

SPHERE
CORPORATION

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GLOBAL NEWS

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THE SWAP NEWSLETTER FOR THE WHOLE EARTH

In this quarters' NEWSLETTER, we are listing those submittals to the Program Library which we have received that are different and of general interest. We have now published the SIM/1 Theory of Operation, along with some Manual updates.

SPHERE would like to get more NEWS! Especially about you, the user, and what you are doing personally as well as in your area Computer Club. So tell us what's happening, write us, Attn: NEWSLETTER, include a ready to print copy on 8 $\frac{1}{2}$ x11 paper, closely spaced, be sure to include your name and address.

ABOUT OUR PRESIDENT

At Spheres' Annual Stockholders Meeting in July, a new face appeared. Soon after, Mr. Carl R. Clark, age 42, became our President. He has owned three separate electronics businesses in the past 16 years and is a former member of the Utah State Senate. A firm believer in SPHERE, Mr. Clark feels that our products plus the right software, represent the greatest opportunity and challenge of his career.

FROM THE OFFICE OF THE PRESIDENT

'THRILLED OR ?'

As the new president of Sphere Corporation, I would like to relate a true experience that occurred with me many years ago.

Before river running became as popular as it is today, several other guys and myself took an old seven man rubber raft down a treacherous stretch of the Green River in Eastern Utah.

After going thru a mild series of rapids where we were dunked, our party arrived in a large remote, supposedly uninhabited, valley. We decided to pull the raft out of the river to get dried off.

We were very apprehensive about the very narrow chasm that the river rushed thru ahead of us. From what information we
(continued on next page)

were able to glean the section of river ahead, known as Split Mountain Gorge, was extremely rough and treacherous.

Then we noticed that we were being watched from a clump of trees by an individual that we learned later was an old hermit that lived in this remote valley. In order to get some fix on our situation, I approached this old hermit and tried to strike up a conversation with him. This proved difficult because he answered most of my questions with one syllable words.

Trying to relieve some of our apprehension, I said "Have you ever been down this river thru Split Mountain?" he replied "Yep", so I said "What was it like?" and he replied "Well young man, when I went thru 'the gorge' it was on a 10 man raft, (which was much larger and safer than the 7 man raft we had). "And I'll tell you something, I'm not an educated man, so I don't know the difference between the word THRILL and the word SCARED, but I was one of um!!!

You know that little experience draws a direct parable with my new experiences at Sphere Corporation. After coming on board here, I really don't know if I should be thrilled or scared.

The story has a great deal of similarity with us all. Whether you like it or not, Sphere Corporation and you and I are all in the same boat. And, we are going into new, uncharted waters with our computers. The final destination for each of us will largely be determined on the Intelligence, Creativity and Ambition that we apply to the fantastic (and I really mean Fantastic) opportunity that we have facing us. Towards this end, I have instituted a number of new programs and policies which will affect you as a Sphere Computer user.

- A - We are formulating a very powerful language here at Sphere which we have code named "Simple" for Sphere's Improved Multi-Purpose Language Edition. Any novice can use this language for programs that do not require higher math.
- B - We are progressing towards getting an expanded BASIC language for our computer. This is a time consuming, costly process and won't be complete for some time.
- C - We have developed a new series called the 500. This computer has a great deal more capacity and versatility in a 80 character x 25 display than our old 300 Series. In addition, the one greatest asset we have in the 500 Series is reliability.
- D - Last of all, since WE ARE ALL IN THE SAME BOAT; I want your support and good will. If there is anything that has occurred in the past which may have left you feeling neglected or less than satisfied, then please call

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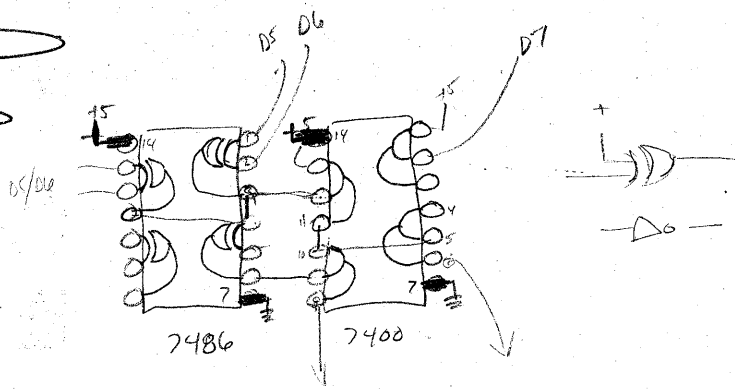
Mr. Neil Tanner after November 1. Neil has been given instructions to do everything possible to gain and keep your good will. Please call Neil or Ernie Dixon if you have a complaint.

E - Other new programs and products are on the way. However, if you need something special, why not give us a call. There are a lot of things that we don't catalog that can be supplied at considerable savings to you.

Best Regards,

Handwritten signature: Carl R. Clark

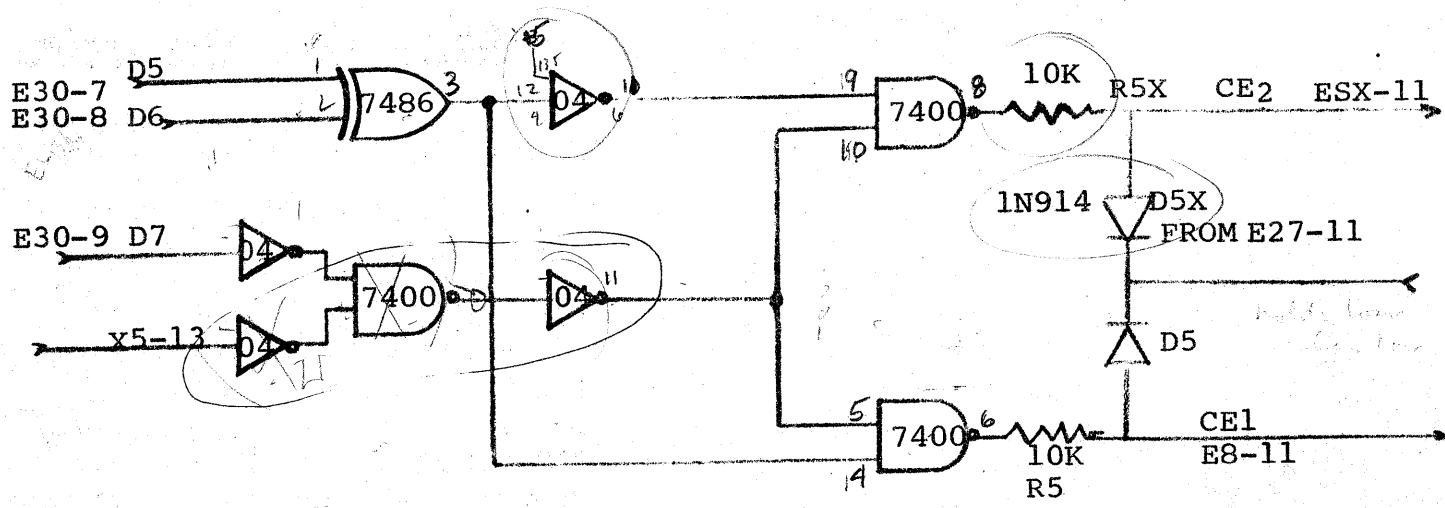
Carl R. Clark
President



IN 914
7486

UPPER LOWER CASE - CRT/1 MODIFICATION
BY E. DIXON-a 320 User

Direct comments and questions in care of SPHERE, include SASE for response, no telephone questions will be taken.



REMOVE R1
Install 7400, 7404, & 7486 Dead Bug style on +5 & ground etches between R22 & E27 (Bend Pins 7 & 14 out until even with top of chip, turn top down, solder pin 7 to ground, pin 14 to +5) make interconnections.

Drill hole for 4 wires near right end of D5. Piggyback new 2513 (CM5810 for lower case & control characters) on top of regular 2513 with pin 11 bent out. Connect pin 11 to R5X-D5X.

Ground X5-13 if it is not to be used (the open input will appear as a "high" and cause the whole screen to be 5x7 cursors unless grounded).

EDITORIAL

When a program is distributed by someone either as a library program or as an application program where royalties may or may not be charged, the author is usually entrusting the distributor with certain documentation to go with the program and usually helps the distributors get their hands into his program so they can help their customers.

When an author entrusts a company with the necessary materials to sell his software and find copies being distributed without all of the documentation, he naturally thinks those "bums" he trusted are giving him a bad name and withholding royalties to which he is entitled. His time is being wasted by the users trying to get the needed documentation. The author may discontinue the distributorships, shutting down honest businessmen, or possibly sue. All that has happened is one user gave a friend a copy and he gave two friends copies, etc. Sooner or later the program ends up in the hands of a distributor who thinks he is doing someone a favor by supplying a cheaper copy service than the guy down the street who is paying a royalty. When a person or firm decides to distribute software, they should check with the author and inform him of their intentions and ask his permission. If the author cannot be identified then the sources need to be back-tracked until the author is found! Questions the user has should be directed to the distributor, and then to the author.

SPHERE CORPORATION does not have 100% exclusive rights to any user submitted program currently in our possession and if anyone would like to distribute program 'x', the author should be contacted and, we feel, since we are trying to help the authors' whose programs we distribute, that we should be notified when someone else is distributing the same program.

(The above editorial does not necessarily reflect the opinion of Sphere Management.)

"THE PDS/2 IS READY!"

As has been promised-keyboard control of cassette! As announced in the last NEWSLETTER, the price is \$40.00 for the program in Proms and improved mini-assembler on cassette, \$6.00 for complete listings and \$5.00 handling/shipping for a total of \$51.00, however since this is a 5 prom set (4 CPU + 1 SIM) the deposit/purchase price of the proms has been raised to \$125.00. When ordering specify KBD/1 or KBD/2.

Cheap Expander:

\$20

Memory Boards

The cheapest way to expand your computer is with the Sphere 16K Memory Board at \$20.

At last the Sphere "EMPTY" Memory Board. Buy the board from us and populate it with your own parts. This printed circuit card is designed for expansion to 16K memory. Simply plug the tri state bus cables into 16K Mem and your computer has larger program storage. The above price is for the PRINTED CIRCUIT CARD only! You receive the parts list and schematic but NO PARTS!

If you prefer to buy a populated module, the 4K Memory Kit is complete with all electronic parts and memory chips for \$159.00 This offer is for a limited quantity of memory boards; So Hurry! Address your orders to:

Sphere Corporation
"Memory Board Special"
P.O. Box 129
Bountiful, Utah 84010

Enclose \$1.00 for postage & handling.
Immediate Delivery.

SPHERE Software Library-The following are the note worthy submittals we have to SWAP. Only a brief description is listed in an effort to entice users to request copies of others' programs. We don't want to 'sell' these programs but need to cover our costs. Therefore we are charging \$5.00 handling and 10¢/page copying fee. Where cassettes are submitted by the author they will be copied for \$10.00. Sphere is only providing a service of cataloging and duplicating SWAP submittals. No warrantee is made as to the correctness of or applicability of the programs. All questions in regard to these programs should be submitted in writing to the author directly or in care of Sphere. Sufficient postage for forwarding and a reply must be included.

<u>TYPE OF PROGRAM</u>	<u>INCLUDES</u>
1	Games
2	Utilities, Monitors, Displays, Debugger
3	Demonstration
4	Business
5	I/O Handlers
6	System Assemblers, Editors Languages
Ø	Other

<u>TYPE</u>	<u>TITLE</u>	<u>AUTHOR</u>	<u>PAGES</u>
Ø	<u>Memory Check</u> Program loads all 1's into memory and checks to see if the contents will remain. Repeats with the 0's.	<u>Marshall Edgell</u>	4
	<u>Random Number Generator</u> Power residue random numbers.	<u>Walter Bays</u>	2
1	<u>Life</u>	<u>Dick Mason</u>	11
2	<u>Block Transfer</u> Transfers one block of memory to another.	<u>Marshall Edgell</u>	4
	<u>Cassette Utilities</u> Allows blocks to be read/written/copied on tape.	<u>T.W. Crosley</u>	12
	<u>Debug 5</u> Extension to PDS debug, formatted dump to CRT or printer, block data transfer, memory fill etc.	<u>Dick Mason</u>	11
	<u>Debug (Mikbug Style) 1/4K</u> Simple debug program similar to MIKBUG.	<u>John Byrns</u>	6
	<u>Extended Monitor</u> Extension of PDS.	<u>Scott Adams</u>	38
	<u>Memory Dump</u> Displays 128 bytes on CRT.	<u>T.W. Crosley</u>	3
	<u>Move Subroutines</u> Move blocks of data.	<u>T.W. Crosley</u>	4
	<u>PDS Assembler Symbol Table Display -</u> Displays PDS assembler symbol table on CRT.	<u>T.W. Crosley</u>	5

<u>TYPE</u>	<u>TITLE</u>	<u>AUTHOR</u>	<u>PAGES</u>
2	<u>Tape Directory Lister</u> Displays on screen block name, length of tapes written by PDS-SYS2NF PROM.	<u>T.W. Crosley</u>	9
3	<u>Multiple Base Adding Machine</u> Adds and Subtracts using Hex, decimal or octal.	<u>T.W. Crosley</u>	4
	<u>Multiple Base Calculator</u> Adds, Subtracts, multiplies, divides in base 8,10,16.	<u>T.W. Crosley</u>	6
4			
5	<u>MP-40 Driver Software</u> Software to drive Micro-Peripherals MP-40 printer.	<u>Scott Adams</u>	9
	<u>Player Control Boxes</u> Hardware & Software joystick controls.	<u>Scott Adams</u>	24
	<u>Tiny Basic I/O Routines</u> I/O routines and programs used in Sphere's version of Tom Pittman's Tiny Basic.	<u>Dick Mason</u>	9
6	<u>Assembler, Full</u> Full assembler similar to Motorola.	<u>M.Scott Adams</u>	49
	<u>Assembler, Full</u> Full assembler similar to Motorola.	<u>Robert Graves</u>	41
	<u>Assembler Mnemonic Fix</u> Fixes bug in <u>Bit</u> instructions of assembler.	<u>Vincent Johnston</u>	1
	<u>Assembler Mnemonic</u> Allows mnemonic OP codes to be used with PDS mini-assembler.	<u>Anthony Pierry</u>	24
	<u>Editor, Tape To Tape</u> Allows batch editing of tape blocks.	<u>M. Scott Adams</u>	12
	<u>Editor, Memory To Tape</u> Allows loading & dumping of editor source area of assembler .	<u>M. Scott Adams</u>	49
	<u>Tiny Basic</u> No information is available-Contact author	<u>Anthony Pierry</u>	

M. Scott Adams	1426 Paul St., Melbourne, Fla	32935
John Byrns	1953 Governors Ln., Hoffman Estates, Ill.	60195
Bays Labs	3205 East Reno, Oklahoma City, Ok	73117
Thomas Crosley	14-3 King Arthur Ct., Northlake, ILL.	60164
M.H. Edgel	9901 Broad St., Bethesda, Md.	20014
Robert Graves	21175 Goldsmith, Farmington Hills, Mi.	48024
Vincent Johnston	402 Wildwood Ave., Pitman, N.J.	08071
Dick Mason	1037 Park Hill Ln., Escondido, Ca.	92025
Anthony Pierry	90 Ruxton St., Uniondale, N.Y.	11553