

catalog

ALTAIR USER GROUP
SOFTWARE LIBRARY

ALTAIR* USER GROUP SOFTWARE LIBRARY CATALOG

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Terms of Purchase

Software is distributed from the Altair User Group Software Library as a service to Altair computer users. The software is submitted to the library by interested users who desire to provide a service to other users. (See Software Submittal and Monthly Contest below.) The software receives little or no testing when it is entered into the library. The listings or machine readable form are merely copied and distributed, at the cost of reproduction and mailing, to those who desire to purchase the listing. ABSOLUTELY NO WARRANTIES ARE MADE THAT THE SOFTWARE WILL OPERATE, PERFORM ANY FUNCTION, OR HAVE ANY FITNESS FOR ANY PURPOSE. If other users detect errors or have improvements in the software, the corrections or suggestions will be copied and distributed with subsequent orders for the software. No attempt will be made to notify previous purchasers. Occasionally, the correction to a program will be noted in COMPUTER NOTES.

Catalog Updates

Updates to this Catalog, which include listings of new software entered into the library each month, are included in regular subscriptions to COMPUTER NOTES, the monthly magazine published by MITS, Inc. The updates are inserted as separate pages, already three-hole punched, in each issue. An annual subscription to COMPUTER NOTES is available for \$5.00 from MITS, Inc., 2450 Alamo, S.E., Albuquerque, New Mexico 87106.

#422751

Author: Robert Rydel
 Length: 25 bytes, first program
 32 bytes, second program
 Two pseudorandom number generators:
 They use "the multiplicative congru-
 ential method for producing pseudo-
 random numbers.
 Second program: produces 16-bit
 random numbers that repeat every
 2^{14} random numbers.

#429751

Author: Martin C. Beattie, M. D.
 Length: 102 bytes
 Game program that plays the follow-
 ing game:
 There are 15 chips. Each player
 takes 1, 2, or 3, and the person
 to take the last one loses. The
 numbers 3 and 15 can be set as de-
 sired. Either player or computer
 goes first.

#55751

Author: Lee M. Eastburn
 Length: 256 bytes
 Binary to BCD conversion.
 Binary number is 3 bytes long.

#516751

Author: George Muttick
 Length: 64 bytes
 RAM Diagnostic Program. It runs
 "continuously until halted by a mem-
 ory access error or stopped by oper-
 ator. All RAM locations are written
 into and accessed for all 256 poss-
 ible 8 bit data word combinations."

#516753

Author: Harold S. Corbin
 Length: 43 bytes
 A debugging routine that when called
 saves the SP, top entry of stack, A,
 B, C, D, E, H, L, and all flags ex-
 cept carry in core so they can be
 examined. Another entry port re-
 turns to the program.

#519751

Author: Dr. Oscar Goldman
 Length: 48 bytes
 Forms an 8-bit "maximal length shift
 register sequence" which "consists
 of the 2^8 distinct words ... arranged
 according to the following rules:
 The first word is 000 and each word
 is constructed from the previous one
 by first shifting left one place and
 then filling the vacated right-most
 spot with a 0 or a 1."

#519753

Author: Martin C. Beattie, M. D.
 Length: 111 bytes
 Game program that plays the game of
 NIM:
 Arrange any number of chips in any
 number of rows. Each player may re-
 move any number of chips from any
 one row. The person who takes the
 last chip wins.
 Program Limits: Up to 10 rows of
 256 chips each. Either player or
 computer goes first.

#521751

Author: Jim Gerow
 Length: About 30 line printer pages
 This program assembles programs for
 the ALTAIR 8800. It is written in
 ANSI standard Fortran IV. The out-
 put and input are in either octal,
 decimal or hexadecimal.

#523751

Author: Daniel Lovse
 A series of programs that form a
 cross-assembler for the ALTAIR 8800.
 They are written for a PDP-8 running
 under OS/8, and use the PAL-8 assem-
 bler.

#527751

Author: Randall K. Webb
 Length: 40 bytes, first program
 19 bytes, second program
 26 bytes, third program
 First Program: estimate of the stan-
 dard deviation of a list of positive
 numbers.
 Second Program: approximation of
 binary logarithm.
 Third Program: bit reversal of a
 word.

#62751

Author: Roger L. Smith
 Length: 43 bytes
 This program plays music through an amplifier connected with a capacitor to an output port. Include 96 byte sample song.

#62752

Author: Lee M. Eastburn
 Length: 256 bytes
 BCD to Binary conversion.
 BCD number is 4 digits long.
 Binary number is 3 bytes long.

#63751

Author: Ronald B. Keele
 Length: 7 bytes
 Memory clear.

#611751

Author: Randolph C. Wilhoit
 Length: 228 bytes
 This program makes a copy of a program in memory at specified locations and adjusts internal addresses in the program to correspond to the new location. There are options to make a copy of the program with no changes, to take the upper and lower limits from registers or the stack, to adjust memory references in a program without relocating it, and to adjust memory references from a group of specified instructions only.

#616751

Author: L. M. Eastburn
 Length: 250 bytes
 Sort Program using bubble sort.
 Allows specification of data size and sort field.

#630751

Author: Jim Babcock
 Length: BASIC, about 250 lines
 Plays famous Las Vegas Card game.

#711751

Author: L. M. Eastburn
 Length: 180 bytes
 Program to relocate other programs.
 Modified instruction operands when appropriate.

#714751

Author: Donald Tork
 Length: 33 bytes
 Loads data from an ASCII device into memory.

#717751

Author: Samuel Cook
 Length: 22 bytes
 The interrupt light on the front panel is turned on and off in a loop that gets smaller and smaller, starting at 1.8 seconds.

#717752 & #717753

Author: Dr. George Haller
 Length: 30 bytes each
 One program (#717752) does a descending sort and the other (#717753) does an ascending sort. Both use a bubble sort. The lists to be sorted consist of single bytes, all of which are used as the sort field.

#721751

Author: Gary Tack
 Length: 240 bytes
 Plays tic-tac-toe. Uses the switches and lights.

#721752

Author: Dennis Bahr
 Length: 25 bytes
 RAM memory test program. Tests all locations between a lower and upper bound with all possible values.

#721753

Author: Matthew Smith
 Length: 44 bytes
 FLASH displays patterns in the lights.
 Good demonstration program.

#722751

Author: Roger Gulbranson
 Length: 35-80 bytes depending on how much data is used.
 Generates 16-bit random numbers using generalized feedback shift register algorithm.

#724751

Author: Billy Wood
 Length: 40 bytes
 RAM memory diagnostic. Goes through memory testing locations with all bits on, and one off and vice versa.

#725751

(formerly misprinted as #722751)
 Author: Herb Archer
 Length: 35 bytes
 RAM test program. Two different bit patterns are stored in each memory cell and checked for accuracy.

#725752

Author: Daniel Lomax
 Length: 31 bytes
 Program that finds out where it is in memory and then relocates itself to the page in the switch register.

#728752

Author: J. R. Scott
 Length: 36 bytes
 Translates some Baudot character codes to ASCII equivalent.

#730751

Author: John Klein
 Length: About 200 lines of BASIC
 Plays blackjack. Full instructions given with the program.

#731751

Author: Ward Christensen
 Length: 2 bytes
 Memory clear.

0000 063 INX SP
 0001 307 RST 0

#84751

Author: Nilton G. Gimenes
 Length: 15 bytes for each routine
 Octal/ASCII--ASCII/octal conversion routines for octal digits/characters stored in six sequential memory locations.

#84752

Author: Nilton G. Gimenes
 Length: 28 bytes
 Translates six octal digits in consecutive locations in memory to a double byte value in [D, E].

#84753

Author: Nilton G. Gimes
 Length: 33 bytes
 Converts a 2-byte unsigned number into 6 individual octal digits in consecutive memory locations.

#88751

Author: Charlie Shields
 Length: 22 bytes
 Outputs 1's to an I/O port a selected percentage of the time. Outputs 0's the rest of the time.

#811751

Author: Donald S. Tork
 Length: 74 bytes
 Searches a table of up to 255 entries of up to 255 byte strings for a match on the search string, which may also be up to 255 bytes long.

