

**DAL - ACE DISK # 30**  
(GAMES DISK)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

**RROUL.BAS** is a BASIC file that is run by menu or RUN"D:RROUL.BAS  
Number of possible players:ONE Hardware Req'd:NONE

Description:This program plays Russian Roulette. The program has no graphics and very little sound.

**MARQUE.BAS** is a BASIC file that is run by menu or RUN"D:MARQUE.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This program draws a marque sign on the screen with simulated flashing lights and scrolls a commercial for Custom HI-FI across the screen. If you want to change the message use the program MARQUE2.

**OCTADRAW.BAS** is a BASIC file that is run by menu or RUN"D:OCTADRAW.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:A nice, graphics drawing program that uses a joystick in port one. Each design the user draws is reflected in four quadrants. To draw a design, hold down the joystick button while moving the cursor with the stick. Release the button to move the cursor without drawing. Pressing the CLEAR key clears the screen.

Pressing SELECT causes the program to generate generally beautiful, random designs. Moving the joystick while the program is drawing causes the automatic drawing to cease. Thus allowing the user to move the cursor to a new location and reinitiate automatic drawing by pressing SELECT.

**BARGRAPH.BAS** is a BASIC file that is run by menu or RUN"D:BARGRAPH.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This program draws a bar-graph of monthly data input by the user. The data could represent expenses, income, taxes, or anything else. The program asks for each month's data. It would be nice if it supported a printer, but no such luck.

**SMASH.BAS** is a BASIC file that is run by menu or RUN"D:SMASH.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:SMASH is a thirteen mile road race with turns, straightways, acceleration, braking, etc. SMASH does not use graphics, sound, joysticks, or paddles. The program provides a menu of code which tells the user where he is on the track and what he can do (accelerate, turn, brake, etc.). The only feedback the user gets is more codes. If the user crashes, the program says SMASH.

**DISKTAPE.BAS** is a BASIC file that is run by menu or RUN"D:DISKTAPE.BAS  
Number of possible players:NONE Hardware req'd:NONE

Description: This program is used to back up files to cassette.

DUPL.BAS is a BASIC file that is run by menu or RUN"D:DUPL.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:DUPL duplicates disk file other than DOS from within a basic program. Its apparent value is in copying DOS 1 files to a DOS 2.0S disk.

COPY.BAS is a BASIC file that is run by menu or RUN"D:COPY.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a basic program which does the same as the DOS COPY. The reviewer didn't any added features, and being BASIC it is slower.

DISKTEST.BAS is a BASIC file that is run by menu or RUN"D:DISKTEST.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:DISKTEST can be used to test your drive and the quality of your diskettes. As with most diskette tests the program writes to the disk to test it, so DON'T test your disks which are not backed up. Having a good drive and good diskettes the only output observed by the reviewer was "TEST COMPLETE".

MATH.BAS is a BASIC file that is run by menu or RUN"D:MATH.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:MATH is used to teach the four basic math functions. The program uses no graphics, but requires the user to do some reading.

STATES.BAS is a BASIC file that is run by menu or RUN"D:STATES.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:A relatively good educational program. States draws a picture of the USA with all the states outlined. The user is given an opportunity to select either the guessing of states or capitals. The program uses the joystick to move through the selections (right for forward, and left for back). Select the proper response by pressing the fire button.

Comments:STATES combines graphics and sound in an excellent geography lesson.

ARTILL.BAS is a BASIC file that is run by menu or RUN"D:ARTILL.BAS  
Number of possible players:2 Hardware Req'd:NONE

Description:ARTILL is an artillery game in which each player specifies the angle of his cannon with respect to the ground and the velocity of the projectile. Each player occupies ground which is at a different elevation and faces a different cross wind speed. The players alternate shooting at each other. The game features simple graphics and sound. The program provides educational value in geometry and will appeal to children as well.

MARQUE2.BAS is a BASIC file that is run by menu or RUN"D:MARQUE2.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:MARQUE2 is the companion program to MARQUE. This program prompts the user with a menu and

allows them to enter the message they want and they can choose to have it blink or not.

Comments: This program may be quite useful in certain applications, and it shows ingenuity on the part of the author.

