

HAVE YOU HEARD?

CLUB TAPE

REMEMBER, OUR CLUB TAPE #1 IS READY FOR SALE, WITH ALL OF THE BUGS REPAIRED! IF YOU HAVEN'T ALREADY ORDERED YOURS, JUST SEND \$4.00 WITH 50 CENTS FOR MAILING, AND WE'LL GET IT OUT TO YOU RIGHT AWAY.

ALSO, OUR CLUB TAPE #2 IS IN THE PROCESS OF COMPLETION NOW. IF YOU HAVE ANYTHING TO OFFER, PLEASE SEND IT OUT RIGHT AWAY. WE ONLY NEED A FEW MORE PROGRAMS UNTIL WE'RE INTO TAPE #3. THANK AGAIN TO MIKE PEACE FOR PRODUCING OUR TAPES FOR US.

CORNER STORE

REMEMBER, IF YOU HAVE ANYTHING TO SELL FOR THE 'ASTROCADE', LET US KNOW, WE'LL SELL IT AT OUR GENERAL MEETING. IF YOU'RE AN ALIEN BUG, JUST SEND US SOME STOCK, COMPLETE WITH AN INVENTORY AND WE'LL SET IT UP. ALSO REMEMBER YOU ARE REQUIRED TO OFFER AT LEAST A 10% DISCOUNT TO CLUB MEMBERS.

UNCLASSIFIED ADS

FOR SALE: 4K BLUE RAM W/POWER SUPPLY, INSTRUCTIONS. (NO BASIC CARTRIDGE). \$120.00. CALL ED MLYNEK 313-846-8692
FOR SALE: ASTROCADE COMPUTERS \$79.95 CARTRIDGES \$11.00. CALL MONAR SALES CO 1-800-426-2604
FOR SALE: BLANK TAPES W/BOXES AND LABELS. \$1.00 EA. \$10.00 DZ. 2 MIN, 5 MIN, 10 MIN. SEE OR CALL DON GLADDEN 313-437-3984 OR 313-437-7303.

GRIPE COLUMN

PROGRAMMERS! WHAT'S WITH THESE GUYS? IT'S BAD ENOUGH BEING HERE ON THE BOTTOM!

YOU KNOW WHAT REALLY GRIPES ME? TRY ASKING A SIMPLE BASIC QUESTION OF THESE GUYS, AND WHAT DO YOU GET? AN ANSWER THAT'S FARTHER OVER YOUR HEAD THAN THE QUESTION! I REALLY WISH THESE GUYS WOULD TAKE A MINUTE TO RE-GROUP THEIR MINDS BACKWARDS IN TIME, TO WHEN THEY WERE AT THE START. IT DOESN'T HELP US BEGINNERS AT ALL WHEN THEY TAKE US FROM A STATE OF CONFUSION TO A WORLD OF MASSIVE HYSTERIA!!!

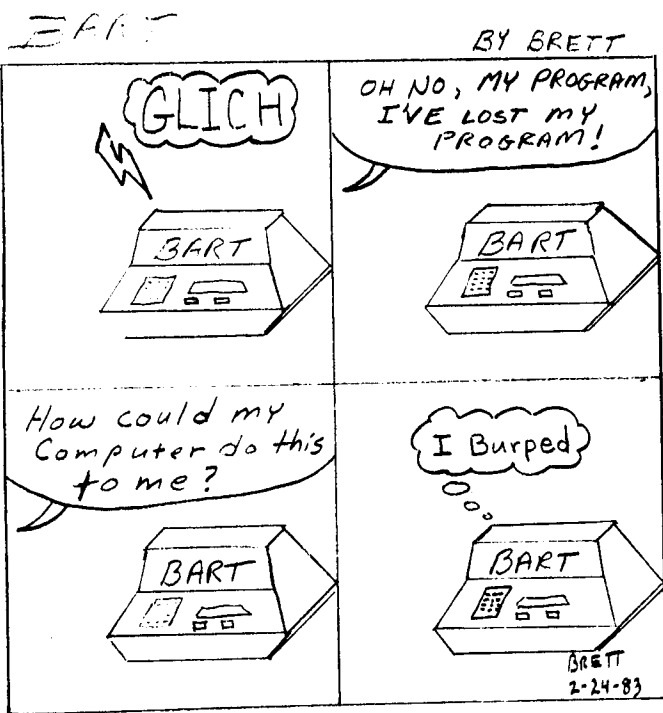
PLEASE GUYS, EXPLAIN YOURSELVES. I CAN REALLY APPRECIATE YOUR EXTENSIVE KNOWLEDGE, BUT REMEMBER, I DON'T HAVE IT. I NEED SOMEONE TO ANSWER MY QUESTIONS AT MY LEVEL. IT DOESN'T HELP IF YOU ANSWER IT IN THE SKY. IF YOU COULD JUST UNDERSTAND I'M BELOW YOU IN KNOWLEDGE AND NEED A DETAILED EXPLANATION, MAYBE I CAN GET TO YOUR LEVEL SOME DAY.