#811753

Author: Thomas D. Thomas
 Length: 19 bytes
 Adds a quadruple byte integer pointed to by [H, L] to registers [B, C, D, E].

#813751

Author: John S. Robison
 Length: 277 bytes
 Tests ACR interface by comparing the record line output to the input from the monitor playback output from those tape machines which have monitor capability.

#813752

Author: David Nowak
 Length: 4 bytes
 Subroutine to do a relative jump using a displacement in [D, E]. Could be used as an RST.

RJMP: XTHL ;Get return address in
 ;[H, L].
 ;Save [H, L] on stack
 DAD D ;Add on displacement
 XTHL ;Save back return
 ;address and restore
 ;[H, L]
 RET ;Do relative branch

#815751

Author: John Trautschold
 Length: 476 bytes
 Multiplies a 12-digit floating point number times an 8-digit floating point number.

#818751

Author: Jonathan Griffiths
 Length: 23 bytes
 Displays the contents of the accu-

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#818752

Author: Steve Phillips
Length: 477 bytes
Quadruple byte signed integer manipulation package. Addition, subtraction, multiplication, division, as well as sign and zero value testing and other useful routines.

#825751

Author: Richard L. Berg
Length: 34 bytes
Simple memory test. Halts when finds a bad location.

#825754

Author: Dr. Jack W. Crenshaw
Length: 16 bytes
ASCII/HEX--HEX/ASCII conversion subroutines.

#829751

Author: R. J. Walker
Length: 57 bytes
Loads checksummed 4K or 8K ALTAIR BASIC from an unmodified PIO board.

#92751

Author: Dean B. McDaniel
Length: 23 bytes
"Object: To kill the rotating bit. If you miss the lit bit another one at that sense switch position will turn on, now leaving you two bits to destroy."

#94751

Author: Carl Swift
Length: 15 and 11 statements
BASIC programs to dump/store memory in octal using ALTAIR BASIC's PEEK and POKE statements.

#99751 & #99752

Author: Gary Tack
Length: 21 and 27 bytes
Routines to add (#99752) or subtract (#99751) two 16-digit BCD numbers.

#910751

Author: Ross E. Housholder
Length: 22 pages
A very complete discussion of playing music on the ALTAIR, including translation programs and an improved PLAY program with source instructions.

#911751

Author: Dale J. Travis
Length: 16 bytes
Subroutine to convert binary to a 3-digit BCD number.

#912751

Author: Gerhald Hansel
Length: 70 lines
A BASIC program that plays roulette.

#912752

Author: Bob Omer
Length: 78 lines
BASIC program that plays the Stick game. Instructions available when the program is run.

#916751

Author: Gary Tack
Length: 128 bytes
Program to play DICE with a basic ALTAIR.

#920751

Author: Dale J. Travis
Length: Approx. 80 bytes
Converts an ASCII string in decimal to a signed 16-bit number.

#920752

Author: Dale J. Travis
Length: Approx. 120 bytes
Program to convert a 16-bit signed integer to an ASCII string of decimal digits.

#929751

Author: Roger Walker
Length: 58 bytes
Dumps a block of memory in checksum format.

#102751

Author: Robert Rydel
Length: 82 bytes
"Error Detection Code Generator/Checker". Generates cyclic redundancy check (CRC) to allow for doing error detection.

#106751

Author: Gerard Bilodeau
Length: 25 bytes
A message print subroutine. Allows for embedded carriage return/line feeds and any delimiter character.

#109751

Author: William D. Roch

Length: 30 lines

A BASIC program to calculate the number of days between two dates. Takes leap years into consideration.

#1010751

Author: Jacques Roth

Length: 256 bytes

Program to play the "Bagels" game with a minimum ALTAIR. Instructions included.

#1010752

Author: Jacques Roth

Length: 19 bytes

Timing subroutine. Delays a specified number of seconds.

#1014751

Author: Jack O. Coats, Jr.

Length: 73 bytes

Loads data from terminal into memory and executes data after the termination character. Currently written to work with a terminal connected through a parallel I/O board.

#1016751

Author: Steve Caldara

Length: 21 lines

A BASIC "Lunar Lander" program.

#1016752

Author: Ian D. Kettleborough

Length: 44 pages

A Fortran IV cross-assembler, currently running on a Data-General. Several listing options, as well as an object dump can be selected. Conditional assembly provided for.

#1020751

Author: Gerhald Hansel

Length: 46 lines of Basic

Title: Addition problems

Produces a group of math addition problems and answers. Written to use PRINT USING, a feature of Extended Basic, to format its output.

#1020752

Author: Lee Eastburn

Length: 290 locations

Title: Print program

Dumps a program with page headings, an address field, and the octal contents of the address. Columns are provided to fill in labels, instruction mnemonics and comments.

#1021751

Author: Jack Coats, Jr.

Length: 46 bytes

Title: A Dual-Tasker

An interrupt level routine to switch between two tasks. Context is saved on the stack and the stack pointer is saved in memory.

#1027751

Author: Jack Coats, Jr.

Length: 43 bytes

Title: Time of Day Routine

Using the real-time-clock interrupts this program keeps track of the hours, minutes, seconds, and hundredths of seconds that elapse. The data is stored in binary coded decimal.

#1027752

Author: Roger J. Walker

Length: 53 bytes

Title: TVTDR-I/O handler for TVT-II

TVTDR is designed to overcome a deficiency in the TVT-II that prevents it from blanking to the end of the line when a carriage return is output. The appropriate number of spaces are output instead of a carriage return. Instructions for interfacing to ALTAIR BASIC are given.

#1030751

Author: Lee Eastburn

Length: LOAD section-71 bytes

DUMP section-96 bytes

Title: ASCII Octal Loader and

Dumper

The DUMP section outputs the contents of the block of memory in ASCII octal (3 characters ["0" - "7"] for each byte). Twenty bytes are printed on each line of output. The LOAD section loads a tape of the same format, ignoring all characters except "0" through "7". The start and end locations are specified by changing LXIs in the programs themselves.

#1030752

Author: John Trautschold
Length: 16 bytes
Title: VLCT load program
Allows entry of a load address and program data in octal from a VLCT keyboard. The entered data is displayed for verification. Documented with high 8-bits of start address as "XXX" so the program can easily be located at the start of any memory page (a block of 256 consecutive memory locations, the first location of which has an address divisible by 256 [decimal]).

#113751

Author: Jack Coats, Jr.
Length: 83 bytes
Title: BCD multiplication subroutine
Currently set up to multiply two 8-digit numbers in memory and give a 16-digit number in memory for a result. Can be changed for different size numbers without much difficulty.

#117751

Author: S. Armstrong
Length: 124 instruction bytes (not including embedded NOPS)
342 data bytes
Title: Punch tape label
Punches paper tape labels by using 5 tape frames to make a block letter. Can "print" any alphabetic, numeric, or common delimiter. Additional characters can easily be added. "Prints" an entire line at once with separating blanks.

#117752

Author: Jerry Ford
Length: 318 bytes
Title: JAMON - a teletype monitor
This monitor allows examining (dumping) of memory blocks, depositing into memory blocks and jumping to a specified address. All inputs and outputs are in octal. Subroutines for character input, character output, octal input and octal output are included.

#1117751

Author: George Rompot
Length: 41 bytes
Title: GET - a "Lifeline" subroutine
A well-documented subroutine to perform the functions of the TGET and LGET subroutines specified in the lifeline article in Byte magazine. (October 1975, pp. 34-41) Includes test routine.

#1117752

Author: George Rompot
Length: 25 bytes
Title: CHECK
A well-documented subroutine to calculate a 16-bit sum of an area of core specified in the calling parameters. Optionally checks the computed checksum with a checksum provided in the calling sequence. A testing program is included.

#1121751

Author: Gary Tack
Length: 152 bytes
Title: Random Magic Squares
Generates 3 numbers which are used to make a magic square (a 3x3 grid in which the sums of the numbers in each row, column, and diagonal are equal). All "magic squares" can be generated since 3 numbers characterize a magic square. Each group of 3 numbers generates a distinct magic square. Stores magic square information in memory. Doesn't do any input/output.

