ENGINEERING 2000

Complete File Listing

12C++
PATH: \ENGINEER\12CPP
12C++, HP 12C Calculator for Windows 100 compatible with the HP original and harder to lose! Fully sizeable, extensive help, and alternate dialog box entry. Includes conversion utility. If you like your 12C, you will LOVE this! v 2.2 wave software shareware 19.95

22NICE Version 1.42
PATH: \ENGINEER\22NCE142
"22NICE Version 1.42, July, 1994 From Sydex, Inc. 22NICE is a PC-based emulator for 8-bit CP/M 2.2 systems using 8080, 8085 or Z-80 processors Completely integrates a CP/M application into the PC MS-DOS environment Includes terminal emulation for several common terminal types, 8080-only Z-80 only, or ""auto detect"" processor support. Will use NEC V20/V30 chip if available. Supports CP/M user number to-DOS subdirectory mapping and custom keyboard maps. A facility to trap and handle 8-bit I/O references is also provided to allow emulation of 8-bit hardware not present on a PC For file transfer from CP/M diskettes to DOS, see the companion product, 22DISK which reads, writes, formats and displays over 420 different CP/M disk types 22NICE is shareware and has a $40 registration fee, which includes the 22DISK diskette transfer product"

2D potential flow visualization
PATH: \ENGINEER\2DFLOW11
2D potential flow visualization DEMO

8085 microprocessor kit simulator
PATH: \ENGINEER\8085EMU3
This program simulates an 8085 microprocessor kit simulator Technically this is a 8085 instruction set simulator

ADDNODE
PATH: \ENGINEER\ADDNODE
a program for inserting and deleting nodes into the ATP database <NODES.BIN Version 2.01

AGA v4.0
PATH: \ENGINEER\AGA
AGA v4.0 <ASP> -(AGA 3 orifice calculations Calculates size, flowrate or pressure drops for gas and liquid orifice meters Calculations are based on AGA Report No.3 ANSI/API 2530, Report No. 3 1992 U.S. and SI units Both DOS and Windows 3.+ versions supplied upon registration

Air & Exhaust Gas Properties v1.2
PATH: \ENGINEER\AIRPRO12
"Air & Exhaust Gas Properties v1.2: MS Windows application that calculates the properties of air/exhaust gas over a wide range of pressure and temprature. It may be used for analyzing a number of energy conversion components used in power plants, such as gas turbines

compressors, boilers and heat exchangers. The accompanied help file ""Thermodynamics online help"" gives a brief description of them Taftan Data Email:Taftan@Compuserve.com"

Airflow in a Box, version 2.0
PATH: \ENGINEER\AIRFLOW
Airflow in a Box, version 2.0, utilizes a multi-domain pseudospectral method (1,2) to solve the compressible two-dimensional Navier-Stokes equations for the flow of air in a rectangular box or cavity. The program is distributed in FORTRAN source code so it can be ported to a number of platforms. Airflow in a Box is designed to produce accurate solutions to the driven cavity problem and a variety of free convection flows

AIRFOIL
PATH: \ENGINEER\AIRF2_02
The purpose of this program is to provide the user with a means to enter modify, and plot various airfoil curves. It has been created with the R/C enthusiast in mind as an inexpensive software tool. Others interested in aerodynamics may find it beneficial

AMUCU Version 2.0
PATH: \ENGINEER\AMUCU
This version of AMUCU performs conversions for 40 different `types` of units (i.e., Length, Area Power, etc.) with over 500 units represented for a total of 10,000 plus possible conversions

ANALYSIS
PATH: \ENGINEER\ANALYS
ANALYSIS is a time-series analysis package which includes a wide diversity of transformations and other techniques to locate and quantify patterns in a data set. Even though you may not be analyzing time-series data, ANALYSIS can still give the same kinds of information as might be extracted from time dependent events, however, the interpretation changes. The only requirement is that you simply have the data in ASCII single column format. Some types of analyses also require that you specify two data sets. You will easily know which modules require this by the directions on the first menu screen for each type of analysis. If you are required to import two data sets, you must concatenate them into a single file which is of course twice as long as each original file

Anchor Bolts
PATH: \ENGINEER\ANCHRB
Description Windows A must see program. This program is an excellent tool for engineers architects, general contractors or anybody who is involved in the design or analysis of anchor bolts It can design or analyze up to 10 bolts and bolts up to 2 inches in diameter It also calculates the embedment and hook length of the bolts. you can view the designed shape and its dimensions on screen It is user friendly, visually attractive and includes Print/Preview with a professional looking output that could be submitted with calculations to building officials On line help and full documentation are also available Download the demo. it will work for 30 days or 30 runs whichever comes first After the trial period, Password is required

ANYANGLE
PATH: \ENGINEER\ANYANG
ANYANGLE is a powerful geometry solver which provides an easy, intuitive method of finding answers to problems involving triangles, and offers scale views and supplementary data to back up the numerical results. ANYANGLE includes an interactive scientific calculator with automatic memory of all triangle components as well as ten user-accessable memories

ARDSLD
PATH: \ENGINEER\ARDSLD
This program is designed to be used in conjunction with the BOCA National Building Code. The user selects the load type of concern on the main menu. The program will provide various lists and options, which describe the structure type and load application. The program will then calculate and display the appropriate design load, as specified in the BOCA building code. The user may select several load types, such as seismic, wind and live loads. Once all of the subject loads have been selected and calculated a report may be generated, with all of the loads specified. The report may be viewed only, in the shareware version. The Registered version provides for printing and saving the report

ArithmeTRICKS ver2
PATH: \ENGINEER\TRIXAR
"ArithmeTRICKS ver2 R.Notturno Introduction to rapid math techniques with emphasis on mental calculations 17 ""Tricks"" for addition, subtraction multiplication and division with endless examples. Basic and expanded levels. FreeWare. Fully functional"

ATP Utilities V1.10
PATH: \ENGINEER\ATPUTI
The ATP utilities consist of: Career Assignment Editor, Logbook Editor Career Results Editor, Flightplanner with Display of Routes and detailed Fuel Calculation. If there is enough interest, i`ll add a Route Editor and Node Editor (Navigation Aids, VORs

ATPPATCH Version 1.03
PATH: \ENGINEER\ATPPTC
"ATPPATCH Version 1.03 ATPPATCH corrects a mistake of ATP.EXE, when the efficiency rating is calculated, as well as an error at landing with sight 00 Description of errors and corrections to follow 1.) Efficiency Sublogic corrected that error in the version of 10/31/91. So that version is the first to calculate efficiency rating correctly without patch Reference fuel is calculated correctly or is taken out of CAREER.ATP. After finishing the flight the needed fuel is compared against the reference. The formula should be nf .. needed fuel rf .. reference fuel eff .. efficiency rate 1.) if nf<=rf: eff=100, end 2.) if (nf-rf)>(rf/2): eff=0, end 3.) rf=rf/2 4.) eff=100-INT(((nf-rf)/rf)*100), end But the last line of that formula was programed like this 4.) eff=INT(((nf-rf)/rf)*100 5.) if eff<40: eff=40 (This line is present only in version 3/11/91 6.) end The result was following If you got very close to the estimated fuel consumption, eff resulted as 0. Because of line 5 efficiency then was set to 40. If you get worse on fuel consumption, you could get better ratings! Best of that was use 1.5*estimated fuel. Burn out, what was going The patch corrects that mistake 2.) Landing at 00

conditions Whenever the cloud ceilings were 0 (you could not see to runway), your safety were derated and a cross besides ""landed in unforecast 00"" appeared although you made a missed approach This error occurs in all known versions of ATP.EXE, including the latest known of 10/31/91 The patch corrects that mistake. You have to report a missed approach. After that the safety rating as well as error table are updated correctly (no derate and no error report Note: If you report a missed approach, but land without doing a go around ATP will not recognize a landed 00. You will be derated for not doing the go around Run the patch Change to directory of ATP.EXE COPY ATP.EXE ATP.OXE (if something is going wrong ATPPATCH After that, the rating calculation should be corrected ATPPATCH can patch most versions of ATP. The patch is tested with following versions ATP.EXE dated 12/21/90 ATP.EXE dated 3/11/91 ATP.EXE dated 9/ 9/91 ATP.EXE dated 10/31/91 Simon Hradecky 100031,336"

BALANCE
PATH: \ENGINEER\BALANCE1
BALANCE is an attractively presented weight and balance calculator which makes it easy and interesting to check this important aspect of flight safety

BALI`S CALC
PATH: \ENGINEER\BALICALC
BALI`S CALC A Simple Scientific Calculator Program with + - * / ( ) x^y x^2 1/x x Pi Deg Rad Sin Cos Tan & Arcs Ln Exp Lg 10^X Mem M+ RM Ran SCI EXP, BackSpace & more DOS text mode (color Keyboard and/or mouse control SHAREWARE by Balint Toth

Basic Engineering Statics
PATH: \ENGINEER\BSSM
This set of programs is designed for computer-aided instruction, problem solving and analysis of mechanical design problems. The Major Topics include Parallel Forces, Nonparallel Forces and Vector Analysis The Parallel and Nonparallel Force Statics Programs are designed to give the student a guide through a randomly selected example problem at a level selected by the student. An option to interact with the computer to solve the problem independently is offered. When this option is selected the student receives an immediate response to Entered data. Help with the problem is available at any time by indicating so as instructed. The answer(s) to the immediate problem is encrypted for the Teacher`s benefit Certain Statics problems may be advanced to include Shear-Force and Moment Diagrams, Moment of the Force at desired locations along the beam and the determination of the Section Modulus

Basics of Space Flight for Windows
PATH: \ENGINEER\BSFDEM10
"A space flight tutorial, in Windows helpfile format, using the NASA/JPL public domain document called ""Basics of Space Flight for the text and illustrations. This program makes the NASA/JPL document more useable by providing hypertext links, a nested table of contents, ""hotkey"" glossary, fully searchable index, popup answers in the review sections in each chapter, and hypertext links to illustrations for various spacecraft"

BC-07 v1.00
PATH: \ENGINEER\BC-07100
This is a unique program, designed to show you, how to cut many pieces of different lengths required, from the standard lengths of materials such as bars, beams, pipes, timber etc. without wasting

BEAM COOKBOOK 1.04
PATH: \ENGINEER\BCKBK
BEAM COOKBOOK 1.04<ASP> is program for static analysis of simply- and multiply-supported 2D beams. Accepts structures up to 20 supports and moments of inertia, including springs hinges, and moment connectors. Loads that can be applied are concentrated loads, moments uniform loads, and ramp loads. Solves for reactions, shear, moment, slope, and deflection in diagram or text forms. Full mouse support and context sensitive help

Beam Design Program
PATH: \ENGINEER\BMSTAN
The Archon Beam Analysis Program is designed to provide a quick method for the Engineer to obtain beam moment, shear stress, rotation and deflection values. The program will analyze most of the single span beam configurations shown in the AISC manual 9th edition as well as multi-span beams, with up to 50 spans Version of the program also allows the user to place several different load types on a single beam The program also provides a data base which provides AISC Shape section properties. This data base complies with the 9th edition of the AISC (ASD) Manual of Steel Construction There is a function in the program to calculate section properties of various shapes. The pertinent values displayed in the section property calculator and the shape data base will directly transfer to the beam analysis portion of the program The multi-span and single span output screens display a shear moment and deflected shape diagram of the system Finally, the program has a function to calculate torsional shear stress on selected solid and closed members The single span beam input allows input of an axial load. By adding an axial load you can use this program to review columns The program will accept input in Metric (SI units) or US System Note, the code check function is only available if the US system of units is used. The SI units system will provide actual stress values All output data, including the shear, moment and deflection diagrams can be printed

Bicycle gear ratios
PATH: \ENGINEER\GEAR10
Calculate charts/graphs of Bicycle gear ratios

Big Number Cruncher
PATH: \ENGINEER\BIGNUM
Big Number Cruncher - is a high-precision calculator for numbers up to 45 digits

BlackBox Equation Expert v1.0
PATH: \ENGINEER\BBFREE
It is a fully-working symbolic calculator pulled out of our major program, BlackBox Math Expert It does not have the integrated graphing and spreadsheet components found in the full BlackBox We hope you find it

a refreshing change from the standard Windows calculators. It will attempt to crunch ANYTHING you type into it, though sometimes it will ask you for guidance

bravo!
PATH: \ENGINEER\BRAVO
bravo! has all mathematic, trigonometric and financial functions, and calendar computing.. It allow you to convert a nummer between 120 different measures, grouped in 12 categories. It let you compute all the values of a triangle (sides, angles, area, height) if you know three of that values. Also this functions are included vectorial and complex calculations solution of equation up to the 16th grad It use the Reverse Polnische Notation

BTU ANALYSIS
PATH: \ENGINEER\BTUSW340
BTU Analysis REG and BTU Analysis PLUS are premiere heat load calculation programs. Each program has the ability to do comprehensive heat load studies with hardcopy printouts of the results

BuilderCalc 1.7
PATH: \ENGINEER\BLDRCALC
BuilderCalc 1.7 is a building calculator that allows you to directly enter and perform mathematical operations on a variety of dimensions commonly used in the building trades, such as lengths, areas, and volumes. It also functions as a regular calculator

C64S Emulator
PATH: \ENGINEER\C64S11BD
From Seattle Lab C64S Emulator (Evaluation Version MS-DOS 3.3+ (486/33+ Reqd

Cabrio V2.01
PATH: \ENGINEER\CABRIO
Cabrio V2.01 The configurable conversion calculator from Digital Workshop. Includes over 70,000 conversions from centimetres to miles to drachm to the speed of a Cheetah Requires Windows 3.1 or better Win95 Compatible

CADRE 1.02
PATH: \ENGINEER\CD102C
CADRE 1.02 is a 3D finite element structural analysis program for Windows 3.1 (Windows 95 compatible). It calculates internal loads, reactions, displacements, vibration frequencies and mode shapes of complex beam and frame structures. Results are graphically displayed and animated on the screen. CADRE handles structures with over 5000 nodes. DXF file conversion, other conversion utilities, and User Manual free with registration

Calc
PATH: \ENGINEER\CALC10VK
Numerical calculations, data processing graph generating, viewing, printing in-line calculator

Calc v1.15
PATH: \ENGINEER\CALCV
Calc v1.15: Arbitrary precision floating point calculator. The precision is user selectable, limited only by memory constraints. The 16-bit version is limited to roughly 1,000 to 2,000 digits of precision The 32-bit Win32 version has no practical memory limits

Calc95
PATH: \ENGINEER\CALC95
Calc95 is a pocket calculator simulator program for the Microsoft Windows operating system. It is a replacement for the calculator program which is included with the operating system, with many additional features and advantages. Many users of Windows have never really made use of the Windows calculator, and in recent years there have been a number of developments in real hand-held calculators and we now expect a lot more from these invaluable devices

CAMCAD
PATH: \ENGINEER\CAMCAD
CAMCAD

Cantilever
PATH: \ENGINEER\CANT100K
Cantilever: Assist in design of sheet piling

Cantilever Sheeting V1.0
PATH: \ENGINEER\CANTDV11
This program facilitates calculating the depth of penetration and section modulus for cantilever sheet piling systems in granular and clay soil

Caos Graph. v1.0
PATH: \ENGINEER\CAOSGRAP
Caos Graph. v1.0 The simplest graph drawing system available 13 simple functions supported Built-in project manager for drawing multiple graphs Built-in calculator Graph and environment information Set up colors, line thickness, grid, grid spacing, numbers on grid, number of decimals shown Graph resolution 50-5000 points Remember position, size and grid size On-line help FREEWARE - Requires Windows 3.x

CARFOR 7.00
PATH: \ENGINEER\CARFOR
CARFOR 7.00 Handy Car Formulas for high performance math that will help you to analyze your Race (Street) Car / Engine needs, and improve performance Built in Calculator Unit/Metric Conversion Show Equivalence Charts Shareware from World Wide Enterprises

CCS64 V1.0 for PC
PATH: \ENGINEER\CCS64_10
Welcome to the world of CCS64. This a software emulator for the Commodore 64 computer. You may say this is not the first program trying to emulate the C64. But this is planned to be the final C64 emulator. I have worked in several years with this product, studying the C64 into its innermost secrets. This shareware version should run perfectly with all one-parted games or demos

CELLFISH
PATH: \ENGINEER\CELLFISH
CELLFISH is an implementation of the program described in Richard Dawkins` book `The Blind Watchmaker

Chem Tools for Windows 95/NT
PATH: \ENGINEER\CHMTOL
chempute.exe Calculation of Mass for a given Formula Elemental Analysis Simulation of the Isotopic Pattern GenFrag.exe Comparison of an experimental Spectra with an calculatet M+-Peak Generation of Chemical Formulas for a given Mass within an range of Elements spectra.exe Generates an Massspectrum from given fragments ReactIt.exe Estimation of the input of Chemicals for a given Reaction Equation with up to four stages PSE.exe Editable Periodic System of Chemical Elements

CHEMICAL CALCULATOR
PATH: \ENGINEER\CMCALC10
Chemical Calculator is a program designed for chemists, biologists and other science professionals. It calculates the amount of reagent to use when mixing up solutions of chemicals

CircSolver
PATH: \ENGINEER\CRCSLV
CircSolver is a 32-bit analog circuit analysis application for Windows95 and Windows NT 4.0 CircSolver can analyze any arbitrary analog circuit by deriving Transfer Functions, generating Bode Plots, and plotting the time-domain response of circuits to user-designed Input Signals. CircSolver can even plot the response of circuits with multiple sources and with different Input Signals applied to each source The application contains an integrated circuit editor with a graphical user interface, multiple document interface dockable toolbars, right-click menu, context sensitive help and advanced editing features like unlimited undo/redo and smart mouse cursors

CircSolver
PATH: \ENGINEER\CSOLVR11
CircSolver is a 32-bit analog circuit analysis application for Windows95 and Windows NT 4.0 CircSolver can analyze any arbitrary analog circuit by deriving Transfer Functions, generating Bode Plots, and plotting the time-domain response of circuits to user-designed Input Signals. CircSolver can even plot the response of circuits with multiple sources and with different Input Signals applied to each source The application contains an integrated circuit editor with a graphical user interface, multiple document interface dockable toolbars, right-click menu, context sensitive help and advanced editing features like unlimited undo/redo and smart mouse cursors

CivilTools
PATH: \ENGINEER\CIVILT10
CivilTools is a suite of spreadsheet-like tools intended to assist a qualified Civil Engineering designer in performing calculations related to the flow of water in pipes, culverts, ditches, and channels. The specific situations addressed are A. Analysis of capacity, flow velocity,

and depth of flow in a round pipe flowing full or partially full (by gravity B. Analysis of capacity, flow velocity, and depth of flow in a box section pipe flowing full or partially full (by gravity C. Design of a culvert, including analysis of inlet control outlet control, and tailwater conditions D. Analysis of flow in a channel such as a ditch or canal including a determination of whether the flow will be subcritical or supercritical, and an estimate of the size of sediment (bed load) that will be transported E. Design of a storm sewer system using the Rational Method In many cases, special algorithms are used to solve complex non linear hydraulic equations, when a direct solution is not possible. The software is arranged in a manner that will be familiar to spreadsheet users. Program modules, which each perform an individual task, are arranged like sheets or pages in a spreadsheet program. Full context-sensitive help is also provided

CO-SOLVE-IT!
PATH: \ENGINEER\COSOLVIT
"This program and the accompanying applications: ""CO-RESIN CO-RADII"", can be used to study the interaction between solvents and resins. These programs have many potential uses, to name a few: in coatings, inks and cleaner solutions All three programs use Hansen 3-parameter theory to predict whether or not a solvent or solvent blend will solubilize a resin or polymer One of the shortcomings of this approach is that not much resin data is available. CO-RADII is used to estimate the Hansen parameters for a resin, polymer or a soil for which data in the literature does not exist. CO-RADII requires only quick and crude experimental procedures CO-RADII is primarily intended for use in non-aqueous solvent resin interactions In waterborne coatings the resin must swell in order to coalesce. In solvent replacement work, if the experimenter can isolate and identify those factors which contribute to resin swell (pH ect.) and hold these factors constant; then, what remains are the effects of solvents on the resin swell. CO-RESIN can be used to match the replacement solvent(s) to the control solvent(s). In CO-RESIN, the numbers created are called ""swell parameters - k values"". Clearly, CO-RESIN is the most ambitious program. Others have tried to use particle size and other methods to study solvent effects. These methods are time consuming and require sophisticated equipment. CO-RESIN (in theory should provide a quick method to screen potential solvent replacements. CO-RESIN has not been tested. The resin solubility module: CO-SOLVE-IT! is the straight forward application of HANSEN 3-parameter calculations and is in the range of: (85% to 95 accurate. CO-RADII has been tested and yields good results. The accuracy (of CO-RADII) has not been investigated by other methods, so all that can be said is: the HANSEN parameters and the RADIUS of INTERACTION generated, when added to the resin database in CO-RESIN RESINS.IN), and then used for solubility predictions in CO-SOLVE-IT have been reasonable and accurate when used for solvent replacement work. CO-RADII is straight forward and is limited by the judicious selection of test solvents used to determine the HANSEN parameters and the Radius of Interaction"

Co-Solve-it!
PATH: \ENGINEER\COEVAPCA
Co-Solve-it!, is a menu driven DOS application that calculates resin / solvent interaction, solvent properties, and other blended properties.