THE INSIDE CORNER BY BRETT BILBREY

FIRST, MY APOLOGIES FOR NOT MAKING IT TO THE LAST MEETING. I HEAR IT WAS REALLY GOOD!

SECOND, A QUICK REPORT ON THE CE: SHOW FROM LAS VEGAS. ASTROCADE WAS PRESENT, BUT WAS NOT DOING MUCH MORE THAN JUST BEING THERE FOR APPEARANCES. NO NEW CARTRIDGES WERE ANNOUNCED OR SHOWN. THE REASON? ASTROCADE HAS FILED REORGANIZATION. BUT THE GOOD NEWS IS THAT IT NOW SEEMS THEY ARE BACK ON THEIR FEET, WILL BE RELEASING AN SHIPPING NEW CARTRIDGES AND HAVE ENTERED THE EUROPEAN MARKET! BACK TO THE CES...COLECO MADE THE BEST SHOWING WITH AN IMPRESSIVE AMOUNT OF CARTRIDGES TO BE RELEASED. ATARI WAS THERE BUT SUFFERING FROM THEIR RECENT LOSSES. THIRD PARTY SOFTWARE FOR THE ATARI 2600 WAS EVERYWHERE, HUNDREDS OF NEW CARTRIDGES, BUT MOST WERE AS BAD OR WORSE THAN WHAT IS ALREADY AVAILABLE FOR THE 2600.

THIRD, AS TO THIRD PARTY SOFTWARE HOW ABOUT SOME FOR THE ASTROCADE? WELL I GOT SOME GOOD NEWS!!! BY THE TIME YOU ARE READING THIS, 'TREASURE COVE' BY SPECTRE SYSTEMS (WRITTEN BY ME!) WILL BE HITTING THE MARKET. IT BEING MARKETED THROUGH ESOTERIC WHAT IS TREASURE COVE? I'M NOT GOING TO SPOIL THE SURPRISE, BUT IT HAS COLOR, MUSIC, AND ANIMATION, ALL AT ONCE



BESIDES 'TREASURE COVE', OTHER THIRD PARTY GAME CARTRIDGES WILL BE COMING SOON. ALL I CAN SAY IS, THE BEST IS YET TO COME!

NOW FOR THE QUESTIONS AND ANSWERS.

WELL I ASKED FOR IT, AND HERE IS THE FIRST QUESTION:

I HAVE A TERRIBLE PROBLEM. IT SEEMS THAT EVERY TIME I TRY TO ORDER A PROGRAM IT WON'T FIT MY 'ASTROCADE'. THEY KEEP SENDING ME CASSETTES. WHAT KIND OF FOOL DO THEY THINK I AM? THEY WON'T EVEN FIT THE CARTRIDGE SLOT ON THE 'ASTROCADE', AND WHEN I TRY TO PUT THEM IN A TAPE RECORDER IT BREAKS MY EARDRUM. SEEMS LIKE I MUST HAVE A DIFFERENT GAME THAN THEY DO...CONFUSED