#1123751

Author: Jim Gerow
Length: 33 pages
Title: A FORTRAN simulator for the 8080
A FORTRAN program to take as input the code generated by Mr. Gerow's Cross Assembler (#521751) and simulate the ALTAIR'S execution of the code. Extremely useful for debugging. A manual is included with the source listing. A list of changes to be made to cross assemblers received before December 1, 1975, to allow them to work with the simulator is given.

#1124751

Author: George Rompot
 Length: 7 & 9 bytes
 Title: RDEL & RHLDEL
 A 16-bit left shift routine for [D, E]
 and a 32-bit left shift routine for
 [H, L, D, E].

#1124752

Author: George Rompot
 Length: 26 bytes
 Title: MPY8
 A subroutine to multiply [C] by
 [D, E], leaving the result in
 [H, L]. Overflow is handled by a
 special return sequence. The 2-byte
 left shift routine in #1124751 is
 called.

#1124753

Author: George Rompot
 Length: 44 bytes
 Title: DIV 16
 Divides two 16-bit unsigned integer
 values. Returns a 16-bit quotient
 and a 16-bit remainder. Uses sub-
 routine #1124752.

#1125751

Author: Christopher Terry
 Length: 23 lines
 Title: INDEL
 Basic subroutine "INDEL" which in-
 serts a fixed length digit string
 in, or deletes it from a string
 which can contain multiple digit
 strings. Several examples are
 given.

#1125752

Author: Matthew Smith
 Length: 56 bytes
 Title: Random 16
 Generates a 16-bit random number.
 All possible numbers are generated
 before any number repeats.

#1125753

Author: Craig Pearce
 Length: 43 bytes
 Title: Number Guessing Routine
 A well-documented routine that uses
 the front panel to play a high/low
 number guessing game with the user.
 (Good illustration of basic tech-
 niques.)

#1125759

Author: J. Scott Williams
 Length: 50 lines
 Title: Basic Cassette Dumper
 A very handy program that allows
 data on cassette to be printed out
 in ASCII, octal, hex, or decimal.
 Full instructions and examples are
 given.

#1201751

Author: Lee Eastburn
 Length: 309 program bytes,
 1536 data bytes
 Title: BLAZER
 Prints 4 block letters using 64
 characters across and 12 lines ver-
 tically. All printing characters
 are provided for, and "custom" char-
 acters can easily be added. Allows
 for characters to be printed and
 background blank, or character to
 be blank and background printed.
 The characters used in making the
 blocks are part of the input to the
 program.

#1201752

Author: Jeffrey Clark
 Length: 59 bytes
 Title: Display Clock
 A clock subroutine which displays
 either the second, minute, hour,
 or day in the address lights, de-
 pending on the sense switches. The
 initial time can be entered in lo-
 cations 100-103.

#1201753

Author: Jeffrey Clark
 Length: 9-136 bytes
 Title: RELJMP
 Uses an RST subroutine to allow 2-
 byte jumps to locations within 128
 bytes of the jump. Similar to
 M6800's "BRA", and can be used to
 make long programs shorter.

#1201754

Author: Jack Coats
 Length: 12 bytes
 Title: Vectored Branch
 A subroutine that branches back to
 a location 2 * [A] beyond the call.

#1201755

Author: Gary Rupert
Length: 21 bytes
Title: Set Memory Demo
Stores the low 8 bits of each address in that address up to a specified limit.

#1203751

Author: Jim Gerow
Length: 867 bytes
Title: 8800 Mini-Monitor
A complete monitor that provides several commands:

- Examine - prints contents of a single location
- Deposit - store into a location
- Program - give a start address and program data
- Run - start execution at a given address
- Tape - I, O, or V -- allows programs to be dumped to, input from, or verified on cassette.
- Search - scans memory for a specific value.
- Clear - zero locations between two addresses
- List - display memory contents between two locations

#1208751

Author: Gordon Burditt
Length: 16 bytes
Title: Vectored RST
Allows up to 256 3-byte RST instructions by using a normal RST followed by an argument. Non-interruptable and impractical, since a CALL to each routine would be simpler, but very illustrative of stack techniques.

#1209751

Author: Alan Miller
Length: 20 bytes
Title: Count in Lights
Using a modifiable delay period, this program counts in the upper eight address lights.

#1216751

Author: Sasan Ardalan
Length: 15 bytes
Title: 8-bit BCD to Binary
A non-looping BCD to binary routine. Execution takes 42 microseconds and all registers are saved

#1217751

Author: Lee Eastburn
Length: 335 bytes
Title: Calendar Printer
Prints a calendar for any month. When the box for each day is typed, the user can type a single character to select one of the preset messages or a special message can be typed in. The format is 71 characters across (10 per day) and 64 lines vertically. The heading includes month name, and day name for each column.

#1217552

Author: Walter King
Length: 384 bytes
Title: Micro-operating System
An extremely handy operating system that allows saving and loading from cassette, dumping of memory locations, running of programs; and provides subroutines for character input, character output, string output, cassette input, and cassette output. Functions such as program loading can be done with program calls.

#1223751

Author: Frederick Dingwall
Length: 48 bytes
Title: 8-bit Octal Input
Inputs 3 ASCII characters which are converted to an 8-bit number which is stored in memory. Allows contents of consecutive locations to be stored in order of input.

#1223752

Author: Frederick Dingwall
Length: 48 bytes
Title: 8-bit Hexadecimal Input
Same as #1223751, except numbers are input as 2-character hexadecimal constants.

#1229752

Author: Matthew Smith
Length: 59 bytes
Title: Ping Pong
Game program in which players flip switches to control the "ping pong ball" (lit bit).

#1-5-761

Author: Adolph P. Stumpf
 Length: 247 bytes
 Title: LIFE
 Plays the game LIFE on a TVT-2, but can be modified to run on other terminals.

#1-8-761

Author: J. W. McCarty
 Length: 32 bytes
 Title: String Table Search
 Uses a search tree to match a string against a table of reserved words.

#1-14-761

Author: Mark Prinsen
 Length: 324 lines (BASIC)
 Title: Stock Market Simulation
 Allows up to 10 players to play a simulated stock market. Slight changes are necessary to run in ALTAIR BASIC.

#1-15-761

Author: Don Baechtel
 Length: 84 bytes
 Title: TAPELOAD
 Loads an ASCII octal paper tape into memory.

#1-15-762

Author: Don Baechtel
 Length: 28 bytes
 Title: DIV
 Divides an 8 bit unsigned binary number by an 8 bit unsigned binary number.

#1-15-763

Author: Don Baechtel
 Length: 157 bytes
 Title: CDUMP
 "Core" dump program which dumps memory in octal and in equivalent ASCII characters.

#1-15-764

Author: Don Baechtel
 Length: 13 bytes
 Title: MULT
 8 bit times 8 bit unsigned binary multiply.

#1-15-765

Author: Don Baechtel
 Length: 57 bytes
 Title: MBSHIFT
 Shifts up to 64K bytes, up to 256 places left or right with zero fill into the empty positions.

#1-15-766

Author: Don Baechtel
 Length: 33 bytes
 Title: APTLOAD
 Absolute boot loader.

#1-20-761

Author: Erik T. Mueller
 Length: 206 bytes
 Title: Number Guessing Game
 User must try to guess a number between 0 and 255. Assumes a TVT-II is the terminal.

#1-21-761

Authors: John Arnold and Dick Whipple
 Length: Approximately 500 bytes
 Title: ASCII Monitor/Editor
 Following commands are included:
 DOP-Dump Octal
 LDO-Load Octal
 EDT-Change memory
 SBP-Set Break Point
 CBP-Clear Break Point
 XQT-Execute
 RDC-Read Data from Cassette
 WDC-Write Data to Cassette
 RUN-Start User Program
 CPY-Block memory move
 MSG-send characters to output device

#1-22-761

Author: William A. Ruggirello
 Length: 106 bytes
 Title: 16 Bit Divide
 Divides a 16 bit unsigned binary number and rounds up the 16 bit result.

#1-23-761

Author: Harold A. Corbin
Length: 310 bytes
Title: Paper tape Editor
This editor allows corrections to be made to a line as it is typed in, and automatically adjust input fields on each line to satisfy the input field requirements for a multi pass 8080 assembler.