NUKE.BAS is a BASIC file that is run by menu or RUN"D:NUKE.BAS  
Number of possible players:1 Hardware Req'd:NONE

Description:NUKE simulates the operation of a nuclear power plant. The program uses the keyboard for input. After starting the program the user is given a page of instructions and the options of selecting a reactor diagram, working instructions, or to start operations. It's important to view the diagram first since it explains the cycle of coolants and other working components of operation. Then view the working instructions, and finally start operations.

In operating the plant the user controls:

- 1 The setting of the control rods.
- 2 The flow rate of the primary coolant.
- 3 The flow rate of the secondary coolant.
- 4 The flow rate of the emergency coolant (last ditch effort).

The operator (user) monitors:

- 1 Reactor temperature.
- 2 Heat exchange temperature.
- 3 Cooling tower temperature.
- 4 Power output.
- 5 Average power output.

The object is to maximize average power produced over a 100-150 day period WITHOUT causing a meltdown. The operation is realistic to the extent that time delays for heat transfer and inertia of the mechanical systems are represented. On the first four tries the reviewer melted the core (the review is an electrical engineer). On the fifth try, The reviewer improved to merely destriying the plant and all equipment except the core, which was safely shutdown. The reviewer was finally able to produce some steady power when certain plant elements spontaneously failed.

Comments:NUKE definitely has educational as well as entertainment value.

CARDS.BAS is a BASIC file that is run by menu or RUN"D:CARDS.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:CARDS is a subroutine for drawing pictures of playing cards. You enter your own game in the card program, and use a subroutine within CARDS to draw the picture of the hands dealt, cards facing up, etc.

Comments:CARDS is a very useful subroutine for those planning on writing their own card game.

JLANDER.BAS is a BASIC file that is run by menu or RUN"D:JLANDER.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:JLANDER is a moon-landing game in which the player uses the joystick in port 1 to control horizontal and vertical thrusters on a space ship as it lands on one of Jupiters moons. In addition, the player can select from the six moons, each with a different gravity. Each play starts on a different landscape. Some moons are quite difficult to land on.

Comments:JLANDER makes good use of graphics and sound and has excellent response to the joystick. JLANDER is about as close to commercial quality as any of us have a right to expect from user contributed programs.



## DAL - ACE DISK # 31

(HACE-3)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

**PMDemo.BAS** is a BASIC file that is run by menu or RUN"D:PMDemo.BAS  
Number of possible players:1-2 Hardware Req'd:1-4 JOYSTICKS

Description:This is a demo program for player-missile graphic techniques. Four players are placed on the screen, and may be moved (slowly) about the screen using the joysticks.

**CONCEN.BAS** is a BASIC file that is run by menu or RUN"D:CONCEN.BAS  
Number of possible players:1-2 Hardware Req'd:1-2 JOYSTICKS

Description:This is the old favorite game concentration. Players use joysticks and fire to choose the boxes they wish to try to match. The system keepstrack of the players scores.

Comments:This game simulates the original game very effectively. Difficulty in placing the cursor with the joystick is the only negative point.

**DODGE.BAS** is a BASIC file that is run by menu or RUN"D:DODGE.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This game pacman eat the dots with the carnival electric dodge-en car ride. The purpose is to guide your car counter-clockwise around a maze, gobbling dots and avoiding the enemy car, which happens to drive in a clockwise direction. You use the joystick to control the car, being able to move 2 lanes if moving slow or only 1 if moving fast. The fast speed is selected by holding down the fire button. Lane changes is only possible at the central parts of the screen.

When entering the number of turns at the beginning of the game, the number must be larger the 0 and less than 23.

**SUB.BAS** is a BASIC file that is run by menu or RUN"D:SUB.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This game displays an ocean view, with mines placed randomly in the water, a sub beneath the surface, and an enemy boat on the surface of the water. You guide the sub with the joystick and fire missiles at the mines by pushing the "fire" button. If your missile hits a mine, a rocket shoots up from the mine to try to hit the enemy boat.

**GOLF.BAS** is a BASIC file that is run by menu or RUN"D:GOLF.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This game simulates the game of golf, displaying a green, fairway, hole, ball, and golfer. Using the joystick you position the golfer near the ball. An angle indicator shoes the direction the ball will go. You control the distance the ball goes by how long the fire button is held down. The



system indicates par for each hole, and maintains your score.

