lubricants and foil splice adhesive may cause a build-up over a period on the capstan. Cut a strip of non-glossy paper about 50 mm. wide and fold it around the edge of the wafer where the tape and pressure roller are exposed. Insert into drive so that contact with the head and capstan is made and tell the computer to load any file to activate the drive. The gentle abrasion against the capstan will clean it.

TECHNICAL BULLETIN - HEAD ALIGNMENT

Dallas, our resident Head Alignment expert, has prepared a Technical Bulletin, particularly for TRS-80 versions, concerning Head Alignment. For use in conjunction with this a Head Alignment Wafer is available for \$10. While opening the drive unit will void your Warranty we recognize that there are those who require this capability whether for reasons of location or otherwise. You will need an Oscilloscope as well as the Alignment Wafer, and a very small Phillips type screwdriver.

While on the subject of Alignment, ASP found some months ago that the majority of warranty claims related ultimately to heads being out of alignment. Since then every drive has been checked to our Alignment Standard before shipping. Alignment should not therefore be a problem for a considerable period and probably the life of the drive. However things can go wrong whether in or out of warranty and ASP provides a prompt Alignment checking service.

THE RANGE GROWS

Currently the most popular Stringy Floppy is the TRS-80 unit. Also on the market is the Micro Sponge with its own micro-processor, able to communicate on either RS232 or Parallel lines. Stringy Bare is the basic drive with read/write electronics for those who are game to do it the hard way.

However new models are now joining the range and we would appreciate it if you would spread the word. Exatron is about to start shipping versions for the Apple and the Commodore PET home computers and ASP has just finished a version for the Exidy Sorcerer to be shipped world-wide starting mid May. A brochure on the Sorcerer versions is enclosed for your information.

With all these versions coming available please don't forget our standing offer - 5 free wafers for any existing owner introducing a sale to us. So let us know if a friend is buying as a result of your recommendation.

IDEAS FOR PRODUCTS

If you have dreamt up an interesting Stringy Floppy application, an end product rather than an application program (which is covered later), you are welcome to discuss its feasibility with us. We are always open to commercially viable ideas, and even if your idea is not commercially viable we are happy to offer a brief opinion, or refer you to others who may help.

One of the problems we all face being involved in a fast growing but "frontier" area of interest is knowing who's doing what. Particularly if Australia is to make worthwhile contribution to the computer industry we need interchange of information. That is of course what SFN is about. The problem is simply the lack of media available to publicise ideas at low cost. So we like to hear from you.

SOFTWARE DEVELOPMENT

It is really rather hard to sell programs in Australia in large numbers, at low cost. To sell them at more realistic prices involves full time effort that most of you will be unable to give.

So what can ASP do to help? Firstly as with hardware ideas you are welcome to discuss your software achievements or ideas for our commercially orientated reaction. There is a market for useful software making the most of SF as a low cost disk alternative. Home users will pay a fair but low price, or otherwise copy it from their friends if the price is too high. All types of businesses will pay much higher prices, and not be so likely to copy software, but want quality with clear concise instructions.

Secondly we may be able to assist you to find overseas markets through Exatron, the SF drive manufacturers. As a general rule they work on a similar basis to us - 50/50 division of the sale price after deducting wafer and documentation cost.

If you are interested in us assessing your software, give us a ring first. Essentially if we are interested we agree to respect your ownership of the program, but shall require your written assurance that the program is your creation and yours to freely dispose of. We will require the program and all documentation, plus your outline of what is unique about your work. Don't forget to include system requirements. Programs should be "bullet-proof" and thoroughly tested.

BEHIND THE SCENES

We, as well as many customers, have been getting frustrated recently by oxide shedding of wafers. Historically the problem relates to changes in the manufacturer of the tape used in SF. Original wafers used a hard formulation resulting in infrequent head cleaning. When that tape was no longer available Exatron switched to a softer formulation. It is the combination of oxide and tape lubricant which gives rise to those brown streaks on the head surface and the consequent need for frequent head cleaning.

Problems can be minimized by putting wafers through several initialisation cycles to scrub loose oxide off. For example in the TRS-80 version:

```
10 FOR I=1 to 5:@NEW:NEXT
```

After initialising a few wafers, clean the head and get on with more serious work.

Anyway the situation is now changing for the better, together with a slight redesign of the wafer to suit the new direct-drive transport. A harder tape will once again be used and attention is being given to further refining the wafer mechanism. Redesigned wafers have already been received with a blue spool in them, but the latest production we are told has red spools and the harder tape.

In summary things are going to get BETTER!

CHEAP MEMORY

ASP can currently supply 200 ns.16K RAM chips at \$35.00 tax paid per set of 8. As the situation varies from day to day ring us to confirm availability if interested.

HUSH/HUSH

(Before ordering any Tandy computer equipment or peripherals give us a ring).

SOFTWARE DELIGHTS

Those of you with businesses have probably heard of a program called VisiCalc. It is an extremely capable and versatile electronic ledger sheet with the ability to be defined for all sorts of applications. It costs up to \$200, and is only available in disk versions. Now Exatron has announced an "Electric Spreadsheet" substitute for Level II 16K TRS-80 for \$50. We haven't seen it yet but it sounds great. Let us know if you are interested.

FOOTNOTE

This should be of particular interest to TRS-80 SF owners, as most of you are using 16K of RAM, and might like more (at low cost of course). ASP expects to have available within about 4 weeks a memory expansion module that fits INSIDE the keyboard unit. So you'll be able to have 32K of memory WITHOUT that overpriced expansion unit. Projected price is \$99 (including sales tax) which includes the module circuitry AND an extra 16K of RAM. No soldering is required to fit the unit and you'll either be able to do it yourself, or ASP will do it for \$10.

So that's it and now we await the deluge of contributions. To ease our load try to send them in a form clear enough to merely be photographically reduced for inclusion in the next newsletter. If any of you have formed formal or otherwise groups let us know so we can publish details.

PAUL STUART