#1-28-761

Author: Martin H. Eastburn
Length: 48 bytes
Title: Memory Test
Simple memory test by another member of that prolific group of programmers, the Eastburn family.

#2-2-761

Author: M. A. Enkelis
Length: 19 lines (BASIC)
Title: Julian Calendar

#2-2-762

Author: M. A. Enkelis
Length: 76 lines (BASIC)
Title: LUNAR LANDER
Game to simulate landing of lunar module on the moon.

#2-2-763

Author: M. A. Enkelis
Length: 7 lines (BASIC)
Title: Pseudo Random Number Generator
Generates a 16 bit pseudo random integer.

#2-2-764

Author: M. A. Enkelis
Length: 20 bytes
Title: 16-bit Delay
This subroutine loops for a number of seconds, minutes and hours--up to 12 hours.

#2-3-761

Author: L. M. Eastburn
Length: 2125 bytes
Title: BIOPLOT
Huge machine language program which plots graphically on a teletype or other terminal a person's 23 day physical & 28 day sensitivity and 33 day cognitive biorhythm cycles.

#2-5-761

Author: George W. Rompot
Length: 49 bytes
Title: ASCII Keyboard Load
Loads Octal data through a keyboard into memory.

#2-12-761

Author: Sidney Rosell
Length: 45 bytes
Title: Memory Test and Clear Routine
Simple memory test. Can also be used to clear memory.

#2-13-761

Author: Roger Walker
Length: 238 bytes
Title: OCTAL MINI-MONITOR

#2-18-761

Author: Jack O. Coats, Jr.
 Length: 53 bytes
 Title: 5BCDBIN
 Converts a 5-digit BCD number in memory to a 16-bit integer value.

#2-18-762

Author: R. H. Hann
 Length: 126 lines (BASIC)
 Title: Tic-tac-toe
 This "heuristic" (learning) program plays tic-tac-toe.

#2-18-763

Author: L. M. Eastburn
 Length: 319 bytes
 Title: TTY utility
 This is a general purpose program to use a TTY and VLCT. One can have the program type a variety of repetitive remarks like Xmas greetings. It provides routines that will backspace and execute TAB functions on a TTY.

#2-20-761

Author: Joe W. McCarty
 Length: 223 bytes
 Title: FIFO
 General purpose routines to implement any number at stacks, to check when stacks are full, PUSH and POP entries on stacks, etc.

#2-20-762

Author: Jack O. Coats, Jr.
 Length: 15 bytes
 Title: Computer GO TO
 Branches to the nth address following the subroutine call. Destroys PSW, A, H, & L.

#2-23-761

Author: Bill Thompson
 Length: Approximately 250 lines (BASIC)
 Title: Astronomical OPTICS
 Computer ray trace. Needs about 12K with 8K BASIC.

#2-24-761

Author: Robert Riskin
 Length: 12 lines
 Title: FRETS
 This program calculates and prints the distances of any number of frets from either the neck or bridge of a musical instrument of any scale length, rounded to two places.

#2-26-761

Author: Martin H. Eastburn
 Length: 56 bytes
 Title: Distribution Analysis
 This program sorts through a string of bytes while keeping track of the quantity of each possible number encountered.

#2-26-762

Author: Jerry A. Ford
 Length: 28/33 bytes
 Title: TDUMP/TLOAD
 Memory dump/load routines to use with JAMON.

#2-26-763

Author: Jerry A. Ford
 Length: 121 bytes
 Title: JABUG
 Simple breakpoint routine which types out registers.

#2-27-761

Author: Harold Corbin
 Length: 46 lines (ALTAIR BASIC)
 Title: XY PLOT
 Produces an X-Y plot of a single valued function.

#3-1-761

Author: Amos D. Conard
 Length: 21 lines (ALTAIR BASIC)
 Title: NUMGUESS
 Simple number guessing game.

#3-1-762

Author: Robin Myers
 Length: 73 bytes
 Title: BRIDGET
 Plays game of BRIDGET. No I/O device needed.

#3-1-763

Author: Roger Walker
 Length: 83 bytes
 Title: CDUMP
 General purpose routine to dump memory in MITS binary checksummed format.

#3-1-764

Author: Harold Corbin
 Length: 60 lines (ALTAIR BASIC)
 Title: BIORYTHM
 Produces biorythm plots.

#3-1-765

Author: Harold Corbin
 Length: 26 lines (ALTAIR BASIC)
 Title: LIFE
 Plays popular LIFE game.

#3-2-761

Author: Alan R. Miller
 Length: 122 bytes
 Title: HEXMON
 Allows JAMON (#117752) to accept and output information in hex for the L, D, or G commands.

#3-3-761

Author: Henry E. Lacy
 Length: 75 bytes
 Title: Security Access Routine
 Subroutine for use with JAMON which verifies a 5-character password before allowing the user access to the system.

#3-4-761

Author: Ian Kettleborough
 Length: 201 bytes
 Title: Binary Loader
 Modified version of MITS checksum loader which will automatically relocate itself to any area of memory.

#3-9-761

Author: Alan R. Miller
 Length: 63 bytes
 Title: Memory Check
 Memory test for use with JAMON. Count test (writes 0-377 octal in every byte in memory).

#3-9-762

Author: Alan R. Miller
 Length: 19 bytes
 Title: Memory Preset
 Sets a block of memory to a predefined value.

#3-9-763

Author: John E. Budnick
 Length: About 350 bytes
 Title: MASTERMIND
 Game where player attempts to break a code devised by other player (Altair). Needs a terminal.

#3-12-761

Author: R. H. Hann
 Length: 152 lines (BASIC)
 Title: STAR TREK
 Plays a game based on popular TV show.

#3-12-762

Author: R. H. Hann
 Length: 95 lines BASIC
 Title: TIC-TAC-TOE
 Plays tic-tac-toe.

#3-12-763

Author: Christopher J. Flynn
 Length: About 100 bytes
 Title: ASCII ACR I/O routines
 Modifications to MITS ALTAIR BASIC which allow programs to be saved on cassette in source (ASCII) form.

#3-15-761

Author: David D. Welter
 Length: 726 lines (IBM 360 Assembler)
 Title: ASM8080
 Cross-assembler for the Altair 8800 written in MACROs in system 360 assembly language.

#3-16-761

Author: Joe Konard
 Length: 72 lines (ALTAIR BASIC)
 Title: PAPER TAPE
 This well written program punches paper tape labels in human readable format.

#3-16-762

Author: Erik T. Mueller
 Length: 129 bytes
 Title: Rocket
 Plays "lunar lander program" on a TVT-II.

#3-16-763

Author: Erik T. Mueller
 Length: 182 bytes
 Title: ESMO
 Very compact monitor. Has commands for entering and dumping memory locations in octal, and for starting program execution at a specified location.

#3-19-761

Author: Don Baechtel
 Length: 61 bytes
 Title: REG DEC
 Decimal print routine, outputs
 [H,L] registers.

#3-22-761

Author: Alan R. Miller
 Length: 512 bytes
 Title: PROMON
 PROM version of JAMON which assumes
 a 2SIO interface board and an ACR
 board as I/O devices. 12K, 8K, and
 4K cassette boot loaders are also
 available on the PROM.

#3-24-761

Author: Martin H. Eastburn
 Length: 47 bytes
 Title: Numerical Order Sorter
 Machine Language.

#3-24-762

Author: William O. Fisher
 Length: 120 lines (Altair BASIC)
 Title: Gregorian Calendar Program
 Allows the user to print out a cal-
 endar, find the day of the week of
 a given date, etc.

#3-31-761

Author: Alan R. Miller
 Length: 70 bytes
 Title: RELOCATE
 Changes address of JMPs and CALLs
 to relocate an assembly language
 program in memory.

#4-1-761

Author: Jim Gerow
 Length: 92 lines (Altair BASIC)
 Title: MATINV
 Uses Gaussian elimination with pi-
 voting to invert a matrix.

#4-1-762

Author: Joe W. McCarty
 Length: About 100 bytes
 Title: 1POP, 2POP, 1PUSH, 2PUSH
 Routines to POP and PUSH entries deep
 on the stack passed as parameters to
 a subroutine.