**STARTREK.BAS** is a BASIC file that is run by menu or RUN"D:STARTREK.BAS  
Number of possible players:ONE Hardware Req'd:NONE

Description:This game is mainly text with some simple graphics. There are many facets of the game which the commander of a space ship controls by entering a set of commands and learning the effects of each. Your crew is trying to wipe out an enemy fleet without being destroyed first.

**CALENDAR.BAS** is a BASIC file that is run by menu or RUN"D:CALENDAR.BAS  
Number of possible players:ONE Hardware Req'd:NONE

Description:You input a month and year, and the program creates a calendar of that month on the screen. You can select either large or small numbers.

**DISKDUMP.BAS** is a BASIC file that is run by menu or RUN"D:DISKDUMP.BAS  
Number of possible players:NONE Hardware Req'd:PRINTER (optional)

Description:This utility disassembles an assembly language program from a binary disk file to either the screen or the printer. You enter the disk filename, it reads the file, determines the beginning and ending address. You enter the range of addresses for which you want a disassembly, then it outputs data to the device you selected.

The output columns consist of:

- 1 ADDRESS (HEX)
- 2 DATA BYTE (HEX)
- 3 MNEMONIC SYMBOL
- 4 ARGUMENTS (HEX)
- 5 DECIMAL EQUIVALENT OF DATA BYTE
- 6 ASCII CODE EQUIVALENT OF DATA BYTE

This is an excellent utility for those interested in machine language.

**DIRECTRY.BAS** is a BASIC file that is run by menu or RUN"D:DIRECTRY.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:You enter the date and time, and the program prints a standard disk directory (filename and # of sectors for each file on the disk) annotated with the date and time.

**LINEPRO.BAS** is a BASIC file that is run by menu or RUN"D:LINEPRO.BAS  
Number of possible players:NONE Hardware Req'd:PRINTER (optional)

Description:This is a simple text editor. It lets you create text line-by-line, edit text already in memory, output text to the disk or printer, and read text into memory from the disk. Instructions are displayed at the beginning of use.

Comments:This is a line editor rather than a screen editor, and thus much harder to use than the commercial word processors.

**DAL - ACE DISK # 33**  
(GAMES - ST. LOUIS ACUGD)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

If the disk is booted with the BASIC cartridge installed, an introduction screen shows indicating ST LOUIS 1 and ACUGD with some directions (this screen should be updated). The MENU should then be loaded using the DOS L command. Booting the disk without BASIC permits jumping directly to the Games Menu from a game by hitting System Reset. Therefore, to start, boot the disk, load the Game menu, and select Instructions.

**ROADRACE.OBJ** is a OBJECT file that is run DOS MENU L  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This game is a single player road race game using a joystick in port 1. The object is to increase points by steering along a roadway created ahead of you without hitting a wall. The game ends when you quit or the program locks.

**RACETRAP.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This is a racing game using a joystick. The object is to run over blue dots to increase score, but to avoid a head on collision with a killer car by jumping from track to track. Scores are logged by players after each race.

**TIMEBOMB.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:ONE Hardware Req'd: NONE

Description:In this game you difuse a bomb by cutting different colored wires shown on the screen by using indicated keyboard strokes. Instructions are given.

**BIRDS.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This is a skeet shooting game for one player using a joystick. It uses simple graphics, is rather slow, and is incomplete--no scoring.

**ATOMS.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:1-2 Hardware Req'd:1-2 JOYSTICKS

Description:This is a one or two player game using joy sticks. The object is to gather all of the bouncing atoms on your side of a partition wall in which you have control of gates. Simple but fair action.

**SKIER.OBJ** is a OBJECT file that is run by DOS MENU L

Number of possible players:1-2 Hardware Req'd:1-2 JOYSTICKS

Description:This is a one or two player game using joysticks. The object of the game is to be the first to finish your ski run. Graphics are basic. You control a square, moving side to side in order to go through a gate in a wall scrolling down the screen. The fire button controls speed.

ROBOT.OBJ is a OBJECT file that is run by DOS MENU L

Number of possible players:1-2 Hardware Req'd:1-2 JOYSTICKS

Description:This is a one player game using a joystick. The object is to avoid being hit by a robot or smiling face in a maze. The game is slow. Scoring seems to be based on time avoiding the robots. Hash flashes on the screen at impact. This may be a bug.

LIFE.OBJ is a OBJECT file that is run by DOS MENU L

Number of possible players:ONE\NONE JOYSTICK Hardware Req'd:

Description:This is a drawing game using the joystick. See the instruction file. There are three screens on disk, A-C. They can be called for demonstration. On running the game a blank screen greets you. Moving the joystick and using the fire button creates lines and spaces.

CRANE.OBJ is a OBJECT file that is run by DOS MENU L

Number of possible players:ONE Hardware Req'd:NONE

Description:This is a simple block stacking game of interest to younger children. It operates from the keyboard. Select 1 through 3 for block size and position the block using the arrow keys. The space bar releases the block at the selected position



**DAL - ACE DISK # 34**  
(GAME UTILITY)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

Dungeons and Dragons character generator is a Autoload file that is run by the system.  
Number of possible players:NONE Hardware Req'd:NONE

Description:This disk is a Dungeons and Dragons character generator. (N.B. it is not recommended that you but this disk unless you play D&D, as most of this will mean nothing to you.) If you do play, though, this is a must. It is an autoload program written in BASIC. The program uses only keyboard input. It is the most complete character generator that I have ever seen. It rolls not only basic stats and hit points, but age, height, weight, and for NPC's, personality traits.

Comments:There are a few drawbacks. The first, and I consider it the worst, is the fact that you can't copy it to a printer. The other problem which I uncovered is, that the program is a chain program. In other words, it "forgets" everything when it loads new data. Also to restart the program you must restart the computer. Even with these minor problems I still think this is a great tool for the serious D&D enthusiast.

**DAL - ACE DISK # 35**  
(GAMES and UTILITIES)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

**BOOTTEXT.BAS** is a BASIC file that is run by menu or RUN'D:BOOTTEXT.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This program modify the boot sectors on a DOS 2.0S disk and permit you to create a custom message that will be displayed every time the disk is booted up.

To use this program just run it with the disk you want customized in drive #1. The program will load in the first three sectors of that disk. It will then check to see if you want to customize in a DOS 2.0S disk.

If the disk is a DOS 2.0S disk you can then type in the message you wish to be displayed at boot time. The message you type in will be displayed exactly as you see it when your customized disk is booted. Your message is limited to 126 characters. Hit ESC to end the message and save it to the boot sector of the disk. Hit CLEAR to erase what you have typed and start over.

**BOOTTEXT.TXT** is a TEXT file that is not run  
Number of possible players:NONE Hardware Req'd:NONE

Description:This file contains the instructions for using the program BOOTTEXT.BAS. The instructions are summarized in BOOTTEXT.BAS

**EXAMINE.BAS** is a BASIC file that is run by menu or RUN'D:EXAMINE.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This utility program will allow you to examine any sector in a disk with DOS 2.0S. After typing in the sector number you wish to examine, the contents of the sector is displayed along with the file number, number of bytes of data in the sector and the number of sectors which links to the sector being examined. The disk directory can also be examined. When examining the directory, a table showing the filename and number, number of sectors and starting sector of each file is displayed. The status of "active" means the file has been deleted from the disk. A status of "deleted" means the file has been deleted from the disk but the filename is still in the directory.

**FILEINDX.BAS** is a BASIC file that is run by menu or RUN'D:FILEINDX.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a file inventory program which allows you to create an index of the files on a disk. This program has several options as follows:

A - Load index from a disk. The index must be a filename PROGINDX with any three digit extension. This file can be created using the add records option below.

B - Add records. This option can be used to either create an index file called PROGINDX with a three digit extender or to add to a previously created index file. Each file on the disk can be categorized as follows:

E education	G game
F data file	1 1 player game
U utility	n n player game
B business	P practical
S system	M music
H household	V visicalc
D demo	L language

Entering the code letter will key the program to the proper category. Any other letter code will result in only the letter being printed in the output.

To create a file, type inverse A and answer prompt to indicate if you wish to enter a category or type code. If yes, then each file name on disk will appear on the screen with a prompt to enter the type code. If no, the a prompt appears to either end operations or continue with the next disk. Enter current disk to store results on disk.

C - If the index has been loaded into memory, it can be displayed to the screen.

D - The index can be printed.

E - An index can be scanned for a specific file name.

F - Indexes can be saved to disk.

G - Indexes can be deleted from the disk.

H - An index can be deleted from memory.

I - A menu can be displayed if the menu is stored with the filename "MENU".

**HOPPER.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This is a FROGGER game in which the player has nine lives. The high score is shown. Push START or SYSTEM RESET to restart th game.

**HOPPER.TXT** is a TEXT file that is not run  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a set of limited instruction for the HOPPER.OBJ program.

**MAZE.BAS** is a BASIC file that is run by menu or RUN"D:MAZE.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:An invisible maze is created for you to work your way out of. You are playing against time. Clues to the maze are given at the beginning by briefly displaying "happy faces" which are clues to the way out of the maze. You use the joystick to move, and pushing the fire button gives you a quick look at the maze but it costs you some time. Press the fire button to play again.

Comments:This is a fun beat the clock game from compute magazine.

**MAZE3D.BAS** is a BASIC file that is run by menu or RUN"D:MAZE3D.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This game will place you in a gigantic random maze from which there is only one route of escape. In this three dimensioned simulation you'll be able to see the high walls and the corridors fading in the distance. You must try to escape from the maze in the shortest possible time.

At the start of each game, you'll be asked to push the select key to adjust the size of the maze. This



level of difficulty can vary from an 11x11 grid to a 35x35 grid. When you press the start key, your random maze is constructed.

To move through the maze push the joystick left or right to make 90 degree turns. Pushing the stick forward will cause your man to move one intersection in the direction you are facing. After you move several steps, turn around 180 degrees and you'll see little tracks in the intersection you just passed. These tracks will let you know where you have been.

You can press the fire button to see a top down map of the maze. Seeing this map does carry a penalty, though, as the timer will run about 10 times the normal speed. Press the fire button a second time to return to the maze.

**MENU2.BAS** is a BASIC file that is run by menu or RUN'D:MENU2.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a menu program which displays the files on the disk. The number of sectors of each file is not shown. A pointer is moved to the file to be run by using a joystick or the file number can be entered. Only files which contain BASIC programs in tokenized (SAVE statement) format can be loaded with this menu. Object or text files can not be run.

**ONSLUGHT.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:1-2 Hardware Req'd:1-2 JOYSTICKS

Description:You are in control of a spaceship at the bottom of the screen while an ever increasing number of spaceships approach you from the top of the screen. A joystick is used to move your ship from side to side. Press the fire button to shoot at the alien ships. Forty points are scored for each spaceship shot down. A large space station occasionally crosses the screen. Hit this ship and you score 1000 points and you get a new spaceship. If spaceships hit you, your ship is destroyed. Mines occasionally chase you. You can not destroy them. To select a game, press select, then use option button to choose game.

**RACE.BAS** is a BASIC file that is run by menu or RUN'D:RACE.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:A joystick is used to steer a race car along a simple race track which zig-zags from top to bottom of the screen. Press the trigger to score points. But watch out because you cannot steer while the trigger is pushed. Hitting the sides costs you points. At the beginning of play the cars handling can be changed from good to fair to poor. With poor handling the racer cannot turn as sharp as the zig-zags in the race track. The length of each race can also be selected.

**RESDUP.OBJ** is a OBJECT file that is run by DOS MENU L  
Number of possible players:NONE Hardware Req'd:NONE

Description:This program makes DUP.SYS memory resident. This allows DUP.SYS and BASIC to co-exist in the system and allows you to go from one to the other. When a DUP.SYS command will destroy the BASIC program a warning will be given. The instructions for using this program are given in the file RESDUP.TXT.

**RESDUP.TXT** is a TEXT file that is not run  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is the instruction file for RESDUP.OBJ.

STARBL5.BAS is a BASIC file that is run by menu or RUN'D:STARBL5.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:This is a defenders type game. You are in command of 3 high powered alien interceptors and your mission is to destroy the invading aliens and their hostile mother ship. You direct your ship with the joystick and fire your laser with the fire button. The enemy mother ship also has a laser on board. Touching the mothership or a alien ship destroys you.