WELL, HOW DO I ANSWER THIS? FIRST LET ME EXPLAIN THAT THERE ARE TWO TYPES OF SOFTWARE FOR THE 'ASTROCADE'. ONE, CARTRIDGES THAT FIT INTO THE SLOT AND TWO, CASSETTE TAPES THAT LOAD INTO THE MACHINE BY USING BASIC. IF YOU DO NOT HAVE A BASIC CARTRIDGE, (BALLY BASIC, ASTROBASIC, BLUE RAM BASIC...) THEN YOU MUST BUY ONE TO USE THE TAPE SOFTWARE. IF YOU DO HAVE A BASIC, THEN READ YOUR MANUAL!!! IT EXPLAINS HOW TO USE TAPE SOFTWARE. WHEN YOU PUT THE TAPE IN THE RECORDER, YOU USE A CABLE TO CONNECT THE OUTPUT FROM THE RECORDER TO THE 'ASTROCADE' UNIT. IF YOU HAVE THE OLD BALLY BASIC, YOU MUST USE THE OLD TAPE INTERFACE OR BUY A NEW ASTROBASIC.

WHY CAN'T PORTS (I.E. &(9), &(10),...) BE SAVED ON TAPE WITH THE BASIC PROGRAM?

WHEN A PROGRAM IS SAVED ON TAPE, IT COPIES THE RAM IN THE 'ASTROCADE' TO TAPE. A PORT IS NOT RAM BASED, MEANING CHANGING RAM WILL NOT CHANGE A PORT. MOST OF THE PORTS IN THE 'ASTROCADE' ARE LOCATED IN THE CUSTOM CHIPS, AND TO CHANGE THEM YOU MUST SET THEM USING STATEMENTS LIKE: &(9)=6. SO WHEN YOU LOAD A PROGRAM BACK INTO THE RAM, YOU MUST THEN HAVE YOUR PROGRAM SET THE PORTS YOU WANT. PLEASE NOTE: VARIABLES LIKE BC ARE RAM BASED, MEANING THE COMPUTER EXPECTS A CERTAIN VALUE TO EXIST AT A GIVEN PLACE IN RAM

IS THERE ANY WAY TO ADD A DISK TO VIPER OR BLUE RAM? HOW HARD IS IT? WHAT KIND WILL WORK?

FIRST, UNLESS YOU HAVE ELECTRONICS EXPERIENCE, DON'T TRY TO ADD A DISK. YES, IT CAN BE DONE, BUT THE COST AND DIFFICULTY IS NOT WORTH IT. YOU NEED A DISK, A DISK CONTROLLER, DISK CONTROL SOFTWARE (IN MACHINE LANGUAGE), AND THE ELECTRONICS TO INTERFACE IT ALL TOGETHER. LET ME SAY THIS-IT IS NOT EASY, AND IF YOU HAVE TO ASK IF IT IS POSSIBLE, THEN YOU DON'T KNOW ENOUGH TO DO IT. BE HAPPY WITH 2000 BAUD ON THE CASSETTE INTERFACE.

HOW DO YOU DO THE 3D STAR EFFECT LIKE IN SOLAR CONQUERER?

THAT EFFECT WAS DONE IN MACHINE LANGUAGE USING MANY VECTOR BLOCKS. A VECTOR BLOCK IS SOMETHING THE ON-BOARD ROUTINES USE TO MOVE PATTERNS IN A SPECIFIC DIRECTION AT A SPECIFIC SPEED. A PATTERN THE SIZE OF ONE PIXEL IS STARTED IN THE CENTER OF THE SCREEN AND MOVES TOWARD THE EDGE AT AN INCREASING SPEED. WHEN YOU DO THIS WITH MANY PATTERNS, YOU GET THE 3-D EFFECT. THIS IS ALSO A GOOD WAY TO DO AN EXPLOSION, LIKE IN SPACE FORTRESS, WHEN THE FORTRESS GETS DESTROYED.

WHAT NEW CARTRIDGES ARE COMING?

'ASTROCADE' WILL BEGIN SHIPPING CARTRIDGES AGAIN MARCH 1, 1983. INCLUDED WILL BE WIZARD, PIRATES CHASE, AND ARTILLERY DUEL. NO ONE IS REALLY SURE WHAT THE OTHER NEW CARTRIDGES WILL BE OR WHEN THEY WILL BE RELEASED, BUT ASTROCADE IS WORKING ON OTHER NEW ONES.

AS I SAID, THIRD PARTY CARTRIDGE SOFTWARE IS STARTING, AND MANY COMPANIES WILL BE RELEASING THEIR CARTRIDGES THIS SUMMER.

ASTRO BUGGED?

WELL FOLKS, WHILE WE BEAT ATARI'S SOLUTION TO THE PUZZLE, WE HAVE SOME BAD NEWS IN THAT ONLY ONE PERSON ENTERED THE CONTEST. THE CONTEST WINNER THIS TIME IS GEORGE MOSES, AND HE DID A BEAUTIFUL JOB.

TO TRY AND GET PEOPLE INTERESTED, WE ARE GOING TO OFFER THE CARTRIDGE OF YOUR CHOICE (EXCEPT BASIC) TO THE WINNER OF THE NEXT CONTEST. IF ONLY ONE PERSON ENTERS, THEN HE WINS! (IF THEY HAVE THE CORRECT SOLUTION).

THE SOLUTIONS WILL BE JUDGED ON TWO CATEGORIES - EXECUTION SPEED AND SIZE EFFICIENCY. ALL ENTRIES MUST BE

RECEIVED BY SATURDAY, MARCH 26, 1983.
 TO ENTER, SEND A COMPLETE PROGRAM
 LISTING AND SEPERATE COMMENTS AND DOC-
 UMENTATION TO:

ASTRO BUGGED
 14430 BARCLAY
 DEARBORN, MI 48126

THE WINNER AND SOLUTION WILL BE AN-
 NOUNCED IN THE NEXT NEWSLETTER AND AT
 THE NEXT MEETING.

HERE IS A REVIEW OF THE LAST BUGS
 PUZZLE.

IN PUZZLE #2, FIVE SAILORS WERE
 SHIPWRECKED ON AN ISLAND. AFTER GATH-
 ERING A HUGE PILE OF COCONUTS, THEY
 FELL ASLEEP, BUT ONE BY ONE AWOKE,
 REMOVED THEIR FAIR SHARE OF THE COCO-
 NUTS, HID THEM, AND FELL BACK ASLEEP.
 IN THE MORNING, THEY DIVIDED THE RE-
 MAINING COCONUTS EVENLY BETWEEN THEM-
 SELVES AND HAD ONE LEFT OVER FOR A
 MONKEY NEARBY. PROBLEM?? FIND THE
 LOWEST POSSIBLE ANSWER FOR THE NUMBER
 OF COCONUTS ON THE ORIGINAL PILE.

THE SOLUTION USES 52 BYTES OF MEMORY
 AND EXECUTES IN 29 SECONDS, ON BLUE
 RAM BASIC (40 SECONDS ON ASTROBASIC).

```
>10 A=1
>20 A=A+5;C=A;FOR B=1TO 5;C=C+4;
    IF RMGOTO 20
>30 C=Cx5;NEXT B;PRINT C
```

COMMENTS.....

LINE 10: MONKEY INITIALIZES A, THE ONE
 COCONUT.

LINE 20: ADDS 1 COCONUT PER MAN TO A.
 SETS C TO A FOR TEST. START A LOOP TO
 PUT BACK COCONUTS STOLEN BY THE 5
 SAILORS. DIVIDE BY 4. THEN MULTIPLY
 BY 5 TO RETURN STOLEN COCONUTS. TEST
 FOR REMAINDER. ALL GET EVEN NUMBER OR
 GO UP 5.

LINE 30: MULTIPLY BY 5 TO REPLACE
 STOLEN COCONUTS AND DO IT 5 TIMES
 (LOOP) BECAUSE SAILORS DID! PRINT THE
 TOTAL NUMBERS OF COCONUTS.

I AM NOT GOOD AT MATH, SO I CHOSE
 THE "BRUTE FORCE" METHOD OF FINDING
 THE SMALLEST NUMBER BY TESTING FOR A
 REMAINDER, AS I ADDED 5 MORE TO THE
 ORIGINALS MONKEYS COCONUT.

WHY DIVIDE BY 4 THEN MULTIPLY BY
 5? WELL, IF A PILE OF 100 COCONUTS
 WAS VANDALIZED AT NIGHT BY A DISHONEST
 SAILOR WHO TOOK 20%, (1/5), YOU'D HAVE
 80 COCONUTS LEFT. TO FIGURE OUT HOW
 MANY YOU STARTED WITH AFTER LOSING 20%
 YOU DIVIDE BY 4 AND MULTIPLY BY 5.
 80+4=20. 20x5=100. I DID THAT 5 TIMES
 TO GET THE TOTAL OF 12,500 COCONUTS.

GEORGE NOSES

 BUG PUZZLE #2

THIS ONE IS TRICKY, REQUIRES SOME
 TIME AND EFFORT, MUST BE SOLVED BY
 COMPUTER PROGRAM, AND GIVES A CART-
 RIDGE TO THE WINNER!

A MODEL TRAIN ACCELERATES AT 2
 FEET/SEC² FOR 20 SECONDS, THEN 1 FOOT/
 SEC² FOR 10 SECONDS, COASTS AT 0
 ACCELERATION FOR 40 SECONDS, DECEL-
 ERATES AT 1 FOOT/SEC² FOR 10 SECONDS,
 THEN 2 FEET/SEC² FOR 20 SECONDS. THIS
 IS SHOWN IN THE ACCELERATION CHART
 BELOW.



FIG. 1

DON'T WORRY ABOUT FRICTION OR ANY-
 THING FANCY. THIS PROBLEM IS REALLY
 SIMPLE, SO KEEP IT SIMPLE.

THE PUZZLE IS TO FIND OUT HOW FAR
 THE MODEL TRAIN HAS GONE AT THE END OF
 100 SECONDS! (THE ANSWER SHOULD BE
 FEET)

NOW FOR THE HINTS!

FOR 1 FOOT/SEC² ACCELERATION,
 DISTANCE = 1/2 (SEC)²
 VELOCITY = 2 (SEC)

FOR 2 FOOT/SEC² ACCELERATION,
 DISTANCE = (SEC)²
 VELOCITY = 2 (SEC)

NOW BEFORE EVERYONE SAYS THAT THIS
 IS TOO HARD, IT IS NOT! IT IS REALLY
 QUITE EASY, BUT DOES REQUIRE YOU TO
 SPEND SOME TIME WITH IT.

WHY A PROBLEM LIKE THIS? THIS I
 HOPE WILL SHOW YOU THAT YOUR COMPUTER
 CAN HELP YOU SOLVE MANY PROBLEMS. SOME
 THAT YOU MAY HAVE THOUGHT WERE TOO
 HARD TO DO!

REMEMBER, THE PRIZE IS THE CART-
 RIDGE OF YOUR CHOICE, SO LETS SEE YOU
 ALL GIVE IT A TRY!!!

 GOOD LUCK!







COLONIAL MERCHANDISE MART
 25 STATE STREET
 DETROIT, MI 48226



WE HAVE THE MASTER COMPONENT (ASTROCADE) AND A LARGE SELECTION OF CARTRIDGES...
 ALL AT COMPETITIVE PRICES!!!

CALL NOW!! 962-6477



'HAPPY ASTROCADING!'



***** COUPON *****

PLEASE SEND THIS COUPON IN, TO JOIN THE BASIC AND/OR MACHINE LANGUAGE CLASSES.
 MAIL RIGHT AWAY OR CALL!!!

NAME.....

ADDRESS.....

PHONE.....

CLASS - MACHINE AND/OR BASIC.....

PLEASE LIST ALL FAMILY MEMBERS WHO ARE GOING. THE FEE IS \$10.00 PER PERSON, PER
 CLASS. EACH CLASS IS SIX WEEKS LONG. IF YOU HAVE ANY QUESTIONS, CALL DON OR
 PEGGY AT 313-437-3984 OR 313-437-7303.





"BUGGY-DOWN"
MICHIGAN ASTROBUGS
5940 NINE MILE ROAD
SOUTH LYON, MI 48178