#4-6-761

Author: Walter S. King
 Length: 34 bytes
 Title: IPL
 Boot loader suited for a diode ma-
 trix or PROM.

#4-9-761

Author: Alan R. Miller
 Length: 56 bytes
 Title: TAPECHK
 Compares tape dump of memory against
 memory that was dumped.

#4-9-762

Author: Paul Braddock
 Length: 200 bytes
 Title: MUSIC
 Music program. Allows entry of notes
 of a song through the sense switches,
 and subsequent playing of the song
 on the Altair. Modified version of
 Steve Dompier's program.

#4-14-761

Author: Rich Schaal
Length: 92 lines (Altair BASIC)
Title: BASIC Program Resequencer
This program reads a program CSAVED on cassette into memory and then re-sequences it. (Changes the line numbers and line references.)

#4-15-761

Author: Gerhald Hansel
Length: 42 lines (IBM BASIC)
Title: LOG 10
Prints a table of Base 10 logarithms.

#4-15-762

Authors: Marc Montemorra & Glenn Sherman
Length: About 230 lines (BASIC)
Title: CATCH
Plays a game where you chase the computer inside a two-dimensional (5x5) matrix.

#4-15-763

Authors: Marc Montemorra & Glenn Sherman
Length: 88 lines (BASIC)
Title: DAZE
This program calculates the number of days between two calendar dates.

#4-19-761

Author: Lynn Cochran
Length: 143 lines (Altair BASIC)
Title: STARTREK
Well-written BASIC program for game based on popular TV show. Needs 12K total of memory with 8K BASIC.

#4-27-761

Author: Gerald Hansel
 Length: 66 bytes
 Title: Trig Table (BASIC)
 Prints a trig table of sine, cosine and tangent functions for selected angles.

#4-27-762

Author: Ron Santore
 Length: Slightly greater than 1K bytes
 Title: Button
 Plays "guess who has the button" game on an ASCII terminal.

#4-27-763

Author: Gerald Hansel
 Length: 60 lines (BASIC)
 Title: Roulette
 Plays roulette against house by using doubling strategy.

#4-27-764

Author: Walter King
 Length: 75 bytes
 Title: ACR Diagnostic
 Thorough routines for checkout and alignment of ACR board with extensive error reporting.

#4-27-765

Author: Erik Mueller
 Length: 256 bytes
 Title: Horse Race
 Five horses race across screen of TVT.

#4-27-766

Author: George Rompot
 Length: 64 bytes
 Title: INTD
 Breakpoint routine to use in conjunction with JAMON to display registers and stack pointer. RST 0 is used to set breakpoints.

#4-27-767

Author: David W. Dodge
 Length: About 300 lines (BASIC)
 Title: LCM
 Computer Assisted Instruction (CAI) program teaches how to add fractions with different denominators.

#5-3-761

Author: James Erlach
 Length: 36 lines (Altair BASIC)
 Title: REACTION
 Tests your reaction time by timing how long it takes you to hit a terminal key after the computer rings a bell.

#5-3-762

Author: Mitchell Wolrich
 Length: 107 lines BASIC
 Title: Missile Plane
 Game in which one player flies a plane and the other player tries to shoot him down with a missile.

#5-3-763

Author: Mitchell Wolrich
 Length: 140 lines (BAIC)
 Title: YUM
 Plays Yahtze game. All instructions and prompts are in French.

#5-3-764

Author: George Rompot
 Length: 197 bytes
 Title: TARGET
 Plays a game where missiles are shot at a moving target. Score is kept on the screen of VDM-1.

#5-4-761

Author: Bill Thompson
 Length: 304 lines (HP BASIC)
 Title: Least Squares
 Performs least squares of six different curves to a set of data points.

#5-4-762

Author: Bill Thompson
 Length: 141 lines (HP BASIC)
 Title: Polar Plotting
 Calculates and plots a function on a polar graph.

#5-4-763

Author: Bill Thompson
 Length: 375 lines (HP BASIC)
 Title: Multiple Linear Regression
 Program performs multiple linear regression analysis for one independent variable and up to six independent transforms.

ALTAIR USER GROUP SOFTWARE LIBRARY

#5-6-761

Author: Craig Pearce
Length: 43 lines (Altair BASIC)
Title: BAGELS
Plays familiar 3-digit number guessing game.

#5-6-762

Author: Craig Pearce
Length: 19 lines (Altair BASIC)
Title: Number Predictor
Number guessing game. Exceptionally well documented.

#5-6-763

Author: Craig Pearce
Length: 24 lines (Altair BASIC)
Title: Day of the Week
Calculates day of the week for any date later than September 14, 1752.

#5-14-761

Author: Paul Krystosek
Length: 196 bytes
Title: Morse Code Sending from Keyboard

#5-14-762

Author: George Rompot
Length: 23 bytes
Title: Screen Fill
Moves strings of text to VDM-1 display buffer.

#5-14-763

Author: George kompot
Length: 335 bytes
Title: Shooting Stars
Plays "Shooting Stars" game found in May 1976 issue of Byte magazine.
VDM-1 required for display.

#5-24-763

Author: Jim Gerow
Length: 1800 lines
Title: 6800 Cross Assembler
Written in FORTRAN.

#5-17-761

Author: Alan Miller
 Length: 24 lines BASIC
 Title: SOLVIT
 Subroutine for curve fitting and
 solution of simultaneous equations.

#5-20-761

Author: Bill Thompson
 Length: 168 lines BASIC
 Title: Annuity Calculations
 Interesting program for interest
 calculations.

#5-20-762

Author: Bill Thompson
 Length: 224 lines BASIC
 Title: Annuity Calculations #2
 Same as #5-20-761 except uses WRITE
 and FORMAT (HP BASIC) instead of
 PRINT USING.

#5-20-763

Author: Bill Thompson
 Length: 48 lines BASIC
 Title: Savings
 Calculates the total yield of an
 investment.

#5-20-764

Author: Bill Thompson
 Length: 47 lines BASIC
 Title: True Annual Interest
 Calculates the true annual interest
 rate charges on an installment loan.

#5-20-765

Author: Bill Thompson
 Length: 103 lines
 Title: Cash Flow and Discounted
 Rate of Return
 Calculates cash flow and discounted
 rate of return.

#5-20-766

Author: Bill Thompson
 Length: 212 lines
 Title: Polynomial Curve Fit
 Calculates polynomial fit using
 least-squares approximation method.

#5-21-761

Author: John Trautschold
 Length: 1K bytes
 Title: VLCT Octal Monitor
 System monitor for use with VLCT.

#5-24-761

Author: Joe Konrad
 Length: 79 lines BASIC
 Title: Radio Code
 Produces Morse radio code. Includes
 a schematic for a tone oscillator to
 be used by the program.

#5-24-762

Author: Walter King
 Length: 50 bytes
 Title: Baudot 5-Level Tape Loader
 Loads object code from 5-level paper
 tape.

#5-24-765

Author: Walter King
 Length: 71 bytes
 Title: Baudot 5-Level Tape Dumper
 Punches 5-level object tapes which
 can be read by #5-24-762.

#5-25-761

Author: Robert Wilcox
 Length: 35 lines BASIC
 Title: Punch Tape Label Program
 Punches human-readable labels on
 ASR33 paper tape.

#5-25-762

Author: Robert Wilcox
 Length: 40 lines BASIC
 Title: Punch Tape Label Program #2
 Fancy version of #5-25-761. Punches
 leader, label, and more leader.

#5-27-761

Author: George Rompot
 Length: 180 bytes
 Title: JAMON Mods-Hex Input & Output
 Adds hexadecimal input and output to
 JAMON while retaining present octal
 capabilities.

#6-1-761

Author: Dale Travis
 Length: 32 lines BASIC
 Title: Lister
 Reads paper tapes and produces a
 page formatted listing.

#6-1-762

Author: Dale Travis
 Length: 103 lines BASIC
 Title: Square
 Plays the game of Square.

ALTAIR USER GROUP SOFTWARE LIBRARY

#6-1-763

Author: Dale Travis
Length: 97 lines BASIC
Title: Kingdom
Plays the game of Kingdom.

