FEEDBACK

The most satisfying thing about a newsletter is the way in which it creates a two-way link between readers and writers. We have all been delighted with the regular stream of letters, ideas, comments and helpful criticisms that have come our way since Issue No. 1 was distributed in August. Please keep it going!

64K

There has been such a demand for 64K add-ons that its been almost embarrassing. The printed circuit board is under way but some folk just insist on getting a wire-wrapped version rather than wait those extra few weeks. The P.C.B. version will be available in January.

16K Add-on = 20K

OK. OK. You win! We will have a 16K add-on available in January. Probable price $506, or $448 to schools. Please note - its 20K or 64K. You will not be able to upgrade the 20K to anything other than 64K as the 16K chips can be later replaced with 64K chips. So with 4K of Monitor, 16K of switchable EPROM and 20K of RAM, its got to be good value.

HARDWARE NEWS

Pegasus expansion update:

Level 1 Expansion - is made on the basic Pegasus board to give graphics and an extra parallel port (eg for a printer)

Level 2 Expansion - will be available in 6 weeks and will incorporate several previously offered features onto a new single board which will fit into the standard Pegasus case. All or any of these upgrades may be added to this board as required:
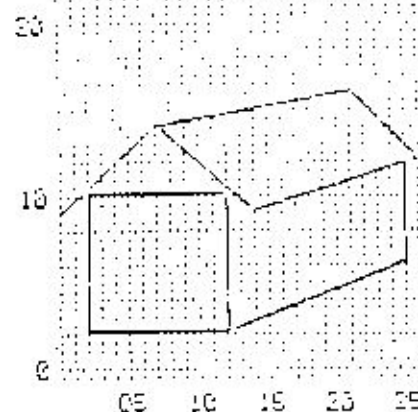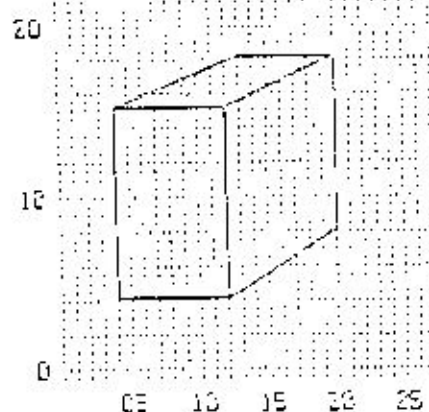   -64K EPROM expander selectable as 4 separate 16K blocks by a hardware switch or by software through the Monitor menu
    -64K RAM
    -wirewrap area
    -network interface to allow connection to the Perseus network controller
    -2 spare parallel (8 bit) ports

Level 3 Expansion (provisional specifications only) is expected to be available early next year to provide the following upgrades on a single board (all or any may be fitted as required)
    -80 x 24 character video controller for use with a high quality TV monitor will also provide programmable character graphics (effective resolution 640 x 288 dots)
    -minifloppy disk interface for up to 4 double sided double density drives
    -SS-50 I/O bus interface for up to 8 peripherals
    -colour graphics adapter to overlap the 80 x 24 text display in 16 colours with 256 x 192 graphics resolution and a programmable sound generator. The normal Pegasus 32 x 16 character display with colour will output, if desired, directly to a normal colour TV

SOFTWARE NEWS

Newsletter No.3 made mention of the printer routines built into our new Monitor. Experimentation with these routines has given us some exciting results. The following reduced copies show various printouts from a Pegasus using an EPSON MX80 TYPE II printer.

Even those of you who do not have a printer will enjoy experimentation with the programs used to draw these pictures on the screen. If any of these programs interest you, a stamped addressed envelope will ensure that a printout is sent to you; HOWEVER, to use these programs satisfactorily, you will need a cassette tape of the graphics characters used.

CASSETTE SOFTWARE

These programs below are available on cassette and include printouts and documentation.

CHARACTER CREATOR (Basic & Forth versions)
    —allows a user to create up to 128 programmable characters and save them on tape for future use. A set of pre-programmed characters (including alphanumerics) is included.

LINES (Basic)
    —allows full use of the graphics facility to draw straight lines and perspective drawings. Sample displays were shown in reduced form on the previous page.
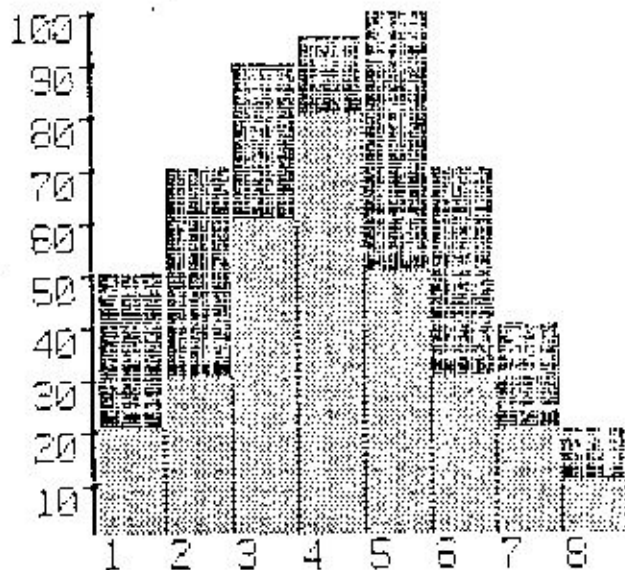
STACK OPERATIONS (Forth)
    —presents a "window" on the top 5 locations of the Forth stack. Forth uses Reverse Polish Notation for its arithmetic operations. This program allows the user to see how numbers are manipulated on the stack using Forth words such as DUP, ROT, SWAP, OVER as well as + - * / .

HISTOGRAM (Forth)
    —allows easy plotting of data in column format. Maximum column height, number of columns, column headings and histogram title are all user selectable. Columns may be drawn in 2 shades; deletions and additions to individual columns may be made; the final histogram may be saved on cassette

Please refer to the last page for prices.

Software from our readers:

Many thanks to Rory Sherlock for his Stock Rotation program for farmers. The program converts the size of a mob of stock to a set of standard units for feeding purposes. A schedule for rotating the mob through a series of paddocks is calculated considering such factors as paddock size and grazing intensity.

Rory is busy working on expanding this program and eventually building up an entire farming package. We would welcome exchanges with other programmers in a bucolic situation. (you might have to look up that word in a dictionary, but its not derogatory at all)

Thanks also to young S. Southon of Pakuranga for his Reactor program which tests your reaction time to press a key from 1 to 5 as the number shoots across the screen.

Printouts of both programs are available upon receipt of an addressed stamped envelope.

Forth Users

    A note for those with Forth on their 64K
machine.   Since Forth sets MEMEND at 7F9E in order
to protect Forth Text above 8000, remember that you
will have to reset MEMEND to BD9E if you want to use
the full memory space when switching to XBASIC or
some other language. Alter MEMEND by using the
Monitor modify function to change memory location
BDF9 from 7F to BD

Basic Users

    If you use the Character Creator program to
form your own programmable characters you may wish
to add these additional controls

line 371   T   -put cursor at upper left
     372   B   -put cursor at bottom left
     373   L   -move cursor to far left
     374   R   -move cursor to far right
     375   H   -fill a row
     376   h   -empty a row
     377   V   -fill a column
     378   v   -empty a column

371 IF M=84 THENPRINT[14,0],:GOTO300
372 IF M=66 THENPRINT[14,15],:GOTO300
373 IF M=82 THENPRINT[0],:GOTO300
374 IF M=78 THENPRINT[14],:GOTO300
375 IF M=72 THENPRINT[14]," ",[14],:GOTO300
376 IFM=104 THENPRINT[14],"[][][][][][][][] ",[14],:GOTO300
377 IF M=86 THEN600
378 IF M=118 THEN600

600 X=PEEK(49DF9):PRINT[X,0],
610 IF M=86 THENFOR Y=0TO15:PRINT[X,Y]," ",:NEXTY:GOTO650
620 FOR Y=0TO15:PRINT[X,Y],"[]",:NEXTY
650 PRINT[X,0],:GOTO300

NOTE that lines 375 and 610 should use inverse spaces.

OUR AUCKLAND MARKETING REPRESENTATIVES

Some of you have probably already met Rex Griffiths and Bruce Takle. They are only too pleased to demonstrate the Pegasus and any of its new add-ons to your friends and colleges who may have been viewing your micro with interest.

Rex or Bruce can be located at 798-304. Remember ..... Xmas is but 7 weeks away!

To those of you outside the Auckland area – your area dealers or reps are similarly available for demonstrations or to answer queries on the Pegasus.

If in doubt, give Computer Machinery a buzz or drop us a line and we will steer you in the right direction.

Golly gosh, only ... er, how many weeks till christmas is it exactly?

PRICE LIST (1 Nov 1981)

Product:	Suggested Retail	Price to Schools
4K PEGASUS KITSET	698.00	521.00
4K PEGASUS with BASIC	998.00	815.00
64K EXPANSION BOARD	875.00	689.00
CARRYING CASE	49.00	49.00
ROM EXPANSION	135.00	103.00
GRAPHICS OPTION	62.00	48.00
PRINTER INTERFACE(cable + PIA)	53.83	53.83
EXTENDED BASIC	120.00	120.00
ASSEMBLER/DISASSEMBLER	70.00	70.00
PASCAL	100.00	100.00
FORTH	100.00	100.00
WORD PROCESSOR	70.00	70.00
GRAPHICS GAMES(CASSETTES) TANK, GALAXYWARS, SNAKE, DRAGON,STARTREK	12.00 each	12.00 each
Other cassette software Character creator Lines,Stack operations histogram	12.00 each	12.00 each
EPSON PRINTERS		
MX80 (traction feed)	1318.68	999.00
MX80 (traction & friction)	1510.08	1144.00
Printer graphics option	217.80	165.00

We welcome letters and comments for the newsletter. Our
address is on the front page.