TEXTIT.BAS is a BASIC file that is run by menu or RUN'D:TEXTIT.BAS  
Number of possible players:NONE Hardware Req'd:optional printer

Description:This is a crude word processor. There are five basic commands as follows:  
READ A file can be read from disk or tape.  
WRITE A file can be written to tape or disk.  
DELETE Text can be deleted by line number.  
EDIT Any line of text can be edited but only the line being edited is displayed. Text lines are called up by line number.  
INSERT A new line may be inserted.

ULTRACUB.BAS is a BASIC file that is run by menu or RUN'D:ULTRACUB.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:The joystick is used to draw lines on the screen which consist of a serie of cubes. The three visible sides of the cube have different colors which can be varied. The fire button is used to stop and start the drawing. the following options are available:  
BACKGROUND COLOR  
CUBE COLOR  
ERASE  
REDEFINE The size of the cubes can be varied.  
QUIT the screen is displayed without the text window  
WIPEOUT erases the entire screen.

**DAL - ACE DISK #36**  
(ANALOG #13)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

**ASSAULT.BAS** is a file that is run by menu or RUN "D:ASSAULT.BAS  
Number of possible players:ONE Hardware Req'd: JOYSTICK

Description: This is a shooting game based loosely on missile command.

**ASTRON.BAS** is a file that is run by menu or RUN "D:ASTRON.BAS  
Number of possible players:N/A Hardware Req'd: NONE

Description: This astronomy program provides information on stellar and planetary objects. The objects are divided into the solar system and deep space. You can get the time these objects rise & set for a selected date.

Comments: This is a very nice program for those who are interested in observing the skies.

**C101 thru C109** are files that are run by ENTER "D:C01 and then RUN, <RETURN>.  
Number of possible players:N/A Hardware Req'd: NONE

Description:This is a series of listed programs which can be included into a basic program to perform direct calls to the C10 routines. If you are interested in loading or saving large amounts of data from BASIC, then this will be of interest to you.

Comments:Refer to ANALOG issue #13 for more details.

**FORTH1 thru FORTH6** are files that are run by menu or RUN "D:FORTH1...; FORTH2B is loaded by DOS MENU L.  
Number of possible players:N/A Hardware Req'd: NONE

Description:These programs provide a comparison of the speed of execution between BASIC, FORTH and Machine Language.

**LPADDCASS.LST** is a file that is run by menu or ENTER "D:LPADDCASS into D:LIVWIRE.BAS  
Number of possible players:N/A Hardware Req'd: NONE

Description: This listing can be added to the file LIVWIRE and will cause the default to be the paddle instead of the joystick. This version is for cassette.

Comments:It is suggested that you do these modifications on a copy of the original file.

**LPADDDISK.LST** is a file that is run by menu or ENTER "D:LPADDDISK into D:LIVWIRE.BAS  
Number of possible players:N/A Hardware Req'd: NONE



Description: This listing can be added to the file LIVEWIRE and will cause the default to be the paddle instead of the joystick. This version is for disk drives.

Comments: It is suggested that you do these modifications on a copy of the original file.

ROUNMAIN.OBJ is an object file that is run by DOS MENU L  
Number of possible players: ONE Hardware Req'd: JOYSTICK

Description: This is a cowboy's delight. You are herding a herd of cows down a track and lasso n' 'em. There are three Black horses that are still that you want to rope if possible. To begin, press START. Oh, and don't let the cows get behind you or you lose the round and the game stops.

Comments: This program is created by ROUNMAIN.BAS which is loaded by a RUN statement. This saved file creates the object file.

Note: The programs ROUNCASS.LST and ROUNDISK.LST are used in the BASIC file listing to create a program that will load and save on disk or cassette.

To do this, first LOAD the ROUNMAIN.BAS and then ENTER ROUNDISK, then RUN

SCROOL.BAS is a file that is run by menu or RUN "D:SCROOL.BAS

Number of possible players: N/A Hardware Req'd: NONE

Description: A sample program that is designed to show the setting up of a customer's display list. Best utilized in conjunction with the magazine.

**DAL - ACE DISK # 37**  
(GAMES & UTILITIES)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

**QUICKDOS.BAS** is a BASIC file that is run by menu or RUN"D:QUICKDOS.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:A real timesaver. This program writes an autorun.sys file to your disk. When you reboot and enter the DOS command you get an immediate MENU including DIRECTORY BASIC LOCK UNLOCK DELETE RENAME and DOS. If you keep forgetting the file names like I do QUICKDOS is worth the price of several DAL-ACE disks.

**CANNIBAL.BAS** is a BASIC file that is run by menu or RUN"D:CANNIBAL.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:Classic puzzle. The 3 missionaries must row 3 cannibals across the river in a 2 man boat without being eaten by teh cannibals.

**STARBLSE.BAS** is a BASICfile that is run by menu or RUN"D:STARBLSE.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:Star Blaster. Defender type game written in BASIC. Hold down the fire button and don't forget to duck under saucer shots.

**DEPTHCRG.BAS** is a BASICfile that is run by menu or RUN"D:DEPTHCRG.BAS  
Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:Drop depth charges on enemy ships to score points.

**MPLOADER.LST** is a LISTED file that is run ENTER"D:MPLOADER.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a BASIC program to load and display Micro Painter pictures. Program is stored in ASCII format. Use the ENTER command to load.

**MPLOADER.LS2** is a LISTED file that is run by ENTER"D:MPLOADER.LS2  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a smaller ersion of MPLOADER.LST.

**DECHEX.LST** is a LISTED file that is run by RUN"D:DECHEX  
Number of possible players:NONE Hardware Req'd:NONE

Description: This is a decimal to hexadecimal converter program.

Comments:

HEXDEC.LST is a LISTED file that is run by ENTER"D:HEXDEC  
Number of possible players: NONE Hardware Req'd: NONE

Description: This is hexadecimal to decimal converter program.

MISSILE.BAS is a BASIC file that is run by menu or RUN"D:MISSILE.BAS  
Number of possible players: ONE Hardware Req'd: ONE JOYSTICK

Description: Invaders type game. Slow.

BUGS.BAS is a BASIC file that is run by menu or RUN"D:BUGS.BAS  
Number of possible players: ONE Hardware Req'd: ONE JOYSTICK

Description: Character graphics game. Pound the green guys into the slots but look out for the orange killers. It's not easy because the cursor has a mind of its own.

ATRAIN.BAS is a BASIC file that is run by menu or RUN"D:ATRAIN.BAS  
Number of possible players: ONE Hardware Req'd: NONE

Description: A spelling game for the youngsters. Letters appear on a train of flatcars. Move the train to select letters - push the button to another letter. Good graphics.

MX80.BAS is a BASIC file that is run by menu or RUN"D:MX80.BAS  
Number of possible players: NONE Hardware Req'd: MX80 PRINTER

Description: A program to dump graphics files to an MX80 printer that has GRAFTRAX.



**DAL - ACE DISK # 38**  
(ANALOG #14)

Standard programs on this disk include: DOS, DUP, and MENU and will load automatically when you boot the disk.

If file is a BASIC or LISTED program, the BASIC cartridge must be inserted.

**FINESC1.BAS** is a BASIC file that is run by menu or RUN"D:FINESC1.BAS  
Number of possible players:NONE Hardware Req'd:ONE JOYSTICK

Description:This is a horizontal fine scrolling routine and demonstration.

**FINESC2.BAS** is BASIC a file that is run by menu or RUN"D:FINESC2.BAS  
Number of possible players:NONE Hardware Req'd:ONE JOYSTICK

Description:This is a horizontal fine scrolling routine and demonstration.

**HEXPAD.BAS** is a file that is run by menu or RUN"D:HEXPAD.BAS  
Number of possible players:NONE Hardware Req'd:NONE

Description:This is a program for creating a long list of DATA statements. The program requests the starting line number and increments for data statements. The program then prints "linenumber DATA" and waits for entry of data. Pressing "ESC TAB" allows you to enter a new starting line number and increment. Data can be entered by means of a simulated HEXPAD. The HEXPAD format is as follows:

KEYBOARD LETTERS	CHARACTER PRODUCED
789	789
TYUID	EF456
GHJKL	CD123
BNM	ABO

The program loads to lines 31000-32001. If you list the program to disk or cassette it can be entered into your program for use. The program is activated by typing "GOTO 31000" and typing "GOTO 32000" deletes it from your program.

**HEXPAD.ASM** is a ASM SOURCE file that is not run.  
Number of possible players:NONE Hardware Req'd:NONE

Description:his is the ASM source listing for HEXPAD.BAS.

**CONVERT.BAS** is a BASIC file that is run by menu or RUN"D:CONVERT.BAS  
Number of possible players: Hardware Req'd:NONE

DESCRIPTION: This is a conversion program for various measurements.

1. Metric to English.
  - Centimeters to inches
  - Meters to feet
  - Kilograms to pounds
  - Grams to ounces

Liters to gallons  
Degrees celcius to fahrenheit

2. English to Metric.  
reverse of above
3. English standard measurements  
inchs to feet  
feet to yards  
square inchs to square feet  
square feet to square yards  
feet to miles  
square feet to acres  
acres to feet
4. Household measurements  
teaspoons to tablespoons  
tablespoons to cups  
cups to fluid ounces  
cups to pints  
cups to quarts  
pints to quarts  
pints to gallons  
quarts to gallons

5. Metric prefix conversion chart: decimal equivalences to metric prefixs from tera to atto.

RETRMAIN.BAS

RETRDISK.LST

RETRCASS.LST

RETROFIR.OBJ

Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description: LOAD "D:RETRMAIN.BAS and the enter either the disk or cassette listed file depending on if you want a AUTORUN.SYS file of a Boot tape. The AUTORUN.SYS program has been renamed and included as a binary load file as RETROFIR.OBJ.

This is a lunar lander type game in which you guide a lander to a designated target on a grid map. You can also monitor descent and position on a panel that gives readout of Objective X,Y position, Altitude, X velocity, Y velocity, and Z velocity.

Comments:How scoring is accomplished was not determined by the reviewer. BEWARE of too much radiation.

LUMBER.BAS is a BASIC file that is run by menu or RUN"D:LUMBER.BAS

Number of possible players:ONE Hardware Req'd:ONE JOYSTICK

Description:Lumberjack is a Frogger type game. The program uses a redefined character set and player missile graphics. Move the lumberjack across the river jumping on logs and rocks. Position of feet determines if a jump is successful.

10 points for each successful jump.

50 points for each successful crossing.

300 bonus points and a new set of five lives  
for each set of 5 crossing successfully.

Comments: Press SELECT to toggle between color or black and white screen.

MUSE.BAS  
MUSE.ASM  
MUSE.OBJ  
MUSEDEMO.BAS

Number of possible players: NONE Hardware Req'd: NONE

Description: This program makes an AUTORUN.SYS program to be used with the basic cartridge. The MUSE.OBJ may be renamed AUTORUN.SYS to accomplish this. When the program BOOTS up the message "MUSE 1.0 OK" and "READY" appear on the screen.

DO NOT press RESET until a BASIC program has been loaded. This program is used to reduce the amount of memory used by any BASIC program. MUSEDEMO.BAS has been included to demonstrate some of the memory saving techniques. Load a BASIC program. Press RESET and the program will display the memory usage and the other following information.

- # of lines
- # of Statements
- # of rem characters
- Program RAM
- # of variables
- # of arrays
- Array RAM
- # of strings
- String RAM
- Variable name RAM
- Free RAM

Comments: This program comes in handy when you have a BASIC program which doesn't have enough memory to run.

BOOTCAMP.ASM is a ASM source file

Number of possible players: NONE Hardware Req'd: NONE

Description: This is a "DO-NOTHING" program which when used with the article in ANALOG 14 will teach a beginner assemble language programmer how to use absolute and indirect JMP statements.

DISASM.BAS is a BASIC file that is run by menu or RUN"D:DISASM.BAS

Number of possible players: NONE Hardware Req'd: NONE

Description: This program is used to disassemble DATA statements in a basic program. This program is loaded in at line number 32000. The DATA statements are disassembled to the screen.

Comments: This program should be listed to the disk so that it may be added to a BASIC program with an ENTER command.

PSOUND1.PIL and  
PSOUND2.PIL are PILOT files

Number of possible players: NONE Hardware Req'd: PILOT CARTRIDGE

Description: These two programs are pilot demo programs which show the user how to synchronize voice and programs in ATARI PILOT.