#6-1-764

Author: Dale Travis
Length: 159 lines BASIC
Title: Dodgem
Plays the game of Dodgem.

#6-2-761

Author: Alan Miller
Length: 1K bytes
Title: PROM on 1K
System Monitor for 1K of PROM or RAM.
An extension of #3-22-761.

#6-3-761

Author: Alan Miller
Length: 40 lines BASIC
Title: P PLOT
Produces dual printer plots.

#6-7-761

Author: Herb Archer
Length: 128 Bytes
Title: Pong
Players paddle a bit across the
front panel LEDs.

#6-11-761

Author: Roger Frank
Length: 10 Lines BASIC
Title: Tape ID
Determines and prints the CSAVE
character for CSAVED files.

#6-14-761

Author: Roy Hann and Alan Menezes
Length: 146 lines BASIC
Title: Lunar Landing Game
Plays an extended version of Lunar
Lander.

#6-14-762

Author: Jim Salem
Length: 55 bytes
Title: Keyload
A simple ASCII-to-octal keyboard
loader.

#6-16-761

Author: Martin Eastburn
Length: 32 bytes
Title: Super Time Counter
Generates program time delays with
accuracy to ± 1 sec/min.

#6-18-761

Author: James B. Hansen
Length: 215 bytes
Title: ASCII to Baudot Translate
Routine

#6-22-761

Author: Jim Wiggins
Length: 106 Bytes
186 Bytes
Title: Tape Load-Octal TLQ
Tape Dump-Octal TDQ
for Baudot Teletypes

#6-25-761

Author: Alan R. Miller
Length: 12 Lines BASIC
Title: "ERF"
Evaluates the error function.

#6-25-762

Author: Alan R. Miller
Length: 4 Lines BASIC
Title: GAMMA
Evaluates the Gamma Function.

#6-28-761

Author: Jim Salem
Length: 71 bytes
Title: Guess 1
Random number guessing game.

#6-28-762

Author: Jim Salem
Length: 88 bytes
Title: Guess 2
Random number guessing game.

ALTAIR USER GROUP SOFTWARE LIBRARY

#6-29-761

Author: Alan R. Miller
Length: 7 lines BASIC
Title: "DROOT" Double
Precision square root.

#7-6-761

Author: Alan R. Miller
Length: 9 lines BASIC
Title: BASIC Subroutine Newton
Newton's method for finding solution
to $S(x) = 0$.

#7-7-761

Author: Jim Blackstone
Length: 635 bytes (hex notation)
Title: 8080 Debug Package
Access and modify memory
Copy memory from one block to
another
Dump memory to Teletype printer
Fill memory block
Go To program
Print registers and flags.

#7-8-761

Author: Jim Gerow
Length: 300 Lines BASIC
Title: 8800 Assembler
Altair 8800 Assembler written in
Altair BASIC.

#7-12-761

Author: Peter Smart
 Length: 1700 Lines (Fortran)
 Title: 6800 cross assembler
 Altair 680 cross assembler
 written in CDC Cyber 74
 Fortran

#7-12-762

Author: Peter Graulich
 Length: 225 Lines (BASIC)
 Title: Bio-rhythms
 Plots Bio-rhythm cycles

#7-13-761

Author: Harold Corbin
 Length: 90 lines (BASIC)
 Title: Depreciation
 Program to compute deprecia-
 tion by 4 methods.

#7-14-761

Author: Roy Hann
 Length: 15 lines (Fortran)
 Titles: Finds value for Pi
 Finds a value for PI
 by Wallis' formula.

#7-14-762

Author: Roy Hann
 Length: 200 lines (ICL 1900
 Fortran)
 Title: Least-square curve-fitting
 program fits a curve to a
 set of experimental points
 by using least square method.

#7-19-761

Author: Charles Wells
 Length: 300 bytes (total) (assembler)
 Title: Baudot Printer Program
 A patch and some additions
 to 3.2 Basic to allow it
 to use a Baudot Printer.

#7-19-762

Author: Matthew Smith
 Length: 12 Lines (Basic)
 Title: Bases
 Base conversion subroutine

ALTAIR USER GROUP SOFTWARE LIBRARY

#7-20-761

Author: Jeb Long
Length: 500 Bytes (assembler)
Title: Intelligent terminal
Interfaces an Altair 8800
to a time sharing computer

#7-22-761

Author: J.W. Klotz
Length: 350 lines (5980 bytes)
(BASIC)
Title: Math drill
CAI Program for teaching
elementary math.

#7-22-762

Author: Keith Fischer
Length: 65 lines (disk extended
basic)
Title: Reseq +
Resequences Basic programs
on disk files.

#7-22-763

Author: George W. Rompot
Length: 150 Bytes (Machine Language)
Title: Creed
Creed 75 output driver for
use with JAMON.

#7-26-761

Author: Tom Simpson
Length: 170 Lines (Basic)
Title: TTT 3D
Plays the game of 3D
tic tac toe

#7-28-761

Author: Phillip L. Hansford
Length: 25 Bytes + table (Assembler)
Title: Jam Table
An efficient command table
lookup change to the JAMON
monitor (#117752)

#7-29-761

Author: David Vomlehn
Length: 10 bytes (Assembler)
Title: Complete memory clear.
A short memory clearing
program that clears entire
memory, including itself.

#7-29-762

Author: Darrel J. Van Buer
Length: 749 + 184 (Max) bytes
(assembler)
Title: Interrupt driven multi-pro-
cessing.
Multi-tasking system driven
by interrupts from a 2 SIO
board.

#8-9-761

Author: Alan Miller
 Length: 200 Lines Altair BASIC
 Title: QUBIC
 Plays 3D tic-tac-toe.

#8-10-761

Author: Alan Miller
 Length: 7 lines Altair BASIC
 Title: Numerical Integration
 Numerical integration by Simpson's
 method and Trapezoidal Rule.

#8-13-761

Author: Erik Mueller
 Length: 7,000 (octal) bytes
 Title: MINOL
 Interpreter for a 4K subset of
 BASIC.

#8-16-761

Author: Roger Frank
 Length: 7 lines Altair BASIC
 Title: Memory Size
 This program resets BASIC memory
 sizes without restarting (for 3-2
 only).

#8-19-761

Author: Alan Miller
 Length: 5 lines Altair BASIC
 Title: ARCSIN
 Program to compute arcsin and arccos.

#8-23-761

Author: Keith Fischer
 Length: 150 lines Altair BASIC
 Title: BECO
 Powerful Text Editor.

#8-26-761

Author: Roger Frank
 Length: 22 lines Altair BASIC
 Title: Memory Test
 Program to test unused memory.

#8-27-761

Author: John Stanton
 Length: 52 bytes
 Title: 4PIO KBD/PTR Loader
 Loads data into memory from keyboard
 and echoes it.

#8-28-761

Author: J. David Green
Length: 168 lines Altair BASIC
Title: Horse Racing
A horse racing game that involves
betting on the races.

#9-1-761

Author: Kenneth Aird
Length: 41,000 bytes FORTRAN
Title: M6800 Cross Assembler
Very well written FORTRAN Cross
Assembler for M6800.

ALTAIR USER GROUP SOFTWARE LIBRARY

#9-8-761 -

Author: Alan R. Miller
Length: 50 lines Altair BASIC
Title: Teaser

Matrix number guessing game.

#9-10-761 -

Author: N. Craig Brown
Length: 20 lines Altair BASIC
Title: Christmas Tree

Program to print christmas tree.

#9-17-761 -

Author: Robert Wilcox
Length: 16 lines Altair BASIC, 70
bytes assembler
Title: Basic Terminal Change

Program to allow version 3.2 of
BASIC without Console command to
switch to alternate console.

#9-27-761 -

Author: John Robison
Length: 265 bytes assembler
Title: Keyboard Entry/Display

Interrupt driven storage display/
modification program.

#10-4-761 -

Author: Philip Romanik
Length: 20 lines HP BASIC
Title: Printer Subroutine

Program to break strings at word
boundaries.

#10-12-761

Author: Darrel Van Buer
 Length: 16 lines Altair BASIC
 Title: Inverse Normal Distribution
 Function

#10-15-761

Author: Henry E. Lacy
 Length: 153 bytes/136 bytes
 Title: Decimal Support Package
 (requires #8-18-752)/
 Decimal Output Routine

#10-18-761

Author: Jay Lucas
 Length: 100 bytes
 Title: Memory Test
 Assembler memory test, a very
 thorough one.

#10-19-761

Author: Lee Wilkinson
 Length: 60 lines Altair Basic
 Title: Accounts Receivable

#10-21-761

Author: Philip Romanik
 Length: 30 lines HP BASIC
 Title: Random
 Random Number Generator

#10-21-762

Author: Henry E. Lacy
 Length: 74 bytes
 Title: Self-incrementing Hand
 Loader

#10-25-761

Author: Byron Johnson
 Length: 2 lines BASIC
 Title: Extended Precision Square
 Roots.

#10-25-762

Author: Byron Johnson
 Length: 7 lines BASIC
 Title: BASIC Line Renumbering
 Renumbering program for 3.2 Extended
 BASIC.

#10-27-761

Author: Steven Armbruster
 Length: 210 bytes 680 Assembler
 Title: Political Influence

#11-4-761

Author: Gordon Berry
 Length: 32 lines Altair BASIC
 Title: Standardized and Weighted
 Scores

#11-4-762

Author: Gordon Berry
 Length: 300 bytes
 Title: Print Registers

12-13-761

Author: Willard I. Nico
 Length: 9 lines BASIC
 Title: "Dec-Hex/Hex-Dec"
 Two subroutines: one for converting decimal values to a Hexadecimal string and a second to convert a Hexadecimal string to a decimal value.

12-14-761

Author: Frank R. McCoy
 Length: 150 lines BASIC
 Title: "Basic Renumbering Program"
 Renumber and reformat program for programs written in MITS Extended Disk BASIC.

1-18-771

Author: Alan R. Miller
 Length: 1K
 Title: PROMON2
 PROMON2 is an improved version of PROMON1K (#6-2-761).

1-18-773

Author: Darrell J. Van Buer
 Length: 1776 lines Assembly
 Title: "Multiprogramming with a Variable Number of Tasks (MVT)"
 Interrupt processing and synchronization for multiprogramming, also provides routines for storage management, for dynamic program control and for dynamic creation and destruction of independently running programs.

1-18-774

Author: John R. Lynch
 Length: 119 lines BASIC
 Title: "T-Twelve-Tone Row Generator"
 Output of this program is used in music composition.

1-18-775

Author: Henry Everett Lacy
 Length: 635 bytes
 Title: "Function Package"
 Provides functions for decimal support Package #10-15-761. Includes Logarithmic, Exponential, Trigonometric, Real Powers, and has useful conversion routines.

1-21-771

Author: Alan Miller
 Length: 1/2K + 1K Work Space
 Title: "Game of Life"
 For Altair 8800. Game deals with the life in various cells on a rectangular grid.

2-9-771

Author: Peter Smart
 Length: 16 lines
 Title: "Game of Life" for Altair 6800
 Game deals with the life in various cells on a rectangular grid.

2-14-771

Author: Baron L. Ader

Length: 27 bytes

Title: "Subroutine 'Text' for
Altair 6800"

Machine or Assembly Language routine allows output of text strings or Memory dumps to Teletype easily.

2-16-771

Author: Ron Santore

Length: 1.5 bytes, 8800 Assembly

Title: "WAMPUS" -

An interesting game; the Wampus you are hunting lives in a dodecahedron maze of 20 caves. Danger lurks from Wumpus, Superbats, and bottomless pits. Well documented with instructions for changing the I/O routines.

PRICE LIST

<u>Page</u>	<u>Program #</u>		<u>Cost</u>	
1	422751	Pseudorandom Numbers	\$ 4.00	
	429751	Game	4.00	
	55751	Binary to BCD Conversion	5.00	
	516751	RAM Diagnostic Program	4.00	
	516753	Debugging Routine	4.00	
	519751	Shift Register Sequence	4.00	
	519753	Game of NIM	5.00	
	521751	8800 Cross Assembler - Listing	6.00	
			Card Deck	20.00
		523751	8800 Cross Assembler	5.00
		527751	3-Programs	4.00
	2	62751	Music	4.00
		63752	BCD to Binary Conversion	5.00
63751		Memory Clear	4.00	
611751		Location Change	5.00	
616751		Sort	5.00	
630751		Card Game	4.00	
711751		Program to Locate other Programs	5.00	
714751		Load Data	4.00	
717751		Interrupt Light	4.00	
717752		Descending Sort	4.00	
717753		Ascending Sort	4.00	
721751		Tic-Tac-Toe	5.00	
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722751		Random Number Generator	4.00	
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	728752	Translate	4.00	
	730751	Blackjack	4.00	
	731751	Memory Clear	4.00	
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	84752	Translate	4.00	
	84753	Convert	4.00	
	88751	Output	4.00	
	811751	Search	4.00	
	811753	Add	4.00	
	813751	Test	4.00	
	813752	Jump	4.00	
	815751	Multiply	4.00	
	818751	Display	4.00	

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<u>Page</u>	<u>Program #</u>	<u>Title</u>	<u>Cost</u>
4	818752	Integer Manipulation	\$ 6.00
	825751	Memory Test	4.00
	825754	Conversion	4.00
	829751	Load	4.00
	92751	Kill Rotating Bit	4.00
	94751	Dump/Store Memory	4.00
	99751	Subtract	4.00
	99752	Add	4.00
	910751	Playing Music	6.00
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	916751	Dice Game	4.00
	920751	Convert	4.00
	920752	Convert	4.00
	929751	Dump	4.00
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	5	109751	Calculate
1010751		Bagels Game	4.00
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1016751		Lunar Lander	4.00
1016752		Fortran IV Cross Assembler	8.00
1020751		Addition Problems	4.00
1020752		Print Program	5.00
1021751		A Dual-Tasker	4.00
1027751		Time of Day Routine	4.00
1027752		TUTDR-I/O Handler for TVT-II	4.00
1030751		ASCII Octal Loader & Dump	5.00
6		1030752	VLCT Load Program
	113751	BCD Multiplication Subroutine	4.00
	117751	Punch Tape Label	6.00
	117752	JAMON	4.00
	1117751	GET	4.00
	1117752	CHECK	4.00
	1121751	Random Magic Squares	4.00
	1123751	8080 Fortran Simulator - listing card deck	6.00 30.00
	7	1124751	RDEL & RHLDEL
1124752		MPY8	4.00
1124753		DIV 16	4.00
1125751		INDEL	4.00
1125752		Random 16	4.00
1125753		Number Guessing Routine	4.00
1125759		Basic Cassette Dumper	4.00
1201751		BLAZER	15.00
1201752		Display Card	4.00
1201753		RELJMP	4.00
1201754		Vectored Branch	4.00

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8	1201755	Set Memory Demo	\$ 4.00
	1203751	8800 Mini-Monitor	4.00
	1208751	Vectored RST	4.00
	1209751	Count in Lights	4.00
	1216751	8-Bit BCD to Binary	4.00
	1217751	Calendar Printer	6.00
	1217552	Micro-Operating System	6.00
	1223751	8-Bit Octal Input	4.00
	1223752	8-Bit Hexadecimal Input	4.00
	1229752	Ping Pong	4.00
9	1-5-761	LIFE	4.00
	1-8-761	String Table Search	4.00
	1-14-761	Stock Market Simulation	4.00
	1-15-761	TAPELOAD	4.00
	1-15-762	DIV	4.00
	1-15-763	CDUMP	4.00
	1-15-764	MULT	4.00
	1-15-765	MBSHIFT	4.00
	1-15-766	APTLOAD	4.00
	1-20-761	Number Guessing Game	4.00
1-21-761	ASCII Monitor/Editor	6.00	
1-22-761	16 Bit Divide	4.00	
10	1-23-761	Paper Tape Editor	4.00
	1-28-761	Memory Test	4.00
	2-2-761	Julian Calendar	4.00
	2-2-762	LUNAR LANDER	4.00
	2-2-763	Pseudo Random Number Generator	4.00
	2-2-764	16-Bit Delay	4.00
	2-3-761	BIOPLOT	15.00
	2-5-761	ASCII Keyboard Load	4.00
	2-12-761	Memory Test and Clear Routine	4.00
	2-13-761	OCTAL MINI-MONITOR	4.00
11	2-18-761	SBCDBIN	4.00
	2-18-762	Tic-Tac-Toe	4.00
	2-18-763	TTY Utility	6.00
	2-20-761	FIFO	5.00
	2-20-762	Computer GO TO	4.00
	2-23-761	Astronomical OPTICS	4.00
	2-24-761	FRETS	4.00
	2-26-761	Distribution Analysis	4.00
	2-26-762	TDUMP/TLOAD	4.00
	2-26-763	JABUG	4.00
	2-27-761	XYPLOT	4.00
	3-1-761	NUMGUESS	4.00
	3-1-762	BRIDGET	4.00
	3-1-763	CDUMP	4.00
3-1-764	BIORYTHM	4.00	

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12	3-1-765	LIFE	\$ 4.00
	3-2-761	HEXMON	4.00
	3-3-761	Security Access Routine	4.00
	3-4-761	Binary Loader	4.00
	3-9-761	Memory Check	4.00
	3-9-762	Memory Preset	4.00
	3-9-763	MASTERMIND	4.00
	3-12-761	STAR TREK	4.00
	3-12-762	TIC-TAC-TOE	4.00
	3-12-763	ASCII ACR I/O Routine	4.00
	3-15-761-	ASM8080	5.00
	3-16-761	PAPER TAPE	4.00
	3-16-762	Rocket	4.00
	3-16-763	ESMO	4.00
	3-24-762	Gregorian Calendar	4.00
13	3-19-761	REG DEC	4.00
	3-22-761	PROMON	4.00
	3-24-761	Numerical Order Sorter Mach. Lang.	4.00
	3-31-761	RELOCATE	4.00
	4-1-761	MATINV	4.00
	4-1-762	IPOP, 2POP, 1 PUSH, 2PUSH	5.00
	4-6-761	IPL	4.00
	4-9-761	TAPECHK [4.00
	4-9-762	MUSIC	4.00
14	4-14-761	BASIC Program Resequencer	4.00
	4-15-761	LOG 10	4.00
	4-15-762	CATCH	4.00
	4-15-763	DAZE	4.00
	4-19-761	STARTREK	5.00
15	4-27-761	Trig Table (BASIC)	4.00
	4-27-762	Button	4.00
	4-27-763	Roulette	4.00
	4-27-764	ACR Diagnostic	4.00
	4-27-765	Horse Race	4.00
	4-27-766	INTD	4.00
	4-27-767	LCM	4.00
	5-3-761	REACTION	4.00
	5-3-762	Missile Plane	4.00
	5-3-763	YUM	4.00
	5-3-764	TARGET	4.00
	5-4-761	Least Squares	4.00
	5-4-762	Polar Plotting	4.00
	5-4-763	Multiple Linear Regression	4.00
16	5-6-761	BAGELS	4.00
	5-6-762	Number Predictor	4.00
	5-6-763	Day of the Week	4.00
	5-14-761	Morse Code Sending from Keyboard	4.00
	5-14-762	Screen Fill	4.00
	5-14-763	Shooting Stars	4.00
	5-24-763	6800 Cross Assembler - listing	6.00
		card deck	30.00

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17	5-17-761	SOLVIT	\$ 5.00
	5-20-761	ANNUITY CALCULATIONS	4.00
	5-20-762	ANNUITY CALCULATIONS #2	4.00
	5-20-763	SAVINGS	4.00
	5-20-764	TRUE ANNUAL INTEREST	4.00
	5-20-765	CASH FLOW AND DISCOUNTED RATE OF RETURN	4.00
	5-20-766	POLYNOMIAL CURVE FIT	4.00
	5-21-761	VLCT OCTAL MONITOR	6.00
	5-24-761	RADIO CODE	4.00
	5-24-762	BAUDOT 5-LEVEL TAPE LOADER	4.00
	5-24-765	BAUDOT 5-LEVEL TAPE DUMPER	4.00
	5-24-761	PUNCH TAPE LABEL PROGRAM	4.00
	5-25-762	PUNCH TAPE LABEL PROGRAM #2	4.00
	5-27-761	JAMON MODS-HEX INPUT & OUTPUT	4.00
	6-1-761	LISTER	4.00
	6-1-762	SQUARE	4.00
18	6-1-763	KINGDOM	4.00
	6-1-764	DODGEM	4.00
	6-2-761	PROM ON 1K	6.00
	6-3-761	P PLOT	5.00
	6-7-761	PONG	4.00
	6-11-761	TAPE ID	4.00
	6-14-761	LUNAR LANDING GAME	4.00
	6-14-762	KEYLOAD	4.00
	6-16-761	SUPER TIME COUNTER	4.00
19	6-18-761	ASCII TO BAUDOT TRANSLATE ROUTINE	5.00
	6-22-761	TAPE LOAD-OCTAL TLQ	
		TAPE DUMP-OCTAL TDQ FOR BAUDOT TELETYPES	5.00
	6-25-761	"ERF"	4.00
	6-25-762	GAMMA	4.00
	6-28-761	GUESS 1	4.00
6-28-762	GUESS 2	4.00	
20	6-29-761	"DROOT" DOUBLE	4.00
	7-6-761	BASIC SUBROUTINE NEWTON	4.00
	7-7-761	8080 DEBUG PACKAGE	4.00
	7-8-761	8800 ASSEMBLER LISTING	4.00
21	7-12-761	6800 Cross Assembler	20.00
	7-12-762	Bio-Rhythms	5.00
	7-13-761	Depreciation	4.00
	7-14-761	Finds Value for Pi	4.00
	7-14-762	Least-Square Curve Fitting Program	4.00
	7-19-761	Baudot Printer Program	4.00
	7-19-762	Bases	4.00

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22	7-20-761	Intelligent Terminal	\$ 4.00
	7-22-761	Math Drill	4.00
	7-22-762	Reseq +	4.00
	7-22-763	Creed	4.00
	7-26-761	TTT 3D	5.00
	7-28-761	Jam Table	4.00
	7-29-761	Complete Memory Clear	4.00
	7-29-762	Interrupt Driven Multi-processing	6.00
23	8-9-761	QUBIC	4.00
	8-10-761 -	Numerical Integration	4.00
	8-13-761	MINOL	4.00
	8-16-761	Memory Size	4.00
	8-19-761	ARCSIN	4.00
	8-23-761	BECO	5.00
	8-26-761	Memory Test	4.00
	8-27-761	4PIO KBD/PTR Loader	4.00
24	8-28-761	Horse Racing	4.00
	9-1-761	M6800 Cross Assembler Listing	10.00
25	9-8-761	Teaser	4.00
	9-10-761	Christmas Tree	4.00
	9-17-761	Terminal Change - Console Command	4.00
	9-27-761	Keyboard Entry/Display	4.00
	10-4-761	Printer Subroutine	4.00
26	10-12-761	Inverse Normal Distribution Function	4.00
	10-15-761	Decimal Support Package	5.00
	10-18-761	Memory Test	4.00
	10-19-761	Accounts Receivable	4.00
	10-21-761	Random	4.00
	10-21-762	Self-Incrementing Hand Loader	4.00
	10-25-761	Extended Precision Square Roots	4.00
	10-25-762	BASIC Line Renumbering	4.00
	10-27-761	Political Influence	4.00
	11-4-761	Standardized and Weighted Scores	4.00
	11-4-762	Print Registers	4.00
27	12-13-761	Dec-Hex/Hex-Dec	4.00
	12-14-761	Basic Renumbering Program	4.00
	1-18-771	PROMON2	5.00
	1-18-773	Multiprogramming	8.00
	1-18-774	T-Twelve-Tone Row Generator	4.00
	1-18-775	Function Package	6.00
	1-21-771	Game of Life	4.00
	2-9-771	Game of Life	4.00
28	2-14-771	Subroutine "Text" for 6800	4.00
	2-16-771	WAMPUS	5.00



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