

PERKINS ENGINEERING

1004 PLEASANT AVENUE

BOYNE CITY, MI 49712

(616)582-9832

JAN. ,1982

DEAR FELLOW **ARCADIAN**:

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS. THEY ARE DESIGNED TO OVERCOME SOME OF THE SHORTCOMINGS OF ONE OF THE BEST COLOR GRAPHICS SYSTEMS--THE **BALLY ARCADE**. OUR ADS HAVE APPEARED IN THE **ARCADIAN** AND MANY EDITORIALS AND TUTORIALS CAN BE FOUND IN THAT NEWSLETTER.

*** THE HEART OF OUR SYSTEM IS THE **BLUE RAM** ITSELF. IT IS A SMALL BLUE BOX WITH AN EDGE CONNECTOR THAT PLUGS ONTO THE 50 PIN EXPANSION OUTLET ON THE BACK OF THE ARCADE, OR, OF COURSE, THE ARCADE PLUS. IT CONTAINS 4096 BYTES OF STATIC READ/WRITE MEMORY (RAM) THAT CAN BE PROTECTED FROM ACCIDENTAL WRITING (ROM MODE) EITHER BY A SWITCH OR WITH SOFTWARE. AN ADDITIONAL 128 BYTES OF FULL-TIME RAM AND TWO 8-BIT PARALLEL INPUT/OUTPUT PORTS ARE ALSO PROVIDED. THESE PORTS ARE AVAILABLE AT A 24-PIN ZERO INSERTION FORCE (ZIF) SOCKET AND ARE SO VERSITILE THAT EACH BIT CAN BE READ (INPUT) OR WRITTEN TO (OUTPUT) INDEPENDENTLY. THE SOCKET ALSO PROVIDES POWER AND OTHER CONNECTIONS TO THE COMPUTER.

THE **BLUE RAM** COMES WITH AN OPERATING MANUAL, A POWER SUPPLY AND TWO TAPED PROGRAMS AT 300 BAUD FOR USE WITH THE **BALLY BASIC** CARTRIDGE. SOME OF THE UTILITIES ON THIS TAPE ARE NOW INCLUDED IN **ASTROVISION BASIC** AND **BLUE RAM 8K EXTENDED BASIC**.

THE **BLUE RAM** PRICE IS \$180.00 PPD.

ALSO AVAILABLE IN A WIRE-WRAP KIT FOR **EXPERIENCED** WIRE-WRAPPERS.

OUR KEYBOARD IS A 62 KEY TYPEWRITER STYLE ASSEMBLY MOUNTED ON WOODEN END BLOCKS AND FITTED WITH A 3-FOOT CABLE TO PLUG INTO THE ZIF SOCKET ON THE BLUE RAM. ALL 62 KEYS ARE ACTIVE-- MOST OF THEM MULTI-FUNCTION. **BALLY'S** WORDS ARE ADDED TO THE KEYBOARD WITH INTERACTIVE STICKERS. **WIRED AND TESTED---\$89.95** ALSO AS A KIT. (SAVES ABOUT \$25.00)

THE **BLUE RAM MODEM/PRINTER INTERFACE** CONNECTS THE **BLUE RAM** TO A **STAR** MODEM AND TO ONE OF SEVERAL GOOD PRINTERS OR BOTH. NOW YOUR COMPUTER CAN "TALK" TO OTHER COMPUTERS OR EXPLORE THE WORLD OF THE **SOURCE!** THE PRINTER WILL AUTOMATICALLY MAKE HARD COPY. IT ALSO CAN BECOME A TYPEWRITER AND WILL REPRINT A PAGE AS OFTEN AS YOU WISH.

WIRED AND TESTED....\$99.95

THE BLUE RAM 8K SUPER EXTENDED BASIC CARTRIDGE

**** * * * **** FOR USE WITH THE BLUE RAM AND ITS ACCESSORIES **** * * * ***

THIS LANGUAGE, IN A STANDARD **BALLY** CARTRIDGE, HAS ALL OF THE FEATURES OF **BALLY BASIC** --PLUS--ALL OF THESE ADDITIONAL FEATURES BY JAY FENTON AND (*) PERKINS ENGINEERING:

- .- 4 COLORS ON THE SCREEN AT ONCE
- .- FASTER OVERALL PROGRAM EXECUTION
- .- 5 ADDITIONAL GRAPHICS COMMANDS
- .- "WINDOWED" GRAPHICS AND TEXT
- .- 2 CHARACTER FONTS (5x7 AND 3x5)
- .- CHANGEABLE PRINT NUMBER BASE
- .- "TRACE" PROGRAM DEBUG AID
- .- LARGER PROGRAM AREA (3100 BYTES)
- .- 14 NEW TWO-LETTER VARIABLES
- .- 3 ADDITIONAL DATA SET COMMANDS
- * PROGRAM "BOMB" RECOVERY *
- * FASTER MULTIPLY AND DIVIDE *
- * BUILT-IN DRIVER FOR THE **B.R.** KEYBOARD *
- * BUILT-IN DRIVER FOR THE **B.R.** PRINTER *
- * FULL SOUND EFFECTS / MUSIC DRIVER *
- * 300 AND 2000 BAUD TAPE INTERFACES *
- * FULL BOOLEAN OPERATIONS *
- * NEGATE OPERATOR *
- * VERSATILE PROGRAM LINE EDITOR *
- * USER EXTENSIBLE COMMAND LINKAGE *
- * EXTENDED GOTO AND GOSUB FORMATS WITH PARAMETER PASSING *
- * 8 MODES CONTROLLED BY MODE FLAGS *
- * 5 SERVICE LINKAGES IN RAM *

THIS CARTRIDGE COMES COMPLETE WITH A 2000 BAUD INTERFACE CABLE AND DOCUMENTATION DEFINING THE NEW LANGUAGE FORMATS.

PRICE IS \$49.95 PPD.

ALL OF THESE PRODUCTS COME WITH MANUALS --SOME WITH TAPED PROGRAMS
WHEN ORDERING, PLEASE INDICATE WHETHER YOU HAVE A 300 BAUD INTERFACE OR 2000 BAUD
ASTROVISION BASIC.

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MAR. 26, 1982

DEAR JIM:

THANK YOU FOR YOUR RECENT LETTER. THE PRODUCT INFORMATION YOU REQUESTED IS ENCLOSED. THE SPRING ISSUE OF THE **SOURCE BOOK** WILL CONTAIN DISPLAY ADS FOR THESE ITEMS.

THERE WILL BE SOME NEW PRODUCTS IN THE NEAR FUTURE. A NEW MODEL OF THE **BLUE RAM** ITSELF WITH 16K OF STATIC RAM IS BEING DEVELOPED FOR PRODUCTION IN LATE MAY OR JUNE. WATCH THE **ARCADIAN** FOR DATE AND PRICE.

WE ARE ALSO WORKING ON A DELUXE 65K (DYNAMIC) VERSION THAT WILL FEATURE VOICE, SCIENTIFIC CALCULATOR AND MANY SURPRISES. THIS MAY BE A YEAR OR TWO AWAY.

OF COURSE, ALL BLUE RAM ACCESSORIES ACCESS THE **ARCADE** THRU THE BLUE RAM, BUT WILL BE COMPATIBLE WITH ANY MODEL.

THIS OFFICE WILL BE CLOSED FOR MOST OF APRIL, WHILE WE CONCENTRATE ON THE NEW PRODUCTS.

HOPING TO HEAR FROM YOU IN MAY....

SINCERELY,



CLYDE PERKINS

PERKINS ENGINEERING

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BOYNE CITY, MI 49712

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NOVEMBER 15, 1982

DEAR JIM:

SORRY ABOUT ALL THE FRUSTRATION! I AGREE WITH YOU. WE REALLY NEED MORE INSTRUCTIONS FOR EXT. BASIC. JOHN HAS BEEN WORKING 70 HOURS PER WEEK ON A NAVY PROJECT AND PERKINS ENGINEERING IN HIS SPARE TIME. HOPEFULLY THE PROJECT IS ABOUT DONE. OUR **UTILITY** TAPE IS NEXT, AND IS ALMOST COMPLETED. THE INSTRUCTION BOOK IS WELL STARTED, BUT FAR FROM DONE.

I DON'T UNDERSTAND THE RESET PROBLEM WHEN EDITING. THERE ARE TWO **EDIT** ROUTINES. **PAUSE** (OR CTRL E) IS ONE METHOD AND **RPL** IS THE OTHER. **RPL100/PRINT/LIST** REPLACES ONE OR MORE CHARACTERS. **RPL100//250** MOVES THE WHOLE LINE AND RENUMBERS IT. MY ARCADE AND BLUE RAM ONLY RESETS ITSELF WHEN I TURN OFF MY FLUORESCENT DESK LAMP...???

THE B.R.EXT.BASIC CARTRIDGE PUTS THE VARIABLES AND THE STACK IN THE BLUE RAM FROM !6000 TO !6FFF. BALLY BASIC PUTS THEM IN SCREEN MEMORY. IF YOU LOAD A BALLY TAPE WITH EXT. BASIC IT WILL GET LOST LOOKING FOR THEM.

THE NEW UTILITY HAS MANY GOOD ROUTINES INCLUDING **MOVE** AND **EDIT**. THESE WILL ALLOW YOU TO MOVE THE STACK ETC., AS WELL AS PROGRAMS. YOU CAN MOVE A GAME FROM CARTRIDGE TO B.R., CHANGE ITS NAME ETC. AND PUT IT ON TAPE, THEN CALL "TEST" AND PLAY THE MODIFIED GAME. THE UTILITY ALSO HAS A DRIVER ROUTINE FOR A MODEM, A PRINTER ETC. WE HAVE A FEW **STAR** MODEMS AT \$50.00 (REG. \$149.95), BUT ARE WAITING FOR SOME NEW 40 PIN CHIPS FOR THE MODEM/PRINTER INTERFACE.

MEANWHILE, TRY THIS WITH ARTILLERY DUEL. USING ASTRO BASIC, LOAD THE TAPE WITH ;INPUT%(-32768). THROW MODE SW. FROM CENTER (RAM) TO ROM AND PREPARE TO RECORD. CHANGE CARTRIDGES AND CABLE. NOW RECORD IT WITH ;PRINT%(!6000),2048. YOU NOW HAVE A HIGH VOLUME RECORDING. IT CAN NOW BE LOADED WITH ;INPUT %(24576) USING **ASTRO** BASIC.

BE SURE TO USE A FRESH TAPE THE FIRST TIME, IN CASE YOU GOOF - AND HOPE THIS INFO HELPS A LITTLE FOR NOW.

LOSE THE ORIGINAL.

SINCERELY,

Clyde

CLYDE

P.S. YOUR POINT ABOUT THE "SPEED UP" IS WELL TAKEN, BUT ASTRO PUT IT IN PRODUCTION 6 OR 8 WKS AGO, SO IT WAS TOO LATE.

P.P.S. THE ADD-UNDER IS ON "T-4 MONTHS AND HOLDING". UNTIL ASTRO IS FUNDED.

SORRY I OVERLOOKED THE \$5.00 LAST TIME. C.P.