This software is modular in construction and can be used by the coatings, inks, adhesives, and cleaners industries to estimate physical properties of solvent and resins to assist in product formulations Co-Solve-it! is comprised of the following modules Co-Solut: Estimates resin / solvent solubility. This module uses Hansen`s 3 parameter model. Other similar models, such as one proposed by Zeller are also supported. More than 1000 solvents and 350 resins are available in user accessible databases. ASC II reports can be generated, and solubility plots printed to graphic capable dot matrix or HP compatible deskjet or laser jet printers Co-Resin: This modules uses experimental data to estimated new or unknown resin parameters. Reports and swell maps can be printed Co-Radii: Another module used to estimate resin parameters from visual ranking`s of resin solubility. This module is easier to use than Co-Resin and provides usable resin parameters that can be added to the resin database (resins.in), accessed from Co-Resin. Reports and scatter plots that characterize your resin can be printed to the screen or a printer Co-Film: For Latex coatings, estimates single solvent MFT (minimum film temperature) for a number of common solvents used in latex coatings. Contains a database of 100 latex emulsions, with data suitable for use with Co-Film. This program uses a unique method to estimate the partitioning solvent between the polymer and water, as well as, 2nd order transitions for the given solvent set. In addition, the user can estimate solvent viscosity as a function of temperature. Also, polymer Tg`s can be estimated by two methods. A surfactant primer is available as a screen slide show to help understand how surfactant works PolyDB - (New addition!) - A compilation of 120 polymers with known solvent and non-solvent, from referenced sources. Another information source. You can also use this data to make a rough calculations of a particular polymers Hansen`s parameters and radius of interaction, using Co-Radii Co-Evap - (Improved and extended), solvent and solvent blend evaporation rates estimator. Recent improvements, relative humidity correction for blends containing water. Also, rough estimations of evaporation time (based on vapor pressure estimation) for solvent and blended solvents with temperature as a variable. More accurate results for for solvent and mixtures estimated for ambient temperatures of 25 degrees C. Most recent, I extended the mixture groupings, and I have implemented a better way to estimate non-ideal VLE for polar solvents. Evaporation theory is outlined in a sub program that can be read on screen. Next, a separate program called IPT2 can be started from within Co-Evap for the experimentalist that measures blended solvent evaporation times and wants to see changes in slope in order to understand how the mixture behaves as it evaporates Co-Flash: Estimates single solvent and binary mixture flash points Viscosity conversion program, for Newtonian fluids, converts Cp to other measures of viscosity. Casson parameters can be estimated with a modules called: Casson Parameter Program, an adapted program Solvent Properties Calculator - Estimations of surface tension for solvent, estimations of interfacial tension for solvent and water - solvent mixtures using group contribution methods. Molar volume corrections, molar refraction, index of refraction estimations, vapor pressure estimations, all based on group contributions, and many other solvent properties HLB Comparator program, - estimates W/O and O/W (O - oil, W - water) emulsion HLB`s for mixtures Solvent HLB Estimator, uses density and Hansen`s parameters to estimate a solvent or oils HLB number Hansen`s Parameter by Group Contributions - This program uses a functional group method to estimate solvent Hansen`s

parameters (Hoy`s Groupings). Also, Van Krevelen`s & Debye`s methods are used to estimated the solvent polar parameters using electric polarization theory and Maxwell`s equations

Coax Calculator for Windows
PATH: \ENGINEER\COAX
Coax Calculator for Windows. This will help you determine what type of coax would be best to use. Very good for comparing side by side. Gives info on RG58, RG8, 1/2 and 3/8 inch hardline. Covers frequencies from 3.5 to 420 Mhz. Every ham must have this on his hard drive Rush Limbaugh fans Check out your bonus in README.TXT Requires VBrun300.dll

Commandline Calculator
PATH: \ENGINEER\CC110
Welcome to the Commandline Calculator! A fast, small and easy to use calculator program for your MS-DOS personal computer Once installed on your (hard)disk, the Commandline Calculator program offers you a function-packed scientific calculator only a few keystrokes away. You`ll never be without a calculator with the Commandline Calculator The Commandline Calculator is not a resident program that eats up valuable kilobytes of your memory; instead, calculations are performed directly from the DOS commandline, or from any DOS-shell. The calculations are passed to the program as commandline parameters This approach gives the Commandline Calculator a number of advantages over other (resident) calculator programs No memorising of cryptic keystrokes When using a command editor, like 4DOS, DOSKEY or CED you can easily repeat your calculations or change them Your calculations remain visible Extensive error messages are provided No permanent use of valuable memory Furthermore, the Commandline Calculator can read calculations from Standard Input (STDIN). This gives you the possibility to execute calculations stored in a file or to enter multiple calculations directly from the keyboard

Complex Calculator 1.0
PATH: \ENGINEER\GOCC10
Complex Calculator 1.0 A calculator, that can also handle complex numbers Ein Rechner, der auch mit komplexen Zahlen rechnen kann

Compressible Flow Function Calculator
PATH: \ENGINEER\COMPFLOW
Lamar University Compressible Flow Function Calculator

Continuous Beam Analysis
PATH: \ENGINEER\CBEAM311
Continuous Beam Analysis Program

Conversion Buddy(tm) v 4.1 Freeware
PATH: \ENGINEER\CNVBUD
Conversion Buddy(tm) v 4.1 Freeware Now for Win 95 and Win NT. Converts measurement units. Now includes Expression Buddy (build-your-own expression), and International numeric formatting. 1700 conversion factors No nags. OK to copy, distribute freely by BBS, CDROM. by J.E.Presley

Conversion Calculator
PATH: \ENGINEER\CONVCA
Conversion Calculator

Conversion Master Engineer Calculator
PATH: \ENGINEER\CMSTR
Conversion Master Engineer Calculator

Conversion Pro for Windows
PATH: \ENGINEER\CPCALC2
Conversion Pro for Windows is a utility which enables the user to perform over 1800 `on-the-fly` scientific and engineering unit conversions. The application also includes a button calculator and a temperature conversion utility which can convert temperature data in either fahrenheit, centigrade, or Kelvin. The archive includes the VBRUN300.dll library which is needed to run

Conversion Tables
PATH: \ENGINEER\CONVTABL
Thank you for using Conversion Tables! Conversion Tables will convert the following 6 measurements... Area, Distance, Temperature, Time, Volume and Weight. Other measurements may be added in future versions. You can also type in a date to find out the difference in days between your date and today

CONVERSIONS BY ROSEWOOD V1.13
PATH: \ENGINEER\RCONV
CONVERSIONS BY ROSEWOOD V1.13 <ASP Converts between Metric and Imperial for a wide range of weights and measures. Works with mouse or keyboard and has a pop-up calculator. Freeware from ROSEWOOD SOFTWARE

Conversions of Units, Currency, Time & Temperature
PATH: \ENGINEER\CONMEA
Conversions of Units, Currency, Time & Temperature

CONVERSIONS v1.1a
PATH: \ENGINEER\UNITS11A
CONVERSIONS v1.1a - Units conversion program. Converts English units to Metric vice versa, temperatures, pressures, power much more. Grouped with similar units for quick use and also organized alphabetically Very useful program for anyone performing technical calculations. Menu-driven user-friendly program with integrated pop-up Help system. Requires MS-DOS From GEDCO Software, Inc

Conversions v1.7
PATH: \ENGINEER\CONVRSNS
Conversions v1.7

Conversions v2.0
PATH: \ENGINEER\CONVE
Conversions v2.0

Convert It! SE 3.56
PATH: \ENGINEER\CONV32

Convert It! SE 3.56 <ASP> Ultimate unit of measure conversion utility for MS Windows. 15 catagories of conversions with a custom you set up. You can edit the conversion factors add, change or delete units. Turn off the conversions you don`t need. Catagories include Temperature, Mass, Volume, Time Area, Angle and more. Customizable. 32-bit version. In use by many Fortune 500, FedGov and individuals

Convert v2.3
PATH: \ENGINEER\CONR
Convert is a program to convert between various units (such as feet to meters or gallons to liters) in a particular dimension (such as length, volume, etc.). It was written in Visual Basic Ver 3.00 and therefore REQUIRES the presence of the VBRUN300.DLL library in your Windows or Windows\System directory in order to run

CONVERT v3.0
PATH: \ENGINEER\CVTT
CONVERT v3.0 <ASP> Units conversion calculator for Windows. Many conversion factors which you can easily modify and add to. Completely rewritten from v2.0 Corrects incompatibilities, adds Info Window, many ease of use features 15 registration

CONVERTER PRO/WIN
PATH: \ENGINEER\CNVRTP
CONVERTER PRO/WIN - Professional unit converter. User-extendible database includes length, area, volume, mass, force, pressure density, energy, power, temperature, dynamic viscosity, kinematic viscosity and time units. Units can be composed from up to four available units (for example BTU, lb. and deg. F will give BTU/lb. deg.F). Written by a professional engineer for other pros

Convertion Calculator 1.0
PATH: \ENGINEER\CONVCL
Convertion Calculator converts units of measurements. It is intended for the fields, fitness and sports It converts distance, volume, weight, energy and temperature. In total it converts more than 50 units It is a 32 bit program and should work on any PC running Windows 95 or Windows NT

Correct Bearing Capacity V4.0
PATH: \ENGINEER\CBC400K
This program facilitates calculating the bearing capacity of footings underlain by sand or clay The program will also calculate the settlement of footings underlain by sand using empirical methods

CPCEMU v1.4
PATH: \ENGINEER\CPCEMU14
CPC Emulator

CRVL AND CRVLGTH
PATH: \ENGINEER\B31G
These programs are for use with ANSI/ASME CODE FOR PRESSURE PIPING B31G: MANUAL FOR DETERMINING THE REMAINING STRENGTH OF CORRODEDPIPELINES: AND ARE DERIVED FROM COMPUTER (BASIC PROGRAMS FOR EVALUATIONS TO ANSI/ASME B31G-1984 The scope of B31G includes all pipelines within the scope of

pipeline codes that are part of ANSI/ASME B31 Code for Pressure Piping: i.e., B31.4, Liquid Petroleum Transportation Piping Systems; B31.8, Gas Transmission and Distribution Piping Systems and B31.11, Slurry Transportation Piping Systems. Parts of B31G Parts 2, 3, and 4 are based on material included in ASME Guide for Gas Transmission and Distribution Piping Systems. This criteria is not intended for new pipeline construction, or pipeline that has become corroded prior to their installation The B31G criterion is limited to corrosion of pipeline steels categorized as carbon steels or high strength low alloy steels typically ASTM A 53, A 106, and A 381, and API 5L

CurveExpert
PATH: \ENGINEER\CRVXPT
v1.32) CurveExpert - Curve Fitting/Plotting Comprehensive curve fitting system for Windows. Linear regression models, nonlinear regression models, interpolation, splines are supported. Over 35 models are built-in custom regression models may be defined by the user. Full-featured graphing capability allows thorough examination of the curve fit Shareware (US$ 35.- MC/Visa/Disc/Amex/Check Daniel G. Hyams, dgh2@ra.msstate.edu

Curvefits v5.15
PATH: \ENGINEER\CRVFIT
Curvefits v5.15 - Science/Engineering curve fitting program. Performs 19 distinct curve fits. Automatically selects best fits based on correlation coefficient and standard error. Built in text file conversion. Mouse Driven. Can handle virtually unlimited number of data points. Graph & Zoom capability Req 286 or better EGA VGA

CurvePlots
PATH: \ENGINEER\CRVPLOTS
3D Plotter 32-Bit

CYBERSKY v2.0
PATH: \ENGINEER\CSKY1620
CYBERSKY v2.0 - Planetarium for Windows 3.1 Colorful, educational astronomy program Displays the sky from any location on the earth. Allows users to learn about astronomy and explore the sky by using animation Shows stars, constellations, deep sky objects, sun, moon, planets. Shows detailed information about objects in the sky. Prints sky charts. Help file contains educational exercises, diagrams, tables, and a glossary

CYCLO
PATH: \ENGINEER\CYCLO
CYCLO creates cyloids, which are a particular family of mathematical plot. As such, it is an educational game, or, if you like, a mathematical recreation. CYCLO uses a simple yet versatile Graphical User Interface CYCLO is free. The entire source code for CYCLO and the GUI it uses are for sale ($30 Australian). Feel free to play with and share this program

Data Display & Analysis System
PATH: \ENGINEER\DTCP32
Plotting system supports Cartesian, Polar, Log, Bar, Step and Spline curves along with various statistics. Up to 12 independent windows (MDI)

possible each supporting 6 signals by 32000 samples. Customizable line/symbol color, size and type with high quality printer and .WMF output Equation processing system with over 30 functions which allows sophisticated signal generation, processing and transformation (FFT, INTEGRATE etc.) capabilities. Powerful data storage and batch file command language that allows complete control and customization High performance - low overhead; suitable for use with mathematical analysis programs or data acquisition systems. Easy to use, interactive operation including Zoom-Pan-Scroll along with point-by-point analysis. Includes on-line Help, demo and examples of how to use DataCompass with various applications

Data Display & Analysis System
PATH: \ENGINEER\DTCP16
Plotting system supports Cartesian, Polar, Log, Bar, Step and Spline curves along with various statistics. Up to 12 independent windows (MDI) possible each supporting 6 signals by 32000 samples. Customizable line/symbol color, size and type with high quality printer and .WMF output Equation processing system with over 30 functions which allows sophisticated signal generation, processing and transformation (FFT, INTEGRATE etc.) capabilities. Powerful data storage and batch file command language that allows complete control and customization High performance - low overhead; suitable for use with mathematical analysis programs or data acquisition systems. Easy to use, interactive operation including Zoom-Pan-Scroll along with point-by-point analysis. Includes on-line Help, demo and examples of how to use DataCompass with various applications

DataFit
PATH: \ENGINEER\DTAFIT
v4.1) DataFit is a tool to perform nonlinear regression (curve fitting) & data plotting Fit data (up to 9 independent variables) to regression models with up to 20 parameters Define your own models, or choose from over 150 built in 2D/3D models. Results include 2D 3D plots, and a variety of fitting parameters. Export code in BASIC or C to use a model in a user written program. Easily used by both experts & beginners

DataVu
PATH: \ENGINEER\DATAVU
Data Analysis and Visualization Software

DatVac 1.1
PATH: \ENGINEER\DATVAC11
DatVac is a Windows based program that allows user to extract data from inspection reports. Currently the only machine supported is a Zeiss. The program allows users to create a Config file which stores what information is to be extracted from the report. When the user goes to extract the data, they select the Process function. In this function, the user is asked to supply a Config file (which indicates what data to extract from the report the name of the result file (a comma delimited file where the program will store the extracted data), and the names of the Zeiss files to extract the data from. There is also a utility to Adjust a section or all of the Address record numbers in your config file. This will be useful if the inspection report has some lines either

added or deleted due to the addition or deletion of some features being measured

Deburr
PATH: \ENGINEER\DEBURR
Process model for robotic grinding

DeedPlot
PATH: \ENGINEER\DDPLT053
Plots map of your deed, finds errors

DEMAND
PATH: \ENGINEER\DEMAND
Electrical Design Software designed Residential Electrical Reports DEMAND 2.5 to be a user friendly program. This application produces professional customized reports for the demand calculation on new or existing single dwellings

DIMCALC2
PATH: \ENGINEER\DIMCAL
"DIMCALC2 contains a complete calculator and units converter for dimensioned quantities. For example, It lets you add ""x miles per hour"" with ""y feet per minute"" and see the answer as ""z meters per second"". It is flexible, comes with hundreds of standard units, and contains extensive help information"

DIZZY
PATH: \ENGINEER\DIZZY
The function of this program is to compute and record coordinated points on stations along a previously defined baseline. It will compute any horizontal offset, left or right. It also will compute profile elevations. The profile can be offset vertically using a constant offset a constant superelevation slope, or a variable superelevation Dizzy also has the ability to create TDS point lists and road files using a simplified format. Use of precomputed coordinate points eliminates the need to enter horizontal dimensions. The vertical profile is also simplified, being based on PVI elevations rather than slopes Roadline files used by Geodimeter can be generated in Dizzy. These horizontal alignment files can only be used with Geodimeter instruments Dizzy uses up to four different types of files 1) A coordinate file containing the coordinates of those points that define the alignment of the baseline. Any new computed points will be stored in this file 2) A sequence file defining the sequence of the points that define the baseline 3) A PVI file defining the profile of the baseline 4) A Superelevation file defining the superelevation transitions along each side of the baseline The Coordinate file and the sequence file are necessary running this program. The PVI and superelevation file are optional

DOS command line scientific calculator
PATH: \ENGINEER\CLC192
DOS command line scientific calculator It calculates, evaluates math expressions plots graphs, solves equations, outputs tables of data, does statistics, reads and writes to files and printer (up to 32000 lines). Bitwise (64 bits) and logical operations and base changes (2-36 Includes

predefined constants with state of the art precision. 17 digits. Many help screens. Comes with a tutor batch file

Drainage Program
PATH: \ENGINEER\DRCLC
This program will allow the Engineer or Contractor to perform a quick estimate of the required drainage facilities for small construction projects The program consists of four parts. The first function is the Runoff calculator. The user uses this function to estimate the amount of runoff in the area of concern. From this output the user knows the flow capacity of runoff that he has to deal with Next the user can access the Channel capacity calculator. Knowing his required flow capacity, the user can now design his drainage ditches Most projects must use culverts to divert the flow under roads or other obstructions The Culvert capacity calculator can be used to size either round or box culverts Finally, the project may involve some road construction, which requires curb drains The Inlet capacity calculator will tell the user the capacity of his storm drains

Draw/plot 2D graphic of math function
PATH: \ENGINEER\2DGR10
Draw/plot 2D graphic of math function

DRILL v.5I
PATH: \ENGINEER\DRILL
"DRILL v.5I; provides knowledge-based manufacturing parameters for drilling a variety of alloys (Al, Steel, Ti Cu-base, Ni-base). DRILL also supports various drill types (HSS, Carbide, Cobalt and Micrograin Carbide). Provides drill tip length, inch per minute (IPM revolutions per minute (RPM), surface feet per minute (SFM), and ""inaccuracy in oversize"" data. Uses industry-proven recommendations for the alloy specified Al is default). Math coprocessor not req`d Executable from within other DOS/Windows programs (such as editors & CAD/CAM prgms for CNC part programming. Free upgrades and technical support via MFG BBS. Only $10.00 registration. MILL, REAM, TAP, TURN, CSINK CDRILL, COBORE, & generalized FRCALC prgms also available; see README.TXT"

DUCTOR v1.0A
PATH: \ENGINEER\DUCTR10A
DUCTOR v1.0A - Sizes round duct systems quickly and easily. This program is very powerful and requires minimal user input. Menu-driven, user-friendly program with integrated pop-up Help system. Requires MS-DOS Easily runs on computers with Windows From GEDCO Software, Inc

DUCTSIZE
PATH: \ENGINEER\DUCTSIZE
ELITE SOFTWARE DUCT CALCULATIONS PROGRAM

DUPLICARE 1.03
PATH: \ENGINEER\DPLCR
DUPLICARE 1.03 - Jesse I. Deutsch The Roman Numeral Calculator for Win3.1 Calculations can be done in either Roman or Arabic and are automatically translated Addition, subtraction and multiplication provided

Dynamo
PATH: \ENGINEER\DDYNAMO
Dynamo

DynaTool version 1.0.3
PATH: \ENGINEER\DNTF1_03
DynaTool was originally designed to process data for seismic analysis of structures, that is generating sets of random time histories from input reponse spectra, generating response spectra from time histories, generating Fourier plots to derive frequency content and converting between acceleration-velocity-displacement records As the program has developed, including the addition of the calculation module, it has become apparent that it will serve other fields where processing of long vectors is necessary. This new release has, therefore, had the seismic specific nature removed DynaTool requires a minimum of an 80386 processor plus a maths co processor. It runs reasonably quickly on an 80486-66, a Pentium P120 at 100MHz gives good performance. It will run under Windows 3.1, Windows 95 and Windows NT. No processor specific or OS speecific optimisation has been included at this release, excepting the basic processor requirement. There are no other intentional system requirements

E6B-V17
PATH: \ENGINEER\E6B-WG2
This program is provided strictly for the purposes of education and stimulating debate regarding computer aided flight planning

Easy Measurement and Temperature Converter Version 2.5
PATH: \ENGINEER\EASYM
Easy Measurement and Temp Converter

EcobaseDB v1.5a For Windows
PATH: \ENGINEER\A-EB15A
EcobaseDB lets you create, archive, and display many important natural resource attributes. It contains over 9,000 plant species native to the western region. In minutes you will be able to produce forms consistent with the USDA Forest Service Region 2 Range Analysis Handbook. This product will not only save you time and money, it will also provide you with a fully interactive database which allows you to sort, query and manitpulate data to make it meaningful to the Natural Resource Manager And, it is simple to operate...just enter data in the field, as you monitor the habitat, and the program walks you through to the completed form. Minimal training is needed to make monitoring habitat a snap If you need help using a particular technique, EcobaseDB provides a context sensitive help on each prompt, and lists options to assist you on the technical process. When all of the necessary information is input, EcobaseDB will provide a completed form for use in a hardcopy file. The form can also be saved and sent as an electronic file, to a central repository for archiving EcobaseDB is the most comprehensive and automated natural resource software package, of its kind, on the market today. Avoid replication of work and increase efficiency by doing work in one step. Simplicity and quality make this product invaluable for the Natural Resource Manager

EDGE Diagrammer v2.10

PATH: \ENGINEER\ED210BU
EDGE Diagrammer v2.10 <ASP> is a powerful feature-rich, flowcharting and diagram drawing tool for Windows 95 and NT. Fully functional Shareware

einSTein
PATH: \ENGINEER\EINST
einSTein (final version 32 bit) is a new all-purpose calculator that accept also expressions and functions (up to 8x240 parenthesis). It is very easy to use. In the RPN functionality it allows you to compute the interest rate of ANY cash flows (regular or irregular). You need only to put in the dates and the amounts of any cash flow and press a key. So everybody can, in very easy way, calculate the real interest rate of loans, investments, saving accounts, leasing, etc. einSTein allows you to save and recall your work, so you can keep it apdated, to print or display on screen it, so you can control your data. It has all mathematic functions, trigonometric and financial functions, and calendar computing. It allow you to compute the interest rate or the periodical amount of leasing and to print the amortment schedule of a loan. It allow you to convert a number between 120 different measures, grouped in 12 categories. It let you to calculate all the values of a triangle (sides, angles, height, area) if you know three of that values. Solution of equations up to the 16th grad. Complex and vectorial calculations. Matrix computing. Plotter. And much, much more It uses the Inverse Polnishe Notatio (RPN) and has a very rich and accurate Help file It was tested in Windows NT and Windows 95

ELCAD
PATH: \ENGINEER\ELCAD
A program that draws the circuit you are dealing with and then queries the user for known information. It then computes the unknowns: resistors, capacitors inductors, AC, DC, transistor circuits 555 timers, unijunctions, puts, trans formers, phase angles, heatsinks and more Displays formulas used, on simpler circuits. Very user friendly

ELCUT v3.00a
PATH: \ENGINEER\ELCT30A1
FEM modelling system

ELEC_SIZE v1.1B
PATH: \ENGINEER\ELECZ11B
ELEC_SIZE v1.1B - Performs wire and conduit sizing and allowable ampacity based on the 96 Code. Also does voltage drop calcs and typical unit conversions. Incorporates the changes in the 96 Code which drastically affect conduit sizing. Menu-driven, user friendly program with an integrated pop-up Help system. Requires MS-DOS Easily runs on computers with Windows From GEDCO Software, Inc

ELECTRC9
PATH: \ENGINEER\ELECTR
Perform most common electrical contracting and engineering calculations Device, junction and pull box calcs Conduit fill calculations Cost to operate various loads at different kwh charges Lighting calculations based on the Zonal Cavity Method Motor conductor, overcurrent and overload calculations Wire and conduit sizing based on allowable voltage

drop General Calculations Amps when hp, pf, and efficiency are known Amps when va and pf are known Va when volts, amps, and pf are known Hp when volts, amps, pf and efficiency are known Quick Reference Tables for Grounding electrode & equipment ground conductor sizes Underground cover requirements KW to ampere tables Transformer Kva to ampere tables Device, pull & junction box size and capacity Standard fuse & breaker ratings Wire ampacity table New terminal temp rating requirements - NEC 110-14(c Voltage drop calcs Power factor correction All functions operate with `what-if` capability. You can quickly and easily change only the data you wish to without having to start a new calculation and re-enter all the required data. Results are calculated and displayed as you make each change

Electronic Life Orchestra
PATH: \ENGINEER\ELO3-0
"ELO - Electronic Life Orchestra, Eloisa Life-Ohjelma, Version 3.0 Copyright (C) 1992-1994 by Antti Karttunen (karttu@mits.mdata.fi except module loadfile.c which is from XLife, Copyright 1989 Jon Bennett and getcpu.asm which is probably in Public Domain Requirements: either ""western"" IBM PC clone, with some CGA-compatible screen (CGA, EGA, VGA,...., With Hercules use emulation software like SIMCGA or japanese NEC PC98 or clone Files ELO.EXE The executable. Just enter ELO without any arguments to get some rudimentary help. Note: with NEC PC98 and clones you should always say SET PC98=YES before you start actually running some pattern, so that ELO uses the proper video memory areas. Otherwise the program will crash. (I still don`t know how to automagically detect whether the program is running in NEC PC98 or in some ""western"" (IBM) PC clone Say ELO -t0 -Xx rpentomi.lif to see how fast it goes CGA.BGI Borland C`s overlay for CGA graphics functions. Must be included LIFEDEMO.BAT Demo showing some life patterns FREDDEMO.BAT Demo showing some images running in Fredkin`s automata For more information about Fredkin`s automata, see LIFE.DOC BREEDER.BAT or BREEDER2.BAT Run the infamous ""breeder"" with the rules of Life Note that if you use IBM-PC clone (NOT PC98), you see only the upper half of breeder, because there are only 200 rows in CGA hires mode. However, the lower half is almost symmetrical to upper half reflected around X-axis). It takes about 1500 generations before the breeder starts actually producing the glider guns, so be patient with slower machines! (The loading of the BREEDER.LIF itself takes 964 generations And many other *.BAT files, test them LIF and *.FRE These are the pattern files for Life and Fredkin`c CA The format is about the same as what Xlife uses, except that ELO doesn`t support #A (absolute) format Actually there`s no difference between formats of LIF and *.FRE, except that the former files contain traditional LIFE-patterns, and the latter ones contain bitmap images which look (maybe) better when run with Fredkin`s rules. But of course, nothing prevents you from the running life with *.FRE files, or vice versa Most of *.LIF patterns are from Xlife (Life for Xwindows which can be found from the ftp-site export.lcs.mit.edu path: /contrib/xlife.tar.Z). Not all *.LIF patterns of that packet is included here, so you can download them by yourself. Some of them require little editing so that they fit into ELO`s world. I think that in most cases it`s enough to change the X- and Y-offsets given in the beginning of file. (The formats of pattern files are explained in the file xlife.man of the Xlife packet Source files elo.c - The main source which contains

all the toplevel C procedures elo.h - Some definitions for above one bittable.c - Contains a table for reversing the bits of byte loadfile.c - Procedures for loading in the pattern files (*.LIF & *.FRE I took this from the Xlife package, and modified it a little supdate.asm - Assembly code to compute the Life or Fredkin CA when one character per cell output mode is used (e.g when ELO is started without -X option.) Contains also related screen handling and world wrapping procedures pupdate.h - Assembly code to compute Life or Fredkin CA when one pixel per cell output mode is used (e.g. when ELO is strted with -X option). The code is contained in the macro GEN_PUPDATE, which is ""called"" 16 times from pupdate.asm with differing parameters, so that 16 different versions of it are generated (8 to compute Life and 8 to compute Fredkin`s CA). Some of them work only with 80386 (or higher), some of them keep the count of population, some of them don`t, etc Which version is actually used depends from the CPU detected with getcpu() function and from the options the user gives at starting time The ""hardest"" code is in this module, and it does the hardest work in the whole program. The algorithm used to compute the Life in the pixel mode was modified from the PDP-11 life routine given in Mark D. Niemiec`s article ""Life Algorithms"" at page 94 of BYTE, January 1979 It computes 16 or 32 cells at same time, depending from the CPU of the running machine pupdate.asm - This contains code to ""import"" and ""export"" variables between data and code segments (i.e. between assembly code in pupdate.h and C code in elo.c). (There are not enough segment registers in the basic 8086 This module contains also byte table for counting the number of 1-bits in byte. Otherwise this just ""calls GEN_PUPDATE macro included from the file pupdate.h pupmacro.h - Some assembly macros for the generic pseudo-instructions used in puprest.h puprest.asm - Miscellaneous routines for wrapping the world (in pixel mode) and handling the screen in CGA`s hires mode getcpu.asm - Function whih returns the CPU type as its result I have modified this a little from the piece of code which was floating in the Usenet All the modules mentioned above were written by me (Antti Karttunen except loadfile.c and getcpu.asm Environment variables PC98 - This should be ALWAYS defined (e.g. by saying SET PC98=HAI in MS-DOS) with NEC PC98 and clones, when you use ELO otherwise it will crash! And with ""western"" IBM PC-clones it naturally SHOULDN`T be defined VIDSEG - The segment where ELO will throw its output. By default the value B800 is used (except A000 in one char/cell mode with PC98`s). With PC98 you can define the color of cells with this variable together with BCOLOR, e.g A800 = blue, B000 = red, B800 = green (when BCOLOR is undefined, i.e. zero). With some ""western"" PC`s with some dubious displays the value should be probably B000 instead of B800 (try it if you don`t get anything to screen BCOLOR - (Background color, works only with PC98`s) If this is defined, then above mentioned three colour segments are initialized to some values, instead of the default zero The value of this should be bit-mask between 0 and 6 Note, I have only run ELO with western PC`s and EPSON PC286LE NEC PC98 clone with LCD display), so I don`t really know how ELO actually looks like in real NEC PC98 with a color monitor Note: with PC98`s the image will be left on the screen (as background if you exit from ELO with x instead of q Misfeatures and future suggestions Many options (like some of the -t options) are currently implemented only with -X option (one pixel/cell output mode). With one char/cell mode they don`t have any effect, or produce incorrect results X (one pixel per cell output mode) and -x (use extent checking to optimize the generation of

world, i.e. compute only the area of world which is currently undergoing changes) options should be probably default Z option sleeps less than second in NEC PC98`s, so use more of them e.g. -ZZZZ I should add to GEN_PUPDATE (in pupdate.h) code which uses the VGA`s 640x480 hires mode (or at least some EGA`s mode). Using the CGA`s 640x200 mode with Super VGA looks little bit lousy Fredkin`s automaton would probably look nice with colours. (I.e we would use, let`s say 16 differect colours for one cell, but the algorithm would be still the same XOR-the-four-neighbouring-cells together This document file is lousy, and I have no time to edit this"

EMILY / MONICA release 1.3
PATH: \ENGINEER\EMILY52
"New features in EMILY / MONICA release 1.3 Serial I/O may now be redirected to a window (with ZOOM), or to a PC COMM port in BOTH EMILY and MONICA. EMILY`s F3 serial setup menu has been added to MONICA, and has received a new `Local` option which selects I/O in the PC window Serial I/O ""fine tuning"" now shows only the actual speeds which are supported by the PC COMM port hardware MONICA now supports single-chip in-circuit emulation with DS5000 type processor. New `/DS5000` command line option, and F4 setup menu have been added EMILY and MONICA now support user defined Special Function Registers for use with expanded 8051/52 variants New EMSETUP utility for configuring default setup values in EMILY and MONICA, including screen colors, Special function registers, COMM port assignment and configuration, reset mode, default filename etc New `/Reset` option to reverse sense of RTS controlled reset"

Emissions Calculator version 2.3
PATH: \ENGINEER\CANARY
The Emissions Calculator is designed to be a time-saver for engineers working with combustion systems. The user enters data which are typical of exhaust measurements and the program calculates fuel properties, exhaust gas components, and air and exhaust gas properties. It also provides a units conversion for the calculated exhaust gas properties

Energy Unit Conversion Calculator 1.0 for DOS
PATH: \ENGINEER\EUCON
Calculate energy & power of single and 3 phase loads

Engi_Cal version 1.3
PATH: \ENGINEER\ENGCAL
Engi_Cal is an intelligent progammable calculator, capable of interpreting formulas. The user can define formulas and add them to a personal categorised formula database

Engi_H2O version 1.3
PATH: \ENGINEER\H2O13
Engi_H2O is specifically suited for the engineer (or student), who regularly has to determine physical properties (enthalpy, entropy specific heat, etc.) of water/steam mixtures. Engi_H2O calculates these properties quickly based on a given temperature/pressure/degree of vaporisation

Engi_Hex version 1.0

PATH: \ENGINEER\HEX10
Engi_Hex is an easy to use and yet versatile Heat Exchanger monitoring program. Engi_Hex is targeted for process engineers in the Petrochemical and Chemical industry as well as the plant operators in this field Engi_Hex is as versatile as traditional home made spreadsheet monitoring prgrams, while its handy user interface facilitates data entry by staff of different levels of education

ENGINE-5
PATH: \ENGINEER\ENGINE-5
ANIMATION of a new kind of ENGINE offered to companies

Engineering Mechanics Calculator
PATH: \ENGINEER\EMC
EMC is an algebraic calculator with built-in Engineering Formula Solver and Units Converter

ENGSIM for MS VC++
PATH: \ENGINEER\ENGSIM21
Engineering Simulation Library for Microsoft Visual C

EPANET (Version 1.1e)
PATH: \ENGINEER\EPANET
EPANET is a computer program that performs extended period simulation of hydraulic and water quality behavior within drinking water distribution systems. It tracks the flow of water in each pipe, the pressure at each pipe junction, the height of water in each storage tank, and the concentration of a substance throughout a distribution system during a multi-time period simulation. In addition to substance concentrations, water age and source tracing can also be performed. The water quality module of EPANET is equipped to model such phenomena as reactions within the bulk flow, reactions at the pipe wall, and mass transport between the bulk flow and pipe wall. This manual describes how to use the EPANET program on a personal computer under both DOS and Microsoftr Windows„. Under Windows the user is able to edit EPANET input files, run a simulation, display the results on a color coded map of the distribution system and generate additional tabular and graphical views of these results

Equation Grapher 2.00 for Windows 95 and NT
PATH: \ENGINEER\EQUAGR
Equation Grapher 2.00 for Windows 95 and NT A complete function plotting and analyzing program. Very fast, automatically finds roots maximum/minumum, intersections, etc. Handles up to 12 graphs at the same time. Can view and calculate integration area. You can copy the graph and paste it into your word processor. Pedagogical help file with descriptive pictures included Shareware, fully functional demo

ET
PATH: \ENGINEER\UETB6_1S
ET is a full featured Electronic TriAngLateration Measurement System ET is designed for Precision Large Scale Dimensional Metrology (Optical Tooling X,Y,Z Measurement ETbuild is designed as a on-site & off-site Construction Measurement tool ETbuild allows Stakeout, Excavation

Measurement, & General Dimensional Measurement for the Construction Industry. Options are available for various orientations. ETbuild provides for 3-D site measurements without requiring set-up over monuments Both programs are designed in a very Structured System. This allows for successful, easily produced, measurements

EthoLog 2.0
PATH: \ENGINEER\ETHO202
EthoLog 2.0 - a tool for the transcription and timing of animal human behavior observation sessions. FreeWare

EUKLID 1.4
PATH: \ENGINEER\EUKLID
EUKLID 1.4

Euphoric 0.97c
PATH: \ENGINEER\EORIC097
Euphoric 0.97c The Oric-1/Atmos/Telestrat emulator by F.Frances Requires: 386, VGA (+Adlib FM for sound

Evaluator
PATH: \ENGINEER\TRCALC
Evaluator Trivial Calculator 1.01

Expansion Joint
PATH: \ENGINEER\EXPJNT
Description Windows Thermal expansion of the structures especially long buildings will require expansion joints. Spacing the expansion joints requires using a graph and applying the specified facrors for each case. This task has been simplified by using this program. This program is an excellent tool for Engineers Architects, and General Contractors It is user friendly, visually attractive and includes the graph and online help The professional looking output could be submitted with calculations to building officials Download the demo, it will work for 30 runs

Exponential-Smoothing Forecasting
PATH: \ENGINEER\EXPSTH
ExpSmth uses a forecasting methodology know as exponential smoothing, in whichthe forecast for a period is based up combing a prcentage of the forecast for the previus period with the actual figures for that period. This percentage, called the smoothing constant, can take any value between 0 and 1, depending upon the weighting you wish to give the two factors. A value of 1 gives full weight to the previous forecast. Exp. 12 Periods, Constant .5 and 490,500,550,400,450,540,560,580,560,590,610,600

ExpressCalc 1.3
PATH: \ENGINEER\EXCALC
"ExpressCalc 1.3 - A unique, practical Windows calculator. Single, visible, ""line of text"" input. Input can be easily edited before or after calculation. Small size No virtual keypad hogging screen space Selectable size (it gets even smaller Removable title bar (smaller still). Three visible memory registers. Memory can be retained between sessions. Always-on-top option (registered users only"

EZ Convert 95
PATH: \ENGINEER\EZCONV
EZ Convert 95

EZTIME v96
PATH: \ENGINEER\EZ555
EZTIME v96 <ASP> (ESC) An easy to use design program for the popular 555 timer. Educators and engineers can use EZTIME to quickly explore many designs in a short time. EZTIME instantly displays oscillator circuit parameters in both graphical and numeric form. Uses a simple graphical interface 19.00 for single users and $79.00 for site licenses. Registered users receive a bonus program

FANMASTER v2.1A
PATH: \ENGINEER\FANS21A
FANMASTER v2.1A - Program for the application of theory to actual fan systems. Has a section that graphs fan curves from fan table data. Finds unknowns from the curves. Also has sections for design, testing, density corrections, etc Menu-driven, user-friendly program with an integrated pop-up Help system Requires MS-DOS From GEDCO Software, Inc

FE-Sizer
PATH: \ENGINEER\FESIZ114
FE-Sizer is the latest in differential pressure type flow meter sizing software. It quickly and accurately sizes flow meters using the latest standards and discharge coefficient correlations. The user interface is flexible, easy-to-use, and complete with pull-down menus and pop-up pick lists

FFTPAK 87/32
PATH: \ENGINEER\FFT32
This is the fastest 32-bit assembler-coded FFT libray available for the PC

Fibonacci Number Series
PATH: \ENGINEER\GFIBNS
The Project Gutenberg Etext of The Fibonacci Number Series

FirstMix for Concrete Mix Design
PATH: \ENGINEER\FM201
FirstMix for Concrete Mix Design

FLASHW
PATH: \ENGINEER\FLASHW1
FLASHW

Flow Pro
PATH: \ENGINEER\FLOWPRO2
Flow Pro is an essential software tool for designing open channels such as culverts, sluiceways, and water transportation flumes. It uses the industry standard Manning`s equation, combined with numerical integration, to compute a water surface profile for subcritical and supercritical flow types System requirements Windows 95/NT 486DX 33MHZ CPU 4 MB RAM 2.3 MB hard disk space

FLOWLOOP v2.1A
PATH: \ENGINEER\FLOWL21A
FLOWLOOP v2.1A - Program for the design and analysis of closed loop, direct return hydronic systems. Handles 100 piping segments and 40 branches. Performs pipe pump, and control valve sizing, etc Menu-driven, user-friendly program with an integrated pop-up Help system Requires MS-DOS From GEDCO Software, Inc

Fluid Flow Calculations
PATH: \ENGINEER\FFC12
This program is used to solve fluid flow problems using the Darcy-Weisbach equation

Footing Design
PATH: \ENGINEER\UNPKFT
This program is designed to give the engineer a quick footing design. The user inputs the footing dimensions, allowable soil bearing pressure, column location, column loads and moments and other criteria. The program will generate soil bearing pressure and design the footing. The design will tell the engineer if the footing is thick enough, what main rebar is required and if the resultant pressure is within the middle third of the footing The program will review the following types of footings Rectangular footings, with a single column Two adjacent rectangular footings, with one column on each A spread (raft) footing with multiple columns Wall footings A spread footing supported by piles, with multiple columns The program will allow input of direct column loads as well as bi-axial moments on each column. The program will generate a final report, which includes a reflection of the user input, a code check to ACI 318-71 and resultant pressures with recommended reinforcement Finally, the adjacent footing option will provide overlapping soil pressures at any depth below the footings

FORM_E 1.00
PATH: \ENGINEER\FORME
FORM_E 1.00 Evaluate math formula interactively, with many features Single line calculator. Can Loop 1 or 2 variables from user low value to user high value by user step value, or Load a table of 1 to 5 variable with unlimited entries to run thru a formula Load and store formulas and variables to disc, output to screen, printer, or file

FORMULAS 1.1
PATH: \ENGINEER\FORMUL
This is a conversion utility program.(Lengths,Measures,etc

FRACTION
PATH: \ENGINEER\FRCTIN
FRACTION is a command line fraction calculator that supports the basic four math operators. C++ source, with Fraction class included. Freeware

Frames
PATH: \ENGINEER\RFCLC
his program determines the loads on Rigid three (3) member frames based upon the following assumptions 1. The beams are of homogeneous material

that has the same modulus of elasticity in tension and compression 2. Each beam is straight (if slightly bent, the curvature is in the plane of bending and the radius of curvature is at least 10 times the depth 3. The cross section is uniform 4. Each beam has at least one longitudinal plane of symmetry 6. The beams are long in proportion to their depth. The span to depth ratio is 8 or more for metal beams of compact section, 15 or more for beams with relatively thin webs, and 24 or more for rectangular timber beams 7. The beam is not disproportionately wide 8. The maximum stress does not exceed the proportional limit (i.e., the beam remains elastic 9. The frames have rigid corners 10. Angular Deformations and Lateral Displacements are the result of frames that are initially deformed and free of stress and then forced to conform to the end conditions. This is not the same as imposing external displacements/deformations on a frame that is true, stress free and meeting end conditions

FREQ for Windows
PATH: \ENGINEER\FREQ
FREQ for Windows: Beyond Fourier Transforms FREQ 2.1 is a data analysis tool which determines what sine waves make up a data set or time series: periods, amplitudes, phases percent relative power). Specify the periods you believe are present, and FREQ tests those periods and graphically assembles selected waves into a revealing portrait of your data You can`t get this from an FFT without much work and specialized training. From CoDebris

FunPlot v 1.00
PATH: \ENGINEER\FNPLOT
FunPlot v 1.00 <ASP> is a function plotting shareware for DOS computers. Use fast and simple zoom and scan to view function. Fast graphing of simple implicit functions. Great support for trig with fractions of pi or degree x-axis. Polar and parametric graphing supported. Graph up to 16 functions at once Designed for ease of use by high school students. Generous licensing for schools and boards. Purchase orders accepted

G-RATE
PATH: \ENGINEER\G-RATE11
This program rates helical and spur gears according to AGMA 218.01-1982 and AGMA 2001-B88

Game of life
PATH: \ENGINEER\LIFE3D
This is yet another version to this well known subject, but it has got some features which aren`t as well known as the game itself (such as 3D view stability tests The game is written for IBM compatibles and requires at least a 286 based machine equipped with a standard VGA adapter

GammaCAD PRO 3.00
PATH: \ENGINEER\GCAD
GammaCAD PRO is a full featured CAD program for Windows 95 or later. Use it to design an addition to your house, create a circuit diagram, graphs, charts, maps, landscaping, and much more Features include: symbol libraries, DXF import/export, layers grids, element snaps, dimensioning, architectural numbers (ft/in multi-level undo. Creates scaled

printouts/plots with automatic page setup. On-line tutorials and examples get you up and running in no time

GASVENT for Windows
PATH: \ENGINEER\GASVENT
GASVENT for Windows

GEARGEN
PATH: \ENGINEER\GEARGN
Geargen was developed as an aid to those engaged in the design and manufacture of gear forms. In its original form I used it to size electrodes in the moldmaking process. After playing with it for a while I realized that it could be used as a aid for designing gears. After playing with it some more I realized that it could be used to generate code for wire edms

Geometrix
PATH: \ENGINEER\GEOMTR
This program calculates simple and complex geometric shapes

Geometry Mate v3.0 for Windows 95
PATH: \ENGINEER\GEOMTE
This handy Windows 95 utility does calculations such as area perimeter, surface area, and more. It includes illustrations to help you input the right numbers. The shareware version of Geometry Mate has only area and perimeter enabled

GEPASI 2.0
PATH: \ENGINEER\GEP208A
This is GEPASI 2.0, a general purpose simulator of metabolic pathways It is a directed towards research and education; it is meant to be a very useful tool for modelling biochemical pathways, chemical reactions,etc. GEPASI is free software covered by the GNU general public license, version 1 This version of GEPASI runs under MS-Windows 3.0 and 3.1 in 386 enhanced mode, on 80386SX and above microprocessors. A maths co-processor is not needed but should accelerate the simulations by at least a factor of 10

Gnuplot
PATH: \ENGINEER\GPT34EXE
"Gnuplot is a command-line driven interactive function plotting utility for UNIX, MSDOS, and VMS platforms. The software is copyrighted but freely distributed (i.e., you don`t have to pay for it). It was originally intended as graphical program which would allow scientists and students to visualize mathematical functions and data. Gnuplot supports many different types of terminals, plotters, and printers including many color devices, and pseudo-devices like LaTeX) and is easily extensible to include new devices. [The ""GNU"" in gnuplot is NOT related to the Free Software Foundation, the naming is just a coincidence (and a long story). Thus gnuplot is not covered by the Gnu copyleft, but rather by its own copyright statement, included in all source code files Gnuplot handles both curves (2 dimensions) and surfaces (3 dimensions). Surfaces can be plotted as a mesh fitting the specified function, floating in the 3-d coordinate space, or as a contour plot on the x-y plane. For 2-d plots,

there are also many plot styles including lines, points, lines with points, error bars, and impulses crude bar graphs). Graphs may be labeled with arbitrary labels and arrows, axes labels, a title, date and time, and a key. The interface includes command-line editing and history on most platforms"

GOW v4.0
PATH: \ENGINEER\GOW
GOW v4.0 <ASP> -(Gas-Oil-Water properties Calculates PVT properties for gases Natural gas, Nitrogen and Air) and liquids (Oil, Water, MeOH, MEG, DEG, TEG More than 12 properties calculated for each fluid (viscosity, density, bubble point, etc U.S. and SI units. Both DOS and Windows 3 versions supplied upon registration

Grafer for Windows 3.1
PATH: \ENGINEER\GRAFER21
"Grafer(TM) for Windows 3.1, v2.1 <ASP makes ANSI look-alike graphs suitable for scientific and engineering reports. The Line Graphs and Scatter Plots are built from X-Y data entered by keyboard, a text file, or the Clipboard. Graphs can be Copied to the Clipboard as ""Pictures"". Saved graphs are in text file format. Printed graphs are adjustable in size"

Graphica
PATH: \ENGINEER\GRPHCA27
System for drawing scientific graphs

GRAPHIT!
PATH: \ENGINEER\GRAFIT
GRAPHIT! 6 Great graphing program 8/95 - Graphs trigonometric functions Input for period, amplitude, & shift Features mouse, range, PI values & sound FAST! FUN! Worth d/l whether you`re a math genius or just a casual file browser Better than any graphing calculator by TTW, MEMBER *[ASAP

Graphmatica 1.60a for Win32
PATH: \ENGINEER\GRMT32
Graphmatica 1.60a for Win32 is a powerful easy-to-use, equation plotter with numerical and calculus features. Graphs Cartesian functions, relations, and inequalities, plus polar, parametric, and ODEs. Up to 25 graphs on screen at once. Offers copy to clipboard bitmap and WMF), Button Bar, on-line help and demo files. Great for algebra through college calculus. $25, by kSoft

Graphmatica 3.60 for DOS
PATH: \ENGINEER\GRMATD
Graphmatica 3.60 for DOS is a powerful, easy to-use, equation plotter with numerical and calculus features. Graphs Cartesian functions, relations, and inequalities, plus polar, parametric, and ODEs. Up to 25 graphs on screen at once. Offers export to PCX files, on-line help and demo files. Supports CGA-SVGA graphics, MS mice, and Epson dot matrix or LaserJet printers. Good for algebra through college calculus. New this version improved integration, new Find Critical Points/Zeros feature, more! $25, by kSoft

Gravity Simulator v1.0
PATH: \ENGINEER\GRAV10
This program simulates the orbital path of a satellite on an almost immovable mass. Mass, radii, and tangential velocities can be changed from within the program

GrayMATTERS SciWAVE!
PATH: \ENGINEER\SCIWAV
"GrayMATTERS SciWAVE! Shareware Installation Instructions Thank you for trying GrayMATTERS SciWAVE! shareware version To install and use GrayMATTERS SciWAVE! you must have a PC running Windows 3.x or Windows 95 with at least 8MB of RAM memory and 5MB of free hard disk space

Grids
PATH: \ENGINEER\GRIDS32
Grids was designed as a simple vectorial drawing software as there are not a lot on Windows Its principal functions is dedicated to schemes drawing, thus you can generate libraries with symbols which can be easily used (many symbols are provided with Grids Because of its design, it can be run very quickly in an easy way. Indeed, the documents created with Grids can be managed like folders, each folio can be composed of several pages It can be used for networks schemes, for electrical schemes, for databases conception flood charts, etc Several original functions complete it: it can create a reverse-engineering of JCL files welcome to the IBM world), it allows you to draw guitar tabs and grids for guitarists of course), and also calendars ; it can execute midifiles, open www sites and even a full screen mode which can be used as a midi prompt

Gutter and Downspout Spacing Design
PATH: \ENGINEER\GUTTER
This program is an excellent tool for Engineers, Architects, General Contractors or anybody who is involved in the design or analyze of roofs drainage systems. It is simple, visually attractive and includes 1- Database containing the rainfall intensities for every county in The United States 2- Print/Preview with an output that could be submitted with calculations 3- On line help

HC124
PATH: \ENGINEER\HC125D-1
HC124: The HydraCyl program is designed to assist an engineer in the selection, from the range of standard sizes available, of the correct hydraulic cylinder for any particular application

Highway Curves
PATH: \ENGINEER\HWYCUR
This program is used to solve horizontal curves circular, compound, & spiral) and vertical curves

HMI DDE disk based recipe/setpoint system
PATH: \ENGINEER\WWSET16
HMI DDE disk based recipe/setpoint system

HOME PLAN v3.1

PATH: \ENGINEER\HOMEPL
"HOME PLAN v3.1 <ASP> - Draw, Save, Edit, and Print house plans. Fast/Easy; Undo; Auto Dimension; Move/Copy/Resize/Reverse/Move Plans; Show studs & joists; Pre-Drawn furn Appl; Calc. square ft; Print 1/8"" per ft Arc; Doors, Walls; On screen `odometers`show Horiz & vert measure; Clone; Wide or regular carriage printers. VGA req. Shareware: Mouse support. Moveable tool bars. $20.00"

HOTRLL
PATH: \ENGINEER\HOTRLL
Description Windows A must see Program. This program is an excellent tool for engineers architects, general contractors, detailres,drafsmen or anybody who can use the section properties of hot rolled steel sections You can view or print all publised section properties of any hot rolled section with a click of a button. You can also print multiple sections by drag and drop to print list It is user friendly, visually attractive and includes Print/Preview with a professional looking output On line help also available Download the demo. it will work for 30 days or 30 runs whichever comes first After the trial period, Password is required

HP-IR
PATH: \ENGINEER\HPIR
HP82240 Infrared Printer Emulator

HP-Kermit
PATH: \ENGINEER\HPKRM10B
HP48 Kermit Interface

HPGL to Compact Binary Code Converter
PATH: \ENGINEER\PLOT7221
This peace of a software was written after purchasing the HP7221C plotter at Computer Swap Meeting as a bargin, when I discovered that it doesn`t understand the single `H` of HPGL (this is why it was so cheap Anyway, after some additional effort, the end result is this software HPGL to Compact Binary Code Converter. It is written for IBM DOS compatible and was tested on my 16MHz SX, as well as 66MHz 486, with no problems observed

HRCalc
PATH: \ENGINEER\HRCAL21
v2.1) HRCalc - Win Astronomy Approximates stellar radii given a star`s luminosity and effective temperature Useful for amateur astronomers, educators and students wishing to gain further insight into the Hertzsprung-Russell diagram. The program models stellar sizes in respect to our sun / solar system Shareware (US$ 15.00 Check/Money Order David C. Irizarry xerxees@ix.netcom.com

HVAC_PRO v2.1B
PATH: \ENGINEER\HVACP21B
HVAC_PRO v2.1B - Numerous programs in one for the HVAC professional Enables the user to perform quick and accurate HVAC calculations. Pipe sizing duct sizing, fan laws, etc. Menu-driven user-friendly program with integrated pop-up Help system. Requires MS-DOS From GEDCO Software, Inc

HydraCyl
PATH: \ENGINEER\HC130D-1
HYDRAULIC CYLINDER SELECTION FOR INDUSTRIAL APPLICATIONS FLUID SOFTWARE ENGINEERING

HydroCulv v1.1
PATH: \ENGINEER\HC1611
HydroCulv is a program that computes water surface profiles through culverts. Features of the program include Combinations of flow profiles including GVF, supercritical flow, hydraulic jumps Predefined culvert shapes (round, ellipse, arch, and box) and user defined shapes Multiple profiles (up to 5 sets of boundary conditions per run Open channel flow calculations or specified tailwater options Error checking of user input prior to execution Saving and opening of input in files, including last files selection GUI input of culvert and flow data including tool bar Tabular output of results to screen Graphical presentation of profiles and plots of key results vs. discharge Printing of output including input and plots Copying of data and plots to the clipboard On-line help including clickable images and flowcharts explaining calculation procedures

HydroCulv v1.1
PATH: \ENGINEER\HC3211
HydroCulv is a program that computes water surface profiles through culverts. Features of the program include Combinations of flow profiles including GVF, supercritical flow, hydraulic jumps Predefined culvert shapes (round, ellipse, arch, and box) and user defined shapes Multiple profiles (up to 5 sets of boundary conditions per run Open channel flow calculations or specified tailwater options Error checking of user input prior to execution Saving and opening of input in files, including last files selection GUI input of culvert and flow data including tool bar Tabular output of results to screen Graphical presentation of profiles and plots of key results vs. discharge Printing of output including input and plots Copying of data and plots to the clipboard On-line help including clickable images and flowcharts explaining calculation procedures

HYDRONICS 4.24 FOR WINDOWS
PATH: \ENGINEER\DEMOHY44
The hydraulic calculation of automatic fire sprinkler systems per NFPA-13

IBP Math tools (Release 3.0)
PATH: \ENGINEER\MATHTL
This program is a windows based conversion program to convert from one unit of measure to another. The only conversion program based on the IEEE-ASTM SI 10-1997 Standard for Use of the International System of units (SI): The Modern Metric System. The program also performs engineering, physics, geometry, and electrical functions

IBP Ohm tools (V2.2)
PATH: \ENGINEER\OHMTL
This program is a simple windows based program to do electrical and geomety calculations The functions that can be performed include Ohms Law (E=IR Capacitive Reactance Inductive Reactance Resonance Decibels in

input and output levels for both power and current and voltage Circle area and circumfrance Right angle functions - can be used for vertor analysis wave length Time between two dates

ICalc v1.00
PATH: \ENGINEER\ICALCP
ICalc is a small, fast, FREE!, calculator-type program. How often have you wanted to make simple calculations, and not had a calculator handy? And how often have you resorted to starting QBasic or the Windows Calculator to make these simple calculations ICalc has two modes - command-line mode and interactive mode. If you don`t enter any command-line parameters, ICalc automatically enters interactive mode ICalc is very simple, and was written in a couple of hours while I was trying to learn how to use YACC. Some of the code was stolen from HTML-Ed and some was stolen from another project of mine, so I don`t have too much time invested in it. So, I`ve decided to make it freeware. It`s still very useful, however; I use it all the time

IMPACT Dynamics Simulator v2.1
PATH: \ENGINEER\IMPACT21
"Impact simulates the collision of 2-dimensional convex polygons with graphical animation. The equations for collision of irregularly shaped objects are taken from ""Dynamics"" by Pestel and Thomson, 1968. With the mouse, you can grab an object and drag it or throw it. You can stack objects on top of one another. You can design experiments interactively, or you can use a text editor to make scenario files. As you watch the bodies bouncing off each other and the the walls, you can get energy reports of the total rotational translational, and potential energy. You can turn on trace and sound to see the amusing ""kinetic artwork"". You can set physical constants restitution elasticity), gravity, air friction, and sliding friction. It works on CGA EGA, VGA, or Hercules using Borland BGI. (Help text not readable on Hercules Recommended but not required: mouse and 286 or better"

Interactive Data Display/Analysis System 16-bit
PATH: \ENGINEER\WP16D1
Interactive Data Display/Analysis System 16-bit

IO71 and IO71ASC
PATH: \ENGINEER\71PRO
These are the transfer programs that operate in the PC. They perform the same function. The difference between the two is that IO71 was written specifically for use with Maptech cogo files. IO71ASC works with generic ASCII coordinate files. If you are not a Maptech user, you will have no use for IO71 In order for these programs to operate, it is necessary for the HP-71 to be connected to an Oregon Digital box with a serial port, and the HP-71 must be running the program PCX. The two computers must have a direct serial connection. They will not be using HP-IL, and an HP-IL/RS-232-C interface will not help. This software was designed to work with Super Surveyor files, but it will also work with any HP-71 Surveying Pac coordinate files and any HP-71 text files Coordinates that are brought into the PC are stored in a new file If you wish to add them to an existing file, you must merge them using some other file management software. Any elevations equal to zero or less than 100 will

automatically be converted to a null elevation. Text files and Autostake figures may also be transferred. The Autostake figures are kept in files separate from the coordinate file. Super Surveyor print files may be transferred as text files. You will have the option of printing any incoming data

ISO v4.0
PATH: \ENGINEER\ISO
ISO v4.0 <ASP> - (ISO orifice calculations Calculates size, flowrate or pressure drops for gas and liquid orifice meters Calculations are based on the International Standard ISO 5167-1:1991 U.S. and SI units Both DOS and Windows 3.+ versions supplied upon registration

ITALASSI v1.0
PATH: \ENGINEER\ITALSI32
"ITALASSI v1.0 (an acronym for ""Is There A Life After Statistically Significant Interactions?"") is a freeware program that has been written to facilitate interpretation of regression models involving interactions. The program may be used by researchers, and also by teachers in advanced statistics courses, to illustrate statistical interactions or applied multiple regression. The program can either compute the estimated regression coefficients from the raw data. or allow the user to use estimates from regression equations computed from general statistical packages, or a published source. ITALASSI can also be run as an addon module to SIMSTAT. Multilingual interface (English and French"

J-Works
PATH: \ENGINEER\JWK480
J-Works makes residential load calculation very easy and delivers quick and accurate results. No more searching for the right table or looking through endless charts in ACCAs Manual J to do load calculations All the information and calculations are included in J-Works Heating and cooling multipliers for calculations and complete weather data for over 750 cities is included. J-Works is a Windows based program which runs on Windows 3.1 or Windows 95 Among J-Works Features Whole house or Room-by-Room Handles up to 14 rooms Calculator- pops up anytime for use CFM Calculator Feet/In to Sq.ft. Calculator Weather data included for over 750 U.S. cities Mobile Home load support Construction component lookup by on-screen description Summary Report, 2 page formatted printed Help with Quick Start to get you started in right away Tool tips with on/off control Context sensitive Help via the F1 key Low Price- $225

Jade 2
PATH: \ENGINEER\PSJAD201
"Jade 2 from Ptolemy Services is a software package for Microsoft Windows 95 and Windows 3.1x that turns your computer into a low-cost data logger for monitoring environmental noise. Jade 2 captures data direct from the CONDITIONED AC output of a sound level meter using a standard PC sound card (SoundBlaster 16 compatible or above). You can then analyze the results on a computer First use Jade`s capture facilities to record sound levels, mark noise events and note observations. Jade lets you see the data as it is captured both in a chart and in a large ""sound level meter"" type display. You can also view the running statistics during data capture (Leq, Lpk and up to five Lns of your choice Next use Jade`s

viewing facilities to view the resulting noise traces and observations. Zoom in and out of the charts to view the data at different levels of detail, edit your observations, and print both charts and notes. You can also view the statistics Finally, use Jade`s export facilities to export both charts and notes (for example for inclusion in a report). You can also export the data to a spreadsheet application and export the statistics as a text file"

Jogging calculations
PATH: \ENGINEER\TSJOG17
Jogging calculations and a pacer by Prof. Timo Salmi of the University of Vaasa

KaleidaGraph Demo
PATH: \ENGINEER\KALGRP
KaleidaGraph Demo

KALKULATOR/32 v1.50
PATH: \ENGINEER\KALK32
KALKULATOR/32 v1.50 - A sci/eng calculator for Win95 (32-bit). Expression evaluation 100 functions (stat.distributions, Euler conditional, user-defined), function graphs, statistics (mean, s.d., histograms poly regression), column operations on stat data. Polynomial roots, linear algebra unit conversion, phys.constants, computer math, save/restore, on-line help

KURV+ for WINDOWS
PATH: \ENGINEER\KURVWI
KURV+ for WINDOWS, Ver 4.4b, is a statistical analysis program with 4 modules CURVE FITTING: X,Y data points are processed to determine coefficients of 28 equations Best Fit index, Forecast option, Graphs MULTIPLE LINEAR REGRESSION: Computes the coefficients for 2-to-4 predictors. Graphs FUNDAMENTAL STATISTICS: Calculates the Mean Variance, Stand. Deviation. Scatter graphs GRAPH BUILDER: User can create line graphs Conrad Button`s Software 4/13/95

KWIKSTAT 4.14
PATH: \ENGINEER\KWKST
KWIKSTAT 4.14 <ASP> <ESC> Award winning statistical Data Analysis and Graphs for Scientific and Business data analysis Contains dozens of standard statistical tests and graphs. Uses dBASE files. Imports ACSII and Lotus. SIA Award Winner. 12,000+ copies sold

KXTD1232 Programator
PATH: \ENGINEER\KXTD1232
KXTD1232 Programator allows you to configure and program a PANASONIC KXTD1232 or KXTD816 PBX telephone switching system via a friendly, graphical interface. Edit groups configure speed dialing, set up call hunting and more - all by pointing and clicking

LAIPE
PATH: \ENGINEER\LAIPE
"The letters LAIPE(TM) stands for ""Link and In Parallel Execute"". LAIPE is a collection of high performance subroutines for intensively-computing

numerical analysis. LAIPE provides Fortran and C native calling syntax. All the functions in LAIPE are parallelable in nature. Link your applications with LAIPE, and then your application not only can be run on a uniprocessor computer but also can be speeded up on a multiprocessor computer"

LENA
PATH: \ENGINEER\LENA
LENA circuit analysis program for 56 node, 204 branch electronic circuits fast compact program speaks electronic jargon; single, multiple branches plus macromodels. Any 80x86 CPU, display or printer; includes 80x87 coprocessor version for very fast analyses. Small interactive, friendly circuit design tool for engineers, techs, teachers hams or hobbyists.

LENGTH NESTING SOFTWARE
PATH: \ENGINEER\LTHNSW
LENGTH NESTING SOFTWARE for cutting-to-length bars, tubes etc

LensView
PATH: \ENGINEER\LENSVIEW
LensView - View lens design patents

LinCalc v1.01 for Windows 95 and Windows NT 4.0
PATH: \ENGINEER\LINCALC
LinCalc v1.01 fixes a major bug in the trace routine in v1.0. LinCalc is an object-oriented calculating system that has been designed to make working with vectors and matrices as simple as possible. Each vector or matrix that the user enters, and the result of every calculation, becomes a persistent object displayed in its own window. The user performs an operation on one or more objects by selecting the object windows and then activating the appropriate function button on the calculator face. Calculations can easily be chained, because the result of an operation becomes a new object. Objects can be entered by the user or loaded from files, and they can also be stored into files. The system has 16 vector and matrix functions, and can operate with objects that have row and column dimensions of up to 20 elements. Help is available from within the application

LinePlot V1.3
PATH: \ENGINEER\LNPLOT
LinePlot V1.3 is an X-Y data graphing program for scientific & engineering data, containing major enhancements from prvious releases Features allow graphs that are difficult with other PC charting & graphing products. Native OS2 Presentation Manager program. Produce OS2 metafiles to be pasted into other native OS2 applications. Full featured, shareware. Ext ensive on-line, context sensitive Help. From Neighborhood Business Services. Reg: $20 (US

LOGIC CIRCUIT ANALYSIS
PATH: \ENGINEER\LCA
"The user can create and evaluate computer circuits with the ""Logic Circuit Analysis"" program. The documentation functions as a tutorial on computer circuits"

LoKon V2.1
PATH: \ENGINEER\LOKON
LoKon V2.1: Construction and Simulation of digital circuits Contextsensitive help (600 KByte) and menues More than 150 elements (gates, flipflops ...), oscillator ROM/RAM, PLA and TTL elements. Oscilloscope Comfortable creation of own elements and macro elements Registration fee: 35 US$ (50 DM commercial: 69 US$ (99 DM Use bmtmicro to register outside Germany read bmtmicro.txt

LPP
PATH: \ENGINEER\LPPWIN
LPP is a Linear Programming software for optimization of small and medium sized business situations. LP algorithm is used for Optimization Maximization or Minimization) for linear relations. It finds applications in areas like: Least Cost Mix (example: Product Formulation and Capacity Utilization Planning) and Profit Maximization (example: Product Marketing Mix and Advertising Media Planning). It can also be used in Transporation Logistics where goods are moved from one warehouse to another. Extremely easy-to-use with Sample Examples to get you started and an exhaustive on-line help

Mac Emulator
PATH: \ENGINEER\EXB1DSK1
Mac Emulator packaged for floppy install

MapDraw v2.7
PATH: \ENGINEER\MAPDRW
MapDraw v2.7 Deed Plotting System. N-S axis or Azimuth. Easy-to-use deed plotting system Draws maps based on metes and bounds descriptions. Instant online display while data is entered. Curves, gap, acreage perimeter, closure, scaling, multiple lots balancing of gap, zoom, conversions, etc High quality printing on aWindows-compatible printer. Feet and metric measurements

MARNAV
PATH: \ENGINEER\MARNAV
MARNAV.EXE V4.5 <ASP><ASAD>- A program to convert LAT/LON (GPS) to LORAN delays and vice versa. The program also calculates head ing and distance from point A to point B with the locations specified in either GPS or LORAN coordinates. Time/Speed/Distance calcu lations are performed with optional hard copy for all functions. Editor allows entry of new LORAN Chains. C & E Associates, 119 Placid Drive, Fort Myers, FL, 33919-6104 Reg $35.00

MASSCALC
PATH: \ENGINEER\MACA-110
MASSCALC is a highly interfacible calculator which does not waste time with flashy screens to get the job done. This calculator solves simple math, derivatives, integrals, roots of equations, trigonometry, and more. MASSCALC is shareware, written by Ralph W. Reid

Master Carpenter
PATH: \ENGINEER\MASTCARP
Master Carpenter - Calculate carpentry angles and distance

MASTER CONVERTER
PATH: \ENGINEER\MSTR16
Master Converter is a powerful Microsoft Windows utility that can quickly and easily convert to and from 425 different units in 23 categories. The categories include: length, area, volume, dry volume, time, speed, mass density, force, pressure, energy, power, flow, dynamic viscosity, kinematic viscosity, temperature, conductivity, thermal conductivity, angle, light numbers, fractions, and computer

MASTER-GRAPH
PATH: \ENGINEER\MGVGA443
MASTER-GRAPH (tm) is a very easy to use 2d graph plotting program It offers high-school pupils and college/university students a very flexible way to analyse different graphs for various purposes Its main features and advantages over other similar programs are Public Domain - No fee required Minimal disk space required (about 60kb for version 4.42 Very easy-to-use interface with extensive mouse support On-Line help screens Special version that takes advantage of a co-processor or an 80486 Fast and Reliable Plotted graphs can be printed to a standard Epson dot printer Numerous built-in functions (including Hyperbolic, Sinc, etc DESQview aware program - runs smoothly under Quarterdeck DESQview Runs under Microsoft Windows and IBM OS/2 Updated quite frequently for more options and bug fixes The latest version can be easily downloaded via anonymous ftp from Simtel (and all its mirrors garbo.uwasa.fi

MatCalc 1.3
PATH: \ENGINEER\MATCAL13
MatCalc 1.3 - Matrix Calculator Performs matrix operations quickly and easily. It has menu driven routines for finding inverses, determinants, matrix multiplication and addition and a number of other operations. It allows the user to save matrices in either binary or text formats, making it easy to import/export to spreadsheet programs. Free for educational use

Math Formulas
PATH: \ENGINEER\MTHFOR
Math Formulas

Mathbook+ for Windows
PATH: \ENGINEER\MHBOOK
Mathbook+ for Windows, Version 2.6 INTEGRAL CALCULUS-Computes definite integral from known functions and data ADVANCED ALGEBRA-Progressions,Binomials Permutations,Linear Equations,more GEOMETRY/TRIG-Areas of plane and solid figures,volume,irregular polygons,more RANDOM NUMBERS-Generates random number tables between any two bounds CONVERSIONS. GRAPH BUILDER. CALCULATOR

Mathematical expressions calculator
PATH: \ENGINEER\MATHFC24
Mathematical expressions calculator

MathLab 95
PATH: \ENGINEER\MATHLB

MathLab 95 is a powerfull program that allows you to draw any function in plane and in space. You can also use it to draw L-Systems (also in plane and in space)...

MATHMATE FOR WINDOWS 1.1
PATH: \ENGINEER\MMWIN
MATHMATE FOR WINDOWS 1.1. - A powerful scientific calculator. Performs evaluation and integration of expressions, sums up series, solves equations. Supports all the elementary functions and 25 special functions plus 15 mathematical and physical constants. Exports results to Clipboard maintains a protocol of calculations Alex Russakovskii, $25

Mathomatic V7.2
PATH: \ENGINEER\SYMBOL72
Mathomatic V7.2: Symbolic math program This program can automatically solve, simplify, combine, and graph algebraic equations, etc. Does calculus operations, too. Runs under MS-DOS or Windows

Mathomatic V7.6
PATH: \ENGINEER\SYMBOL
Mathomatic V7.6: Symbolic math program This program can automatically solve, simplify, combine, and graph algebraic equations, etc. Does calculus operations, too. Runs under MS-DOS or Windows

MathPad
PATH: \ENGINEER\MATHPD
MathPad is a tool for solving and storing mathematical equations in standard algebraic syntax. It works just like the standard MemoPad app except that if you write down an equation and tap the Solve button, it computes the answer and fills it in for you. These equations can be simple math expressions like "2+2=", or algebraic expressions using variables such as "sqrt(x+4) / acos(0.7) = y**3". MathPad provides operators for exponentiation, bitwise AND, OR, NOT, and XOR, bit shifts integer or modulo division, comparisons, and Boolean logic. Functions for trigonometry (including inverse and hyperbolics), logarithms, and date manipulation are also provided, with more to follow

MATHPLOT v3.7
PATH: \ENGINEER\MATHPL37
MATHPLOT v3.7 <ASP> - Mathematical function plotting program. Mathplot allows you to enter math functions using ordinary algebraic notation and immediately plot them Cartesian, polar, and parametric functions are supported. Presentation quality plots are produced on the screen or LaserJet printer Excellent program for anyone who needs to quickly visualize math functions. Requires 512KB, CGA, EGA, or VGA

MathWiz v2.4
PATH: \ENGINEER\MATHWZ
MathWiz v2.4 <ASP Versatile, easy-to-use financial analyser and calculator. PV, FV, IRR, PMT, periods payback, interest functions. Spreadsheet-style input of irregular cash flow. Save, print multi-term amortization tables. Calendar date calculations, trigonometry. Paper tape roll-back, cut & paste. Excellent all-purpose analyser and calculator. Req. VBRUN300.DLL

MathWiz v4.0
PATH: \ENGINEER\MTHW32
MathWiz v4.0

ME10 _VERSION_
PATH: \ENGINEER\MECHEN
CoCreate/Mechanical Engineering

meaSure
PATH: \ENGINEER\MESURE
Allow you to convert a number between 120 different measures, grouped in 12 categories. Wery easy to use, let you paste and copy to/from the clipboard

Measurement Conversions for Win95/NT4
PATH: \ENGINEER\VULCON
Measurement Conversions for Win95/NT4 with 15 categories and over 270 different measurements. Save chart as bitmap file or set chart as Windows wallpaper. Highly configurable. Shareware by VulcanSoft US$19.95
http://www.vulcansoft.com

MEASURES
PATH: \ENGINEER\MEAS-100
MEASURES allows fast accurate conversions between measurements. Several ASCII conversion files are included for mass volume, length, velocity, cooking measurements, and more. Users may also define their own conversion tables as needed. Shareware written by Ralph W Reid

MEGA UNIT (MU) v3.3
PATH: \ENGINEER\MUDEMO
MEGA UNIT is designed to grow and is much more that a conversion program. You may add you own notes, special conversions, additional equations or graphs and diagrams. Converted values can be copied to the Clipboard and re-inserted virtually anywhere in MU or copied elsewhere into other Windows based programs. MU is a learning and reference tool which can be expanded to accommodate users of any level- from beginning science students, to business men who need to learn the metric system to professional engineers and scientists

Merlyn
PATH: \ENGINEER\MERL32
Merlyn is designed to create, edit and manipulate equations. With its powerful editor, you can manipulate equations by highlighting and picking a command. You can simplify, combine and move terms, all with a keystroke. Merlyn includes rules for algebra trig, calculus and units conversion tools for the physical sciences, but can be extended Educators will find Merlyn a great tool for creating classroom materials

Meter-Yard Converter Version 1.0
PATH: \ENGINEER\METRYRDC
Meter-Yard Converter is a software to convert from one measuring unit to another(from Meter to Yard, for example). It has a tabbed dialog user interface which is quick and easy to use. You can add and customize

categories(such as length or area) as well as their units(such as meter or acre). This shareware version of Meter-Yard Converter is a fully functional program

METPAD`S CONVERSIONS v1.2
PATH: \ENGINEER\MPAD32
METPAD`S CONVERSIONS v1.2, 32-bit: With this program you can convert metric measurement units to and from English/American measurement units. MetPad`s Conversions also allows you to work with Weight, Length, Liquid, Temperature, Time, Velocity, Volume, Pressure, Force, Mass Density, Power, Angle, Energy and Area measurements. Also included are Heat Index, Wind Chill, Dew Point Factors, calculator and note pad. There are more than 6,500 conversion possibilities with MetPad`s Conversion in a convient popup menu interface

Metric Conversion 2.0 for Windows 95
PATH: \ENGINEER\METCN
Metric Conversion 2.0 for Windows 95 Perform many Metric & English conversions with this graphical easy to use interface

Metricon 2.0
PATH: \ENGINEER\METRIC
Windows unit converter handles 332 units in 41 general and scientific categories, including currency and temperature. Metricon features updateable exchange rates, a calculator, an easy drag-and-drop mode a clipboard utility for exchange of data with a spreadsheet or other Windows application, and more. Beats similar products by a country mile Metricon can help you and your enterprise make the switch to the metric system, which the U. S. Congress has mandated by recent legislation Ease of use is favored by organizing units logically in subjects and categories, with appropriate cross-references

MicroFast Z80 Emulation Engine
PATH: \ENGINEER\MYZ80111
MYZ80 is a Z80/64180 emulator package. It was written to allow you to finally get rid of those old Z80 computers which have done so many fine years of service. The new 80486, 80386 & 80286 machines with the fast hard drives and the snazzy OS/2 operating systems are such a delight... but for many, the Z80 machines still have to be fired up from to time in order to develop code for CP/M and the Z80 chip. Well, not any more, thanks to MYZ80 Other emulators on the market are less than satisfactory solutions. Of the small number which can actually run without causing system errors under the later versions of DOS, apparently none is capable of running real CP/M. Instead they use an emulated version of CP/M which is only as accurate as the developers have bothered to make it None can run CP/M 3.0, and none can run ZCPR (which is such a useful Z80 developer`s environment). Add to that their less than perfect Z80 emulation and slow overall performance, and until MYZ80, the `real` Z80 machines were destined to remain in the office MYZ80 provides the solution being conceived, born and nurtured to the point where it is now the most useful Z80 emulator package ever

Minim
PATH: \ENGINEER\MINIM

Boolean Expression Minimization Utility

Misc. Physics programs
PATH: \ENGINEER\PHYS
Misc. Physics programs to help students with physics calculations

MoneyTime v2.1 for Windows 95
PATH: \ENGINEER\MNYTIM
MoneyTime v2.1 for Windows 95 Versatile financial calculator for loans investments and amortization schedules Can solve for present value, future value payment/deposit, periods and interest rate Simply enter the known values and click the unknown for the solution. Includes a user guide with several examples

Motor Vehicle Simulation V1.0
PATH: \ENGINEER\MTRSIM10
MVS is designed to simulate the performance of a vehicle given various statistics about weight, power and the like. Once statistics are entered, modifications can be simulated on the computer, hopefully reducing the number of actual performance runs needed This program provides quite good estimates of top speed. However quarter mile and 0-100 (or 0-60) times are not quite as accurate

Motorola MC68HC11/LCD software simulator for DOS/IASM11 version 0.9
PATH: \ENGINEER\SIM11_09
Motorola MC68HC11/LCD software simulator for DOS/IASM11 version 0.9

MR.MACHINIST V2.00A
PATH: \ENGINEER\MRM
MR.MACHINIST V2.00A Easy-to-use menu driven math/eng program designed to solve geometry and trig. problems that machinist and industrial engineers encounter. G-code creation of Bolt Circles, feeds/speeds scientific/mouse calculator, edit multiple files up to 65K, large F1 help file, sequence/un-sequence CNC files Voice/BBS Support; From F1 Computing

MtrxCalc
PATH: \ENGINEER\MTRX32
MtrxCalc A Windows95 interface to Matrix Algebra, now imports/exports text files and allows 320x8 to 80x32 matrices, includes a parser/evaluator for matrix expressions and buttons for solving, factoring, finding eigenvalues and eigenvectors, extracting rows and columns, elementary row operations complex or real display, norm, determinant inverse, conjugate transpose, condition number. elementary stat functions & more

MULTI-CONVERSIONS 1.2
PATH: \ENGINEER\MLCONV
MULTI-CONVERSIONS 1.2 by J.A. Marrero The ultimate conversion utility. Will do multiple conversions all at once. Converts length, area, volume, weight, time and more. Additional conversions available with the registered version including roman numerals, power, energy computer base numbers, frequency, xrays, plane angles, electronics conversions acceleration, pressure, etc. Create or edit your own conversion table Plus, comes with a built in calculator A must download

MultiCAD
PATH: \ENGINEER\MULCAD
MultiCAD

Multifamily 1.0
PATH: \ENGINEER\MULTIF
Electrical Design Software designed Multifamily 1.0 to be a user friendly program that produces professional customized General and Optional Method reports for the demand calculation when sizing electrical services for multifamily dwellings

Multifunc. dimensional & conversion calculator
PATH: \ENGINEER\C_MSTR40
Multifunc. dimensional & conversion calculator

MUNICON
PATH: \ENGINEER\MNICON
Multi-Unit Converter v5.19

NACA AIRFOILS
PATH: \ENGINEER\NACA
NACA AIRFOILS - displays and prints any* NACA 4- or 5- digit airfoil to scale on dot matrix printers. Also creates files for ModelCAD and Foiled Again!! and displays airfoil libraries

Nbody3D Gravitational Simulator
PATH: \ENGINEER\NBODY
Nbody3D Gravitational Simulator version 2.0.013 written by Henley Quadling, 20th May, 1996 This is a very early beta release, with many bugs (sorry This software is freeware; you may distribute it freely as long as you distribute it free and unmodified This software requires at least Windows NT 3.51, Intel or Alpha. This software also runs in Windows 95 with the appropriate Opengl dll`s. It doesn`t seem to work so well with the NT 4.0 beta 1 (build 1234 Features 1. OpenGL 3D animation.... A future release will have much improved openGL functionality, and more control over the rendering 2. Multiple threads. This software has 6 threads. The Calculation and rendering are executed on seperate synchronized threads, which should allow for very efficient execution on SMP machines. I do not have access to a SMP machine, so please tell me if there is a problem 3. Windows 95 common controls, Drag and drop support toolbars, tooltips etc 4. Completely written in C, for compact and fast code

Newt for Windows
PATH: \ENGINEER\NEWT25
Newt is a newtonian telescope CAD (computer aided design) program. It ray traces a telescope checking for vignetting, optimizes diagonal size calculates baffles, and a lot more

NLREG v4.0
PATH: \ENGINEER\NONLIN
NLREG v4.0 <ASP> Windows 95/NT - Linear and nonlinear regression statistics. NLREG determines the values of parameters for an equation,

whose form you specify using ordinary algebraic notation, that cause the equation to best fit a set of data values Handles linear, multivariate, polynomial, and general nonlinear equations. Also plots data and equation. NLREG is the best shareware regression program available

Nominal Pipe Size
PATH: \ENGINEER\PIPEW22A
NPS - Nominal Pipe Size, version 2.2 for MS Windows 3.x Database of dimensional, weight, flow design data for more than 5700 sizes of pipe and tube in over 35 materials inc metals, plastics and composites. A must for all piping engineers and students ASP shareware from Herne Data Systems Ltd

Number base conversions
PATH: \ENGINEER\TSBITS18
Number base conversions, bit and other calculations from Prof. Timo Salmi of the University of Vaasa, Finland. Contains the programs bintodec, bitwise, comdiv convbase, dectobin, dectohex, factors and hextodec

NVFoi
PATH: \ENGINEER\NVFOIL
Aerodynamic 2-D problem solver

OmniCon
PATH: \ENGINEER\OMNICN
OmniCon 96 is a Windows based application that has been written using Microsoft Visual Basic 4.0. OmniCon 96 is designed to perform conversions between various units within various physical quantities. For example, if you wanted to know how many feet there were in a metre, or how many ounces there were in a litre, then OmniCon 96 would be THE tool to use OmniCon is also the most powerful unit converter available. It gives you the capability to add your own units to any of the quantities available, so that you are never "tied down" by the program. Its accuracy is unsurpassed, as it its quality! But stop reading this and USE IT! Here's how

Oriana for Windows
PATH: \ENGINEER\ORIANA
Oriana for Windows ver. 1.0 - easy to use program to calculate the special statistics required for circular data. Calculates circular mean, length of mean vector circular standard deviation and standard error, confidence limits, Rayleigh`s test Watson`s F-test and Chi-squared tests Graphs include raw data plots, rose diagrams circular & linear histograms and uniformity plots. STAR member

Panel 4.0 for Windows
PATH: \ENGINEER\PANEL
Panel 4.0 for Windows <ASP> Create & print custom circuit directories that will insert into the cover or display area of any circuit breaker panel, switchboard, motor control center or any electrical distribution system Increase safety, efficiency & professionalism with neat & organized circuit directories. A complete database system that will store the circuit directory & panel information as one record

PC-DRAGON
PATH: \ENGINEER\PCD202A
Dragon32/64/Tandy CoCo II Emulator & Debugger V2.02

PC-DRAGON Source Code & Postscript Reference Manual V2.02
PATH: \ENGINEER\PCD202B
PC-DRAGON Source Code & Postscript Reference Manual V2.02

PC-ECAP v3.01
PATH: \ENGINEER\PCECAP
PC-ECAP v3.01 <ASP> - AC circuit analysis Calculates magnitude, phase, group delay impedance, VSWR, and return loss. Now also calculates TRANSIENT response with one of 8 waveforms as input. Handles circuits with up to 90 nodes and 1000 components. Completely menu driven, very easy to use. Many features High res plots on screen or 9/24 pin printer or HP LaserJet/DeskJet. All video adapters supported. Shareware $89

PCVIC
PATH: \ENGINEER\PCVIC110
PCVIC - Vic-20 emulator for IBM compatibles

Periodic Table 3.54
PATH: \ENGINEER\PT35416
Periodic Table 3.54 - 112 Elements 890 isotopes. 500+ radioisotopes with decay trees. Quiz mode. Calculate molecular weights. Compare bond properties. List properties in sorted lists. Graph the properties. Print table, data and decays Supports clipboard. Has over 30 data items on each element, including abundance, melt/boil point, electronegativity, oxydation states and more

Personal Harmonograph Simulator V1.5
PATH: \ENGINEER\PHS15
Personal Harmonograph Simulator V1.5 creates pretty circular patterns on your computer screen that you can control. Requires mouse and EGA/VGA Runs under DOS or Windows

PHYSICS DEMOS FROM THE WOODROW WILSON PHYSICS INSTITUTE
PATH: \ENGINEER\WWDEM
PHYSICS DEMOS FROM THE WOODROW WILSON PHYSICS INSTITUTE

Pilot Log
PATH: \ENGINEER\FLYLOG1
Pilot Log is a sophisticated database program allowing easy recording and analysis of flying hours for private and other pilots. This program is abstracted from the more extensive Pilot Workbench multi-function aviation calculator and hours log

Piper
PATH: \ENGINEER\PIPER10
Piper generates HP-GL/2 instructions for plotting chemical water data on a Piper diagram. HP-GL/2 is the new standardized version of the Hewlett-Packard Graphics Language. It is available, for example, with HP`s series of LaserJet III printers and DraftMaster plotters The program exploits an important feature of this graphics language, namely that the plot size

can be made strictly dependent on the output media size. The same plotting commands can be directed to an HP LaserJet III with letter-size paper or to an HP DraftMaster SX+ with paper of any acceptable size mounted. The resulting Piper diagram will be automatically adjusted to fit up to the hard-clip limits of the media, and accordingly, be expanded or contracted Piper also reports the charge-balance errors. It computes the results in epm or epL units depending on the units used to define the input mass concentrations. Water analyses exceeding a user-specified error tolerance on the electroneutrality condition will be excluded from the plot The charge-balance report can be directed to a printer or redirected to a file for later viewing. Similarly, the HP-GL/2 commands can be directed to a compatible plotter or printer They can also be redirected to a file for importing, for example into a print/plot-utility or drawing program Each data point can have a symbol and a color/pen associated with it. There are eight possible pen selections and eight symbols to chose from. A point can be further identified with a user-supplied label. The amount of total dissolved solids (TDS for each data point is represented by the area of a circle centered on the point. The TDS representation for any given point can be suppressed by defining its symbol-code as a negative value The user can specify a title of up to thirty characters. A legend describing the number of data points plotted with a specified symbol and pen code can be optionally selected. If there is enough room, it can be replaced or augmented with a listing of the amount of total dissolved solids for each data point. The resolution of the grid system can be selected from six possibilities or omitted entirely

Piping installation costs (Lotus WK4)
PATH: \ENGINEER\PIPINGA1
Estimate piping installation costs (Lotus WK4

PiW
PATH: \ENGINEER\PIW
Compute Pi to a million or so decimal places in Windows

Plaise
PATH: \ENGINEER\PLAIS110
Plaise is a calculator, not unlike the simple calculator one is used to, and indeed it can be easily used as a fancy decimal calculator capable of doing sums, multiplications, square roots and the likes. Its distinction, however lies in its ability to work in other bases (a.k.a. number systems) than the everyday decimal system For those unfamiliar with the term, different bases or number systems differ in the number of digits used to represent numbers. The decimal system (base 10) uses, surprisingly, 10 digits (0 through 9). Similarly, base 2 uses 2 digits, 0 and 1, base 19 uses 19 digits (0 - 9 and A - I), &c. As you have noticed, bases larger than 10 use letters as digits, following the order of the alphabet. This is the reason Plaise is restricted to bases up to 36, which uses all the digits (0-9) and letters (A-Z) available Some bases are regularly used within restricted avenues of life, e.g. bases 2 and 16 are widely used in computer science, base 18 is often used in golf base 7 in mining, and base 31 in North Sea whaling. Others have more widespread uses; an observant reader will readily discern the obvious relevance of the next equation to everyday life JAMES.II in base 29) / (John.Doe in

base 26) = (54.0346113006 in base 7 Furthermore, with the advent of multi-base calculators such as this program relatively unknown bases (base 34 comes to mind) may attain worldwide fame (or not For those narrow-minded enough to lack applications for a multi-base calculator, myself to name but one, it may serve as just a regular, yet very accurate, calculator

Plot/calculate functions
PATH: \ENGINEER\TSFUNC15
Programs to Plot/calculate functions by Prof. Timo Salmi of the University of Vaasa, Finland. Contains FN Calculator (evaluates functions FNP Plots any function FNT Tabulates user`s function

PlotData 1.3
PATH: \ENGINEER\PLOTD13A
A Plotter with Analysing Data

PLOTTER v8.1
PATH: \ENGINEER\PLOTR81
PLOTTER v8.1 - A data plotting and analysis program for MS-DOS computers (ideal for researchers in all disciplines). Uses ASCII data files. Includes a Full Screen Data Editor, Least Squares Curve Fitting, Fast Fourier Transforms and Digital Filtering Plot screens can be sent to a printer, or saved to disk in PCX format. Requires CGA EGA or VGA monitor. Mouse support included On-line instructions. Shareware. $25 US

PneuCalc
PATH: \ENGINEER\PNUCLC
PneuCalc

PNEUCALC PRO v2.0
PATH: \ENGINEER\PNUPRO20
"PNEUCALC PRO v2.0 PneuCalc Pro is a versatile tool which helps you properly size pneumatic components PneuCalc Pro`s ""Scratch Pad"" is a mini text editor for notes, printing and copying Metric conversions for pneumatic related variables are included. Calculates force bore size, Cv and CFM Shareware (30 day or 30 use trial Registration Fee: $35.00 US"

Polygonn 2.0
PATH: \ENGINEER\PLYGON
Polygonn is a Windows utility that 1) Finds the sides and angles of triangles 2) Displays regular polygons up to 200 sides 3) Finds any pythagorean triple With a simple interface and powerful features this program is a must have for anyone working regularly with triangles and polygons

PostScript prolog for a2ps ascii to PostScript program
PATH: \ENGINEER\FPLOT06A
PostScript prolog for a2ps ascii to PostScript program

POWER FACTOR CORRECTION PROGRAM V1.1
PATH: \ENGINEER\PWRFAC
Power factor correction is usually accomplished by placing a shunt capacitance across the load terminals (parallel with the load). Most

power circuits are inductive, so capacitors are usually used This program calculates the value of the capacitance and the VA rating of the capacitor needed to correct the power factor to a desired value. The frequency, load voltage, apparent power (VA average power (W) must be known in advance. You must also enter the power factor that is desired This program was developed to run with Windows 3.1. It may run under Windows 95, but it has not been tested

PowerCalc 2.0
PATH: \ENGINEER\PCLC
PowerCalc 2.0 is a powerful calculator for Windows that features RPN logic, a macro language, and an extensive library of mathematical functions. PowerCalc was designed to meet the needs of engineers technicians and students who use calculators on a regular basis. It offers you more calculating power than you get with the calculator that comes with Windows

PrimePro v5.0
PATH: \ENGINEER\PRMPRO
Prime Number Generator thru 15 digits Prime Number: Those divisible evenly only by 1 and themself

PrintGL 1.28
PATH: \ENGINEER\PRTGL128
pen plotter emulator for IBM/DOS systems

PRO-BELT v4.0P
PATH: \ENGINEER\BELT4LIT
PRO-BELT Version 4.0 includes four (4) programs HEAD - Normal head pulley drive belt conveyor design TAIL - Tail pulley drive belt conveyor design PULLEY - Shaft deflection, and bending and torsional stress analysis FEEDER - Idler bed or slider bed belt feeder design

Process Control Simulator v1.05
PATH: \ENGINEER\PCON105
This software will be of interest to Process Control and Instrumentation Engineers, Instrumentation Technologists, Instrument Mechanics, and those studying to become such The software simulates various types of industrial processes Flow Control NSR Level Control SR Level Control Liquid Pressure Control Gas Pressure Control Boiler Water Level Control Temperature Control Dead Time Control It uses P only, PI, PID, PD, or On/Off control modes. You select the process type, the controller type, enter tuning parameters and run the process. The controller operates in manual and automatic modes. A trend graphic of the Setpoint, Controller Output, Process Variable, and Load is produced Ramp and step changes may be made to the setpoint or controller output. The ramp rate and step change values may be set by the user. Measurement noise and/or process load drift may be toggled on/off allowing the user to see the effects of each The trend graphic may be printed. Many other features are included. It must be run to appreciate its capabilities The help file contains information about process types, tuning parameters, controller modes, valve characteristics, etc. A useful study tool for instrumentation students by itself

ProKalc v6.2
PATH: \ENGINEER\PROKAL
ProKalc v6.2 Windows 95/NT scientific/financial calculator. Scrolling tape calculator featuring scientific and financial capabilities. Full 15 digit accuracy with no rounding errors. Integrated help on all funcions. Results of all calculations can be saved to clip board, file, or printer. 10 memory locations/saved between sessions Shareware. Registration: $15.00

ProKon v7.8
PATH: \ENGINEER\PROKON
ProKon v7.8 Windows 95/NT Unit Conversion Utility 350,000+ unit conversions possible Features help throughout. Converts imperial to metric, metric to imperial etc. Features printing, calculator save to file. Very easy to use Includes over 600 material densities periodic table, geometry, constants etc. ShareWare. Registration: $14.95

Q Calculator
PATH: \ENGINEER\DOSCAL
Q is a Command Line Calculator for DOS which can do many things including perform calculations change numbers from any base to any other perform bitwise operations, perform logical operations, algebraic substitution, solve equations with one unknown, generate random numbers perform statistics, solve trigonometric functions draw graphs and more features

Q387 V3.5 Math Accelerator and Emulator
PATH: \ENGINEER\Q387_35
Q387 V3.5 Math Accelerator and Emulator Run all AutoCADs with a coprocessor Up to 400% faster graphics, CAD, etc Requires a 386SX+, 1.5 Mb RAM+, and DOS 5 or 6. This is a 20 minute demo, with a quick and inexpensive upgrade available

Qnet 97 for Windows
PATH: \ENGINEER\QNETW
Qnet is the complete solution for Neural Network modeling. It is designed for both MS Windows 95 and NT. This is a fully functional trial version that allows users to become familiar with both Qnet and the principals of neural network modeling Example neural network models are included for science, investing pattern recognition and more. Details on obtaining the retail version of Qnet along with Qnet`s other exciting utilities are available in the download. INVESTORS and TRADERS, professionals in SCIENCE, ENGINEERING, MARKETING, MANUFACTURING, MEDICAL DIAGNOSTICS, ... can benefit by employing neural networks to automate problem solving and decision making tasks

QPW5AT.DLL
PATH: \ENGINEER\QPW5AT
QPW5AT.DLL provides a variety of special mathematical add-in @functions for Quattro Pro for Windows, version 5.0, which complement and, in some instances, improve on the extensive list of functions in that program These functions take advantage of improvements in Quattro Pro for Windows Developers Toolkit, Version 5.0--notably addition of the prototype argument INTERNAL that allows invoking a function without prefixing the DLL name to the function name and provides help on the status line when

entering function arguments. Thus add-in @functions now work just like the built-in ones (see Usage, below

Quadratic Solver for Windows 95
PATH: \ENGINEER\QUADSV
Quadratic Solver is a simple Windows 95 utility that solves quadratic equations. All you do is input the information and click a button, and the answer appears. Included is the ability to copy the answer to the clipboard for easy access by other apps

QuickField
PATH: \ENGINEER\QFLD40
FEA for engineers on Win95/NT

QuikGrid
PATH: \ENGINEER\QGRID
v3.3) QuikGrid Windows 3.1 program which will read a set of scattered data points (x, y, z which represents a surface. The program will generate a grid from this data and then, using that grid, display the surface as a contour map, or as a grid with hidden lines removed. The grid may be output as a series of XYZ triplets or in the ER Mapper raster format

QuikTag
PATH: \ENGINEER\QUICKTAG
QuikTag allows you to create a database for your references, compounds and schemes. These records may be inserted as `tags` into a document(s). The details of these tags may be viewed by Tag Viewer from within your word processor. These `tags` may be sequenced so that they are in the correct order. Also, a pre-formatted bibliography may be created for all your refereneces, etc. This software was written by a scientist to assist in the compilation of his Ph.D thesis. If you are a scientific report writer, then you will quickly come to realise how invaluable a tool this program is

Qwik Convert32
PATH: \ENGINEER\QWCT32
Qwik Convert32 was designed to be a quick and easy to use unit conversion program for Windows95 and NT. It was intended to be used as a tool that is quick to get in and out of while using another Windows application. For example, if you were using a number in an Excel spreadsheet and wanted to convert it to another unit, you could copy the number to the clipboard, use the Task Manager to access Qwik Convert and paste the number into the `I have:` box. After choosing the appropriate units the number is converted, and can be pasted back into the Excel spreadsheet from the clipboard

R-TEK SCRATCHPAD
PATH: \ENGINEER\RTEKSP
R-TEK SCRATCHPAD (Windows Shareware) v1.02 Self-documenting, programmable, printing graphing, scientific scratchpad calculator Math expressions are formatted much like you would write them on a sheet of paper Handles fractions,mixed numbers,exact math,trig,linear

algebra,linear programming finance,statistics. Perfect for students 22 Shareware - See ORDERFRM.WRI Requires Win 3.1,386,4Mb RAM,4Mb HD,mouse

RADIOSIM v3.0
PATH: \ENGINEER\RADSIM
RADIOSIM v3.0 <ASP> - Simulation of a radio electric link (satellite link, terrestrial radiolink, mobile radio, etc.) in presence of noise, linear and non-linear distorsion, and interferers. Most digital and analog modulations are supported. On-line contextual documentation and Help. From BREMENSON, Inc 1800.00 Master/Visa card

Random Sampler v1.52
PATH: \ENGINEER\RS152
Random Sampler v1.52 <ASP> Conducts Monte Carlo analyses on continuous data broken down by a categorical variable. Includes routines for data sampling, descriptive statistics correlation and regression. Two types of Monte Carlo analyses are included: Salience Analysis and Effect Size Analysis Accomodates dBase, Paradox and text files and includes data editing capabilities

Reglo
PATH: \ENGINEER\REGLO
Reglo - serves as a ruler to measure things on your computer desktop. You can measure in horizontal or vertical orientations using pixels, points twips, metric units, English units, or dialog units. It also allows you to resize other applications Description Copyright 1997 PsL

Retaining Wall
PATH: \ENGINEER\RWNPK
"The Archon ""Retaining / Flood wall"" program is designed to be a desktop engineering aid The program is designed to analyze earth or water retaining walls. The program supports a trial and error effort by the Engineer to design the retaining walls or provides direct information for analyzing an existing design"

RGB Log
PATH: \ENGINEER\RGBLOG
A LOW COST, HIGH SPEED, 16 CHANNEL LOGIC ANALYZER

ROMANUM
PATH: \ENGINEER\ROMAN
Enter Arabic numbers to convert to Roman numerals Enter Roman numerals to converte to Arabic numbers Do not enter commas Printing is set for an Epson compatable dot matrix printer

RPN 377
PATH: \ENGINEER\RPN377
RPN Calculator

RPN CALC VERSION 1.1
PATH: \ENGINEER\RPNCAL
RPN CALC VERSION 1.1 - A Reverse Polish Notation (RPN) calculator for Windows 95 and Windows NT 3.51 or later. It has the look and feel of an

HP calculator and almost all of the same numerical functions. If you`re used to RPN, you`ll love RPN Calc Shareware. Registration is only $15

RPN SciCalc 2000 Complex
PATH: \ENGINEER\RPNSCICL
RPN SciCalc 2000 Complex V1.3 - Reverse Polish Notation (HP style) Engineering and Scientific Calculator with Complex Numbers

RunPager XS
PATH: \ENGINEER\RPXSV109
RunPager XS is an MS Windows based external event supervisor that senses switch closure actions through an Allen-Tel serial port connector or input from a sequential file to set an alarm condition The system was designed to monitor commercial and industrial equipment or an executing job stream and alert personnel of the alarm event via numerical pager and/or audio How the system works... When a switch is tripped or input from a sequential file signals an alarm condition the system notifies you of the event by placing a call to your pager service and supplying a code representative of what is occuring. In addition, output levels may be raised, or reset, to drive solid state relay devices, alarms may be sounded through your audio board and an external application may be launched as well

S48
PATH: \ENGINEER\S48V13
S48 emulates Intel 4048-4050 microcon trollers. Full screen display of regis ters, flags and memory, instruction dis assembly, prospective execution window breakpoints. Free

Schaeffler diagram
PATH: \ENGINEER\SCHAEF01
Schaeffler diagram (for high alloyed steel

SHAPES ver 1.0
PATH: \ENGINEER\SHAPE
SHAPES ver 1.0 -- Powerful yet easy to use Section Properties program from MylesHi Software. Provides an interactive GUI environment for designing and analyzing cross sections. Ideal for structural and mechanical engineers 25.00 Registration (US Funds Requires 640k ram, VGA, 286 or higher and a mouse Check it out

Shopcost v2.1 for DOS
PATH: \ENGINEER\SHPCST21
Shopcost v2.1 for DOS Based on a mathematical model to help determine the horsepower requirements for machine tools Computes the min/max feedrate in turning or milling operations. Shows machine capacity with 3D bar graphs. Gives metal removal rates in cubic inches per minute, and compares the time needed to machine a part by using the range of machine capacity. Calculates the weight, volume and price of raw materials in metric or english

SICon v7.7
PATH: \ENGINEER\SICON

SICon v7.7 Windows Unit Conversion Utility. 350,000 unit conversions possible. Features help throughout. Converts imperial to metric metric to imperial, etc. Features print ing, calculator, save to file. Very easy to use. Includes over 600 material densities, periodic table, geometry constants, etc. ShareWare Registration: $16.50

SIM2MVSP v1.0
PATH: \ENGINEER\SM2MVS
SIM2MVSP v1.0 <ASP> - Add-in program to integrate MVSP into SIMSTAT allowing one to perform principal components analysis PCA), principal coordinates analysis (PCO correspondence analysis (CA), distance or similarity measures, hierarchical cluster analysis, and diversity indices. Mouse support, context sensitive help, Requires SIMSTAT 3.5 and MVSP 2.2

SIM2NL v2.0
PATH: \ENGINEER\SM2NL
SIM2NL v2.0 <ASP> - Add-in program to integrate NONLIN 3.0, a powerful nonlinear multiple regression program into SIMSTAT an easy and powerful statistical package Mouse support, context sensitive help Requires Simstat 3.5 and Nonlin 3.0

SIM68
PATH: \ENGINEER\SIM6822C
Welcome to the seventh release of SIM68, the Motorola MC68HC11 simulator designed to allow the product engineer and programmer to run and debug 68HC11 .S19 object code on a IBM PC, or equivalent SIM68 allows you to load and actually watch your object code run in a manner similar to the format of the BUFFALO monitor, but with a full screen display on an IBM compatible PC Below is a list of some of the SIM68 programming features Set and alter program breakpoints Enable a full time display of memory location contents during program execution (single bytes Enable the display of 32 bytes of contiguous memory, ie useful for examining buffers and caches (new feature A CPU cycle stop watch which allows you to perform actual CPU cycle timing of program loops A memory mapping feature displaying the actual block of memory that code has been loaded into A feature that allows the modification of register and memory location contents Full support of all 68HC11 Op Codes, for a non-test mode system The ability to run a user defined assembler and editor from within SIM68 The ability to simulate all of the MC68HC11 interrupts at any point during program`s execution Full EEPROM emulation Full timer support

SimStat for Windows
PATH: \ENGINEER\SIMSTW
SimStat for Windows

SIMSTAT v3.5d
PATH: \ENGINEER\SIMST
SIMSTAT v3.5d <ASP> - Easy & powerful statistics and simulation analysis program with mouse support, pulldown menu, context sensitive help. Reads Lotus, dBase, ASCII SPSS files. Provides descriptive, frequency crosstab, breakdown, t-test, GLM anova/ancova mult. responses, linear, nonlinear & multiple regression, time-series, nonparametric bootstrap simulation analysis. Hi-resolution graphs, weighting, missing values, etc

Sinclair Spectrum 48k Z80-based Emulator
PATH: \ENGINEER\JPP_B4
This program emulates a Sinclair Spectrum 48k Z80-based computer on any PC with at least an 80386SX processor and VGA graphics The following Spectrum features are implemented Graphics, nearly perfectly. The border is implemented, but flashing and special effects don`t work The keyboard, nearly perfectly Kempston joystick, if you have a PC joystick. Both buttons on the PC joystick press the single Kempston button Sound, but you might not want it. Since the emulator doesn`t run at the same speed as a real Spectrum the pitch is most often wrong. (Well, one version does, if it works Not the tape interface, yet

Sinclair ZX Spectrum Emulator `Z80` v3.05
PATH: \ENGINEER\Z80-305
Sinclair ZX Spectrum Emulator `Z80` v3.05 - 11/11/96 - by G.A. Lunter

Slabacus v1.2
PATH: \ENGINEER\SLIDRL
Slide Rule and Abacus Simulation

Slide Rule for Windows v1.21E
PATH: \ENGINEER\SLDRLE
Slide Rule for Windows v1.21E - Miss those old days when calculations were simple? What are all those buttons on the calculators anyways? Slide Rule for Windows tries to replicate the slide ruler which was so popular way back. Even more, it`s digital Complete with instruction and examples on how to use slide rule Req: Windows 3.1. Freeware

SmartSum Calculator v1.6
PATH: \ENGINEER\SMTSUM
SmartSum Calculator v1.6 - Windows based talking printing calculator/adding machine no sound card needed). Host of features including loading/saving of calculations notes by entries; user-defineable macros correction of previous entries; auto recalculation; interfaces with any Windows Spreadsheet; sales tax calculations; supplied conversion macros; 10 memories; vocalisation and much much more

SoftAlchemy
PATH: \ENGINEER\SALCH15A
SoftAlchemy is both a P-Table and a chemistry facts program. It`s very user-friendly and packed with facts of chemistry and physics. It should suit any user of all levels who needs this kind of information at their fingertips Shareware $20

SofTConversion 97
PATH: \ENGINEER\SFTCNV
SofTConversion 97 - is a simple utility program that allows you to convert between units in 28 different categories The software was originally designed by a mechanical engineer in response to the need for a simple utility that could be used to convert from English to metric units The software was expanded to include many other conversions. This latest version provides support for 394 units, for a total of 8,918

different conversions From SofTEK Consulting. $12.95 Lead Developer - Chris Cox, ccox@planetc.com

Soil Projects v2.1
PATH: \ENGINEER\SOILPJ21
"This is a geotechnical program that lets you manage a entire soil project since the lab`s data input to the boring printout The program automatically calculates the soil sample parameters natural moisture, liquid limit, plastic limit, plasticity index dry density, gradation, and classifies the sample by the Unified Casagrande`s method. It also mantains a containers database that make an easy input of container weight by only selecting the description setting by you The program draws the complete boring in a full customizable graphic that can be previewed before printer by its own print preview system and also can be printed in full color. All graphics can be exported to any appication that supports the Windows Metafile graphic format as MS Word, Excel, Autocad, etc so you can insert the image in the document that you want by simply ""coping and pasting"" it The program also have a complete on line help that covers all program items and have the technical support of the Soil Mechanics Laboratory at La Plata University - Argentina for the commercial version"

SPCALC v5.0
PATH: \ENGINEER\SPCALC
SPCALC v5.0 (c)1994 - Electronic Solvent Handbook and Solubility Calculator. If you are a working scientist, engineer, student or formulator or you simply need to find optimum solvents or solvent mixtures for any application, try SPCALC! SPCALC can find solvents in its database of physical properties for 1200 solvents meeting single or multiple criteria for any solute predict solute solubility, or calculate an optimum solvent mixture from basic physical principles. COMPLETE pop-up help EXTENSIVE documentation, quick-tour tutorial, fully customizable, macros Windows/OS2 support,and much more

SPCONV 1.02
PATH: \ENGINEER\JPP
Spconv is a utility to convert between various snapshot formats. Snapshot files are created by various spectrum emulators. SPCONV converts between .SNA SP, .Z80 and .PRG files. The conversion to/from .SP files may not work always however, it is not clear to me how IFF, IFF2 and the interrupt mode are stored in the .SP file. Since version 1.02 I have made some improvements to this type of conversion however, it sould work now, but I have not enough .SP samples to fully test it. Note that crashing of a converted image may also be caused by bugs in the SPECTRUM emulator. Converion to .SP will work if the image is converted from a RAW image

Speed Estimator for Windows v1.00
PATH: \ENGINEER\SPEEDE
Speed Estimator for Windows v1.00 Quick calculation program for labor (time standards for manufacturing operations Generate standards for most manual motions and distances used at an assembly or test workplace. Includes elemental standard data for numerous common tool use elements of work. Offers editing of work descriptions addition of allowances, and computation in seconds or TMU

SPHERIC/32 v1.00
PATH: \ENGINEER\SPHRIC32
SPHERIC/32 v1.00 - Spherical geometry calculator and navigation aid for Win95 Distance between points (incl. geodesic and elliptic arc approximations cumulative distance, range and bearing azimuth, midpoint, great arc intersections more. Various display and input formats ASCII read/write, save/restore, on-line help

Statsizer
PATH: \ENGINEER\STATSI
Statsizer: a Statistics tool for Windows

Steam Properties v1.31
PATH: \ENGINEER\STEAM13
"Steam Properties v1.31 is an MS Windows application that calculates the properties of steam/water within a wide range of pressure and temprature. It may be used for analyzing a number of energy conversion units used in power plants, such as steam turbines pumps, boilers and heat exchangers. The accompanied help file ""Thermodynamics online help"" gives a brief description of them Taftan Data Email:Taftan@CompuServe.Com"

Steam Table Evaluation Module
PATH: \ENGINEER\ASTEM32
ASTEM32 is a 32-byte version of the 1967 IFC Water and Steam Tables. The thermodynamic properties are obtained from a FORTRAN dynamic link library (DLL ASTEM32.DLL and help file ASTEM32.HLP are freeware The Visual Basic 5.0 source files are also freeware and may be used or modified to fit any particular need

Structural Connections
PATH: \ENGINEER\WINCON
Wincon is a desktop engineering program which will aid the Engineer in the design of welded or bolted structural connections. All of the input and output is based on AISC`s Manual of Steel Construction, 9th edition (ASD) part 4. Certain input screens may seem limited in the availability of input options, such as only listing A325 and A490 bolts. This is because the ASD tables only provide data for certain standard input. The program follows the input presented in ASD Each section provides the user the option to view and print his results

Structural Engineering software
PATH: \ENGINEER\ENG971
Structural Engineering software - 3d & 2d space frame analysis, features includes 3d views and 3d animation, easy to use menu systems, automatic data checking, on line help, section data bases. Runs under any OS that supports DOS sessions, Shareware

Structural Tool Box
PATH: \ENGINEER\STBUNP
Structural Tool Box

Student Geometry Calculator Program v. 3.03
PATH: \ENGINEER\GCALCU

Student Geometry Calculator Program v. 3.03 Find area, volume, and make special geometric calculations with this program. Great for Geometry students! It now also has an RPN calculator built in for your enjoyment

SuperCal v5.7
PATH: \ENGINEER\SPCAL
SuperCal v5.7 Windows scientific/financial calulator Scrolling tape calculator featuring scientific and financial capabilities Full 15 digit accuracy with no rounding errors. Integrated help on all funcions Results of all calculations can be saved to clipboard, file, or printer. 10 memory locations/saved between sessions Shareware. Registration: $16.00

SURVEY LAND YOURSELF ver 2.53
PATH: \ENGINEER\SLY253A
SURVEY LAND YOURSELF ver 2.53 - ($10 to $100 You can survey it yourself, quickly easily, & inexpensively. Get 98% of the information with 2% of the effort. You can find lost corners and lines, calculate acreage, & write land descriptions. You can establish test plots, subdivide property layout building foundations & landscapes gaming fields, hide & recover buried treasure, or even map a cave. No magic

SymbMath
PATH: \ENGINEER\SM34A
SymbMath by Dr Weiguang Huang A powerful symbolic calculator. Solves mathematical and algebraic problems and provides a complete symbolic, numeric and graphical computing environment with built in expert system, program language database and editor. Rivals Mathematica

T3
PATH: \ENGINEER\T3-100
Dragon 32/Dragon 64/Tandy CoCo II Emulator v1.00

Tape Calculator for Windows95 v1.07
PATH: \ENGINEER\TCALC
Tape Calculator for Windows95 v1.07 - Simple 3D calculator with tape register you can print. Great accounting tool

TCS
PATH: \ENGINEER\TCS
This is a small version of the Beam Load Program. The full size Program which is contained in the Engineer`s Toolchest, contains more shapes and materials. The Full-size Toolchest Program also features over 100 other practical Programs This smaller version is limited to four Beam Cross-sections and four Materials

Temperature Conversion 32bit
PATH: \ENGINEER\TEMPCO
Temperature Conversion 32bit This is a temperature conversion util that converts to 1 million degrees 32bit Windows95 bases using VB4 Must have the VB4 runtime modules to use....there are available at Microsoft

THE LAMINATOR v2.02
PATH: \ENGINEER\LAMINA

"THE LAMINATOR v2.02 - A Windows 95 program that analyzes laminated composite plates according to classical laminated plate theory. Input consists of ply material properties, material strengths, ply fiber orientation and stacking sequence, mechanical loads and/or strains, and temperature and moisture loads. Output consists of apparent laminate material properties, ply stiffness and compliance matrices, laminate ""ABD matrices, laminate loads and mid-plane strains, ply stresses and strains in global and material axes, and load factors for ply failure based on Tsai-Hill and Tsai-Wu failure theories"

THE UNIVERSAL CONVERTER
PATH: \ENGINEER\UNICON
THE UNIVERSAL CONVERTER

Thumper
PATH: \ENGINEER\THMP_V1
Thumper is a Windows based User Friendly program designed to provide a comprehensive performance analysis of reciprocating compressors in a time saving manner. It provides comprehensive on-line help which defines all its main features and offers direction for compressor modeling Thumperc key benefits can include increased production capacity reduced energy operating costs reduced maintenance costs safer operation by establishing pressure limits reduced engineering evaluation costs easy `what-if' scenario and compressor re-application analysis an educational tool tool for data presentation almost certain to Pay For Itself the 1st time it is applied to a real life situation Basic operating and engineering capability includes compressor capacity actual condition volumetric flow external rod load discharge temperatures required power for compression service crosshead pin reversal and rod thread stress analysis modeling of different gas properties can be easily based on either the Redlich Kwong or Lee Kesler equations of state a selection of hydrocarbon gases from methane to octane and CO, CO2, H2S, water vapour, and others interchangeable use of customary (imperial) units and SI (metric) units on screen and printer plotting capability, and the option to save plotted data in ASCII files that can be imported by spreadsheets and word processors to afford easy presentation of results

TIMEX SINCLAIR 1000 EMULATOR
PATH: \ENGINEER\TS1000-C
This program emulates a complete Timex/Sinclair 1000 equipped with TS2040 thermal printer and TS1016 16K RAM pack. (Printers must be Epson or Proprinter II compatible.) CGA is required and at least a 12 MHz system is recommended

Topics In Materials Science
PATH: \ENGINEER\TIMS
Topics In Materials Science (TIMS) is a multimedia teaching aid for materials science/engineering materials. It is appropriate for a technology program or as an introductory course in an engineering curriculum. TIMS is free if used for educational purposes

Tradesman Calc`s Version 1.03
PATH: \ENGINEER\TCSHARE3

Tradesman Calc`s is a collection of Mechanical Engineering Workshop formulas put together to assist Tradesmen and Engineers working in a production environment do their engineering calculations on a PC Features easy to use point and click menu, online context-sensitive help, cut paste, print and save functions

Trajectory Maker
PATH: \ENGINEER\TRJMKR
Trajectory Maker predicts trajectories for earth orbiting satellites and ballistic missiles. As trajectories are generated, the program simultaneously displays their ground traces on four conformal map projections. In addition it creates three distinct types of trajectory data files. It produces high quality trajectories and it can accommodate a variety of applications Its companion program, Trajectory Scape, is a multiple trajectory viewing tool. It displays trajectories, created with Trajectory Maker, on several optional map projections, e.g., Mercator, stereographic, Hammer, Mollweide etc. It has three optional map resolutions as well as three central viewing regions These easy to use programs provide maximal flexibility and control for the user`s particular application. They comprise an excellent introduction to orbital mechanics, and are outstanding tools for professional scientists and engineers Twenty-four example data sets are included for you to get started immediately The software requires an IBM PC XT/AT or compatibles with a hard drive and color card. Graphics visualization requires EGA or VGA. A math co-processor is optional and is utilized if present

Transmigration Analysis 1.0
PATH: \ENGINEER\CLIFE
"This program is totally free. The purpose is an illustration of the personal identity problem involved in downloading a mind from one host to the next In the simulation, the brain is represented by 100 squares. Four scenarios are displayed. In the connected scenarios, the brain`s components are connected to the artificial replacement components. In the disconnected scenarios, they are not, requiring the extra step of storage of the total brain map which we display as ""Mind Stored"". Actually, it could more appropriately be named Brain Stored"". These cases are discussed in Parfit REASONS AND PERSONS in Appendix B. As you can tell, the non-local/local difference is a bit of a red herring but it is included for completeness. Local represents the replacement component occupying the same space as the original component. Non-local represents the replacement components assembled ""across the room A green square is an original neural component. Black signifies removal A yellow square is an artificial replacement component. It is well established that small qualitative changes do not affect numerical identity as in the case of the change of cells in our body over time. The personal identity problem usually boils down to two camps. One camp says that qualitative identity of the mind is all that matters in surviving transmigration. For this camp backup copies, and multiple copies of yourself are acceptable as cases of continued existence. The other camp would hold that only the connected cases, preferably with an in-line check, are acceptable as cases of continued existence. A third camp believes that the other camps are misled by reasoning on the basis of what we seem to be without having all the facts about what we are"

Triangle Wizard 3.0
PATH: \ENGINEER\TRIWIZ
Triangle Wizard 3.0 Version 3.0 A Windows utility that graphically calculates sides and angles of triangles. Features include solving right, optuse, and acute triangles 486 or better recommended Windows 3.1 or Windows 95 required Registration fee $15.00 Developer: ByteCrafters

TRS-80 COLOUR COMPUTER 2 EMULATOR Ver. 1.40
PATH: \ENGINEER\COCO2-15
This package is a complete* emulator designed to make your PC imitate a genuine CoCo 2 with 64K and four disk drives. It has also been tested successfully with the Dragon 32`s 16K ROM, though you must use the Options Menu (F6 in the emulator) to select the Dragon keyboard It requires EGA graphics and 256K RAM. Also, a 286 with at least 16 MHz is recommended, though you`ll need a faster processor to get operating speed that matches the real machine. (A 33 MHz 486, on the other hand is drastic overkill. A slowdown option is provided for users fortunate enough to posess such a beast Version 1.40 is the third release of this package, and includes many enhancements and a few corrections. The file NEWSTUFF.DOC summarises all changes since version 1.30 for those who`ve seen the earlier releases. Also MANY things in this COCO.DOC file have changed. Please read it thoroughly This program is freeware, though copyright remains with the author

TRS-80 MODEL I EMULATOR
PATH: \ENGINEER\MODEL1-E
"This emulator package allows your MS-DOS based PC to run as a TRS-80 Model I It will be able to run virtually all Model I applications and software from Galaxy Invasion to Electric Pencil and the Z-80 Editor/Assembler. My aim was to be able to design a convincing ""virtual reality"" in which a Model I program would not be able to tell that it was not running in the genuine machine. This virtual Model I includes the following options 48k CPU with Z-80 Microprocessor Expansion Interface (including internal clock, printer port, and floppy disk controller RS-232 port 4 80-track single-sided disk drives Lowercase and numeric keypad upgrades"

Turbo Grapher
PATH: \ENGINEER\TGRAPH32
Turbo Grapher

Turbo-INT Demonstration Version 3.5
PATH: \ENGINEER\TRBINT
Turbo-INT Demonstration Version 3.5

TVRO ASSISTANT v1.4
PATH: \ENGINEER\TVRO
TVRO ASSISTANT v1.4: Application for calculating look angles, focal length, f/D ratio, declination, and feed offset for home satellite dish antennas User-accessable database with up to 100 satellites. DOS, 286 or greater CGA or better. Shareware - $15 US

UCALC v4.0
PATH: \ENGINEER\UCALCW

UCALC v4.0 (Win 95) Multipurpose calculator Expression Evaluator, Unit Converter, User Solution Modules, Financial Calculations Equation Solver, General Ledger. Many built in functions, operators, numeric bases, modes and formats. User functions and variables Plots Cartesian, polar, 3D, parametric, data files. USMs allow you to interactively define and solve problems by simply filling in the blanks. Web site: www.ucalc.com

ULTIMATE BALLISTICS
PATH: \ENGINEER\ULTBLSTC
RECOIL & EXTERIOR BALLISTIC CALCULATIONS ETC

ULTIMATE CALCULATOR v3.2
PATH: \ENGINEER\UCALC
ULTIMATE CALCULATOR v3.2 Graphic scientific calculator. Expression evaluator with many built-in functions, operators, numerical notations, and modes. User variables functions. Solves, plots 2D/3D equations does integrations and summations. Supports hex & binary notations. Radian & degree modes. Resizable TSR window. 18 significant digits. Mouse support. Online help and more

Unios
PATH: \ENGINEER\UNIOS
Unios - makes it easy to juggle between units including capacity, currency distance, speed, temperature, weight etc. You can add your own units, and modify existing ones. Requires Win95/NT Description Copyright 1997 PsL

UNITS & VOLUMES v2.1
PATH: \ENGINEER\UNTVOL21
UNITS & VOLUMES v2.1 - An Excel Add-in Extensive unit conversion and tank volume calculation functions. 17 unit functions cover everything from Acceleration to Volumetric Flow. 6 tank geometry functions range from spherical to horizontal cylinder with end caps. Full Function wizard support and extensive on-line help. $30 Registration This release supports only 32bit versions of Excel (7 and 8) for Windows

Variable Conversions
PATH: \ENGINEER\VARCON
Variable Conversions

VARIOWIN 2.2
PATH: \ENGINEER\VARIOWIN
This demo version includes the four programs distributed with the full release of VARIOWIN 2.2. However, the features of the demo versions of those programs have been restricted The demo version of Prevar2D is limited to 100 data. If you use it with a data set including more than 100 data, only the first 100 data will be considered for building the pair comparison file The demo version of Vario2D with PCF will read up to 100 data in a data file and no more than 4,950 pairs in the associated pair comparison file The printing and copy features have been removed from the demo versions of the Model and the Grid Display programs. The printing and copy features of VARIOWIN 2.2 may be tested using the demo version of Vario2D with PCF

VectorJockey
PATH: \ENGINEER\VJ169704
An Educational Physics Game of Space Travel involving Vector Addition of Velocity, and Acceleration

VEHICLE
PATH: \ENGINEER\VEHICLE
VEHICLE is a simple HPV (Human Powered Vehicle created by an engineer for other engineers VEHICLE will calculate wind resistance, effeciancy top speed, and other various calculations

ViewProf
PATH: \ENGINEER\VWPROF
ViewProf is a profile viewing and ideal flow multiblock 2-D Oellers method solver for computers running Windows 3.1 or newer version

VINNY GRAPHICS 16 bit Version 1.96
PATH: \ENGINEER\VIN16_96
Vinny Graphics is a novel graphing and data analysis program for science and engineering students. It is easy to use and accepts and exports data through a variety of sources. The intuitive Windows interface helps produce multi-parameter design or test data graphs and perform simple math operations on groups of cells Number inputs can be decimal or exponential with dot or comma European) digit separator. This zip package contains the complete 16 bit Vinny Graphics application for Windows. If you wish to run Vinny Graphics on Windows 95 you may want to download the 32 bit Vinny Graphics application for Windows 95 It provides increased speed and allows 21 rather than 12 data sets

VOLNAR v3.1
PATH: \ENGINEER\VOLNAR31
VOLNAR v3.1 - A very easy-to-use program for calculating areas and volumes and converting areas, lengths, temperatures volumes, and weights between metric and standard units of measure from an input in either system. It also calculates the number of gallons (U.S. Liquid a container holds from an input in either system Works on IBMs and compatibles $20

Warajevo ZX Spectrum emulator
PATH: \ENGINEER\WARASP15
At the beginning, we want to tell to users of earlier releases of Warajevo ZX Spectrum emulator that war in our country is finished at last although political and especially economical situation is still very bad. We hope that this problems will be solved in a time. If it is your first contact with this program, a short story about developing of this program follows Maybe this program is not too interesting itself, as a fact that the program comes from Bosnia and Hertzegovina, from more than three years surrounded city Sarajevo. Our names are Zeljko Juric and Samir Ribic. We are engineers of electronic and computer sciences (emulator was Samir`s graduate thesis). Even in middle-school days, about ten years before, we began to interest about computers just thanking to ZX Spectrum. From this reason, we are a bit sentimentally tied with this computer. Between the other, this computer remembers us to the times when in our regions the life was normal and nice However, when we bought AT 286 computers, at the end of 1990, we did not forget our Spectrums. We

had great interest when, in June 1991, we got one Spectrum emulator, which, without underestimating of anybody`s work, had very bad characteristics (it was slow, quite incompatible with the original machine with unpractical emulation of the tape recorder etc.). Its origin is unknown to us (we suppose that the program is from some Slavish state), and when starting it displays the copyright message `(C) 1991. Roman & easy inc.`. When the war started in our country, we wanted to reject some dark minds from our heads as possible. So, in April 1993, we started the development of our Spectrum emulator, symbolically called `Warajevo Spectrum emulator` which should have much better characteristics. We mention, that we were known as quite good programers, especially in assembly language The program was developed in horrible conditions. The grenades fell on every place, there was no electrical power during the months, sometimes even the hospitals had not the power during two month! When we had electrical power it was only 2-3 hours during the night. However, we did not quit and caught every moment when the electrical power was present to develop the program. It was often in an Army`s camp, with the improvised generator, with voltage that varies from 150 V to 300 V! The greatest part of ZXTOOLS (which is integrated in emulator`s environment in this release of emulator) was developed even without hard disc, because this `stable` voltage destroyed it. We progressed very well, and in November 1993, reading some newspapers that came from the enemy`s territory we`ve got the information about the emulator `Z80`, written by Gerton Lunter. In even worse winter conditions we continued the development in the rooms where we slept the water was frozen), hoping to get this emulator to compare our program and his program In April 1994, the foundation Sorosh opened the electronic mail in Sarajevo. We sent a general request and in June 1994, we got Lunter`s emulator. Between the other, from documentation we got the information about many Spectrum emulators around Europe, but we think that our program is better than all the others, except maybe the Lunter`s program. We think that it is a great success, according to conditions where the program was development and the quality of Gerton`s program. The same opinion has Gerton itself, when we contacted him. The Lunter`s emulator `Z80` is better than the `Warajevo emulator, from the our opinion, but, our emulator has some important advantages comparing with his one, especially in this release (1.5), so characteristics are today balanced. In the following text we will make cross-comparation between our and Lunter`s program

Water and Steam Properties v1.21
PATH: \ENGINEER\WASP121
Water and Steam Properties v1.21 <ASP Physical properties of ice, water and steam in many popular units. Data for 15 fixed and 17 variable properties from -100 to 800 deg C and up to 1000 bar. Replaces printed Steam Tables but covers many more properties and eliminates the need to interpolate between data points. Has context sensitive on-line Help. Calculated data points match published data very closely. Shareware reg $40.00

Weights And Measures Plus
PATH: \ENGINEER\WAM
"Still the premier unit conversion software, Weights And Measures Plus is in world-wide use by people in hundreds of fields WAM+ can convert such

diverse units as teaspoons, light years, radians, picas, meters, miles per hour, ergs, and pounds per square inch. There are a total of 158 different units in 11 categories Only WAM+ offers direct input and output of fractions, or mixed numbers, or decimals because only WAM+ has a decimal/fraction converter Only WAM+ has such an extensive and interesting Help/Glossary/Tutorial. It is like an encyclopedia of weights and measures Only WAM+ has an easy-to-use notebook-tab interface Only WAM+ includes a free trigonometry calculator Only WAM+ includes multiplication tables, geometric formulas, tables of abbreviations and fractions Long"" double-precision algorithms are used throughout, and we believe this to be the most accurate unit-conversion software available today"

Weld Design Program
PATH: \ENGINEER\WLDCLC
The Archon Weld Calculator is used to size fillet welds or welds with throat values equal to an equivalent fillet weld throat. The user provides the weld shape, applied loads, allowable stress and material yield strength. The program will provide the required weld size. The program assumes E70XXX electrodes are used in the welding process There are two ways to specify the weld shape. First the user may select a pre-determined shape from the main menu or he may choose to draw a custom weld shape The custom weld function is new, with this version of the program and provides an unlimited number of possible weld shapes This version also provides Archon`s AISC data base. The user may select any AISC standard steel member. The dimensions of the selected member are transferred to the weld shape input screens. You no longer have to look up your steel shapes to get the dimensions, its automatic If you have also purchased Archon`s Beam Design Program, a jump button has been provided to allow the user to activate the Beam program. This is a quick way to obtain your loads and moments

WELL PUMP SIZER
PATH: \ENGINEER\PUMPV10
WELL PUMP SIZER

WHATS-UP
PATH: \ENGINEER\WHTSUP
WHATS-UP is a tool for experimenting with orbital dynamics and Telemetry Decoding and display Program for the DOVE, UoSAT-2 AMSAT-OSCAR 13, Fuji-OSCAR 20 and the AMSAT Microsat Spacecraft OSCARs 16, 17, 18 and 19). It is table driven via the configuration files to allow maximum flexibility WHATS-UP also contains a morse code terminal for use with communications satellites and other natural links WHATS-UP also has the capability to beacon [APRS] and/or automatically attempt a connect to MIR/SAREX

Win95 FLEX Emulation System
PATH: \ENGINEER\RFLEX
"The package is a complete emulation of a 6809 processor based system running the TSC Flex operating system over the Percom PSYMON monitor ""ROM with a useful command extension set. It runs under Win95. On a modern PC Pentium, 60 mhz or better) the emulator is faster than the original computer system was Flex is a small (8k!) disk operating system (DOS) which, along with CP/M and a few others, truly pioneered small

""personal"" computers. These were the systems that were in place when Apple Computer started in a garage"

WinBeam Version 2.60
PATH: \ENGINEER\WINBM
WinBeam Version 2.60 is a full-featured, easy-to-use beam analysis program. It calculates and displays shear, moment, rotation, and deflection diagrams for virtually any beam with any supports and any loading Version 2.60 includes improved printing updated help, and minor bug fixes Requires Windows 3.1 or higher

WinCrete (Reinforced Concrete Design)
PATH: \ENGINEER\CRTNPK
WinCrete is an engineering desktop program which will assist the Engineer in designing reinforced concrete structures. The program will generate moments and reactions on reinforced concrete walls, beams, slabs and columns. The program also provides a rebar data base which provides information such as bar area, weight, diameter, development length and lap length This ShareWare version of WinCrete has some limitations which the full (registered version does not. Click here to see the differences The program provides for the user to save and load his input data The program will analyze the members in accordance with the 1971 edition of ACI 318 One note of caution, this program will address a large number of requirements outlined in the ACI code, but it is up to the user to be aware of what the program limitations are

WINDATCON v2.01
PATH: \ENGINEER\WINDC
WINDATCON v2.01 <ASP> - a windows conversion program for Acceleration, Angle, Area Energy, Length, Power, Pressure, Speed, Time Temperature, Volume and Weight. Includes leap year option, graphical angle display, pop-up unit definitions, calculation of boiling points at specified pressures, density calculations, and lists of SI prefixes and over 200 boiling points and densities Requires VBRUN300.DLL. Shareware. Reg. $25

WINDMILL STREAMER
PATH: \ENGINEER\STREMR
"WINDMILL STREAMER DEMONSTRATION INSTRUCTIONS FOR USE 1. You must have one of the following operating systems to run this demo Microsoft Windows 3.1 or 3.11 Microsoft Windows for Workgroups 3.1 or 3.11 Microsoft Windows 95 Microsoft Windows NT Workstation 3.51 2. The demonstration uses a software-simulated signal generator, so you do not need any special hardware. For details of the data acquisition hardware supported by Streamer, contact the Sales Office at the address below 3. The demo includes several different Streamer set-ups which have been pre-configured and saved. You can select any of these by pressing the ""Open Setup"" button. After restoring the setup press the ""Collect"" button, followed by the ""Start"" button The pre-configured setups do NOT write the data to disk files, so they do not fill your disk with unwanted data. You can enable file output from the Settings menu, if you want to generate data files 4. All the menus and controls in the Streamer demonstration program work exactly as in the real product, so you can configure the program as you like and experiment with the various features. The on-line Help system contains full details - accessible from

the Help menu or from the Help buttons found in various dialog boxes 5. The full product includes the SetupIML program which is used to configure the channels in the hardware. This allows you to select the name, range, engineering units, linearisation, etc. for each channel in your system. It also includes the ReView program which allows you to view the data stored in IMX format files and export sections of data into other formats. These programs are not supplied with the demo 6. As well as IMX format, Streamer can record the data in Famos format for direct transfer into IMC`s Famos analysis software, and in ASCII format for transfer into spreadsheets or other programs 7. For further information contact Biodata Ltd 10 Stocks Street Manchester M8 8QG Tel 0161 834 6688 Fax 0161 833 2190 Email Microlink@CityScape.co.uk WWW http://www.microlink.co.uk/microlink 8. The programs, libraries and help files on this disk are c) Copyright Windmill Software Ltd 1990-1996. All rights reserved The demo may be freely copied for the purpose of demonstrating the features of the Windmill system. The disk, and files on this disk, may not be used for any other purpose. The contents must not be disassembled, reverse engineered or altered in any way WINDMILL STREAMER DEMONSTRATION INSTRUCTIONS FOR USE 1. You must have one of the following operating systems to run this demo Microsoft Windows 3.1 or 3.11 Microsoft Windows for Workgroups 3.1 or 3.11 Microsoft Windows 95 Microsoft Windows NT Workstation 3.51 2. The demonstration uses a software-simulated signal generator, so you do not need any special hardware. For details of the data acquisition hardware supported by Streamer, contact the Sales Office at the address below 3. The demo includes several different Streamer set-ups which have been pre-configured and saved. You can select any of these by pressing the ""Open Setup"" button. After restoring the setup press the ""Collect"" button, followed by the ""Start"" button The pre-configured setups do NOT write the data to disk files, so they do not fill your disk with unwanted data. You can enable file output from the Settings menu, if you want to generate data files 4. All the menus and controls in the Streamer demonstration program work exactly as in the real product, so you can configure the program as you like and experiment with the various features. The on-line Help system contains full details - accessible from the Help menu or from the Help buttons found in various dialog boxes 5. The full product includes the SetupIML program which is used to configure the channels in the hardware. This allows you to select the name, range, engineering units, linearisation, etc. for each channel in your system. It also includes the ReView program which allows you to view the data stored in IMX format files and export sections of data into other formats. These programs are not supplied with the demo 6. As well as IMX format, Streamer can record the data in Famos format for direct transfer into IMC`s Famos analysis software, and in ASCII format for transfer into spreadsheets or other programs 7. For further information contact Biodata Ltd 10 Stocks Street Manchester M8 8QG Tel 0161 834 6688 Fax 0161 833 2190 Email Microlink@CityScape.co.uk WWW http://www.microlink.co.uk/microlink 8. The programs, libraries and help files on this disk are c) Copyright Windmill Software Ltd 1990-1996. All rights reserved The demo may be freely copied for the purpose of demonstrating the features of the Windmill system. The disk, and files on this disk, may not be used for any other purpose. The contents must not be disassembled, reverse engineered or altered in any way"

Windows Slide Rule
PATH: \ENGINEER\SLIDER
Windows Slide Rule

WINFIT 1.7
PATH: \ENGINEER\WINFIT
WINFIT 1.7

Winfoil Version 2.0.5
PATH: \ENGINEER\WFL2102U
Winfoil Version 2.0.5 <ASP> - Disk 2 of 2. A Windows program for plotting Model Aircraft Airfoil sections and designing wing and tails. Fast on-screen plotting airfoils wing/tail designs. Automatic panelling for normal size printers. CAD like user interface screens to design modify airfoils/wings and tails.DXF export. Soartech import. Requires 386SX-16 or up, Windows 3.1 or up, 4MB RAM 3 MB disk

WINKS 4.2
PATH: \ENGINEER\WINKS
WINKS 4.2 <ASP, ESC> Windows program for Statistical Data Analysis and Graphs. Based on the award-winning KWIKSTAT program. Dozens of standard statistical tests and publication quality graphs. Extensive helps and step-by step examples. Uses dBASE files. Imports ACSII and others

WinPipeD
PATH: \ENGINEER\WPIP100B
WinPipeD: a professional, fully-featured Windows program for pipe hydraulics in steady multiphase flow. It utilizes most industry-standard equations and correlations, packaged in an easy-to-use interface. Available freely for non-commercial use. Keywords: pipelines hydraulics; fluid mechanics; multiphase flow engineering software

WinPlate
PATH: \ENGINEER\SWPLAT
This program analyzes circular flat plates based upon the following assumptions 1. All plates are circular, have a constant thickness and are of a homogeneous, isotropic material 2. The thickness is not more than 1/4 of the least transverse dimension 3. The maximum deflection is not greater than about 1/2 of the plate thickness 4. All forces (loads and reactions) are perpendicular to the plate surface 6. The plate remains in the elastic region (i.e. the maximum stress does not exceed the elastic limit 7. The deflections given are based upon bending stresses only. There is, some additional deflection due to shear that is not accounted for in this program. Typically, this value is negligible. Care should be taken however with annular plates with a relatively large inside diameter (b dimension), one or both edges fixed, and when plate thickness exceeds 1/6 of the radial distance (a - b). When all three of these conditions exist, actual deflections may be larger than those computed

WinPlot
PATH: \ENGINEER\WINPLT
WinPLOT Features Interactive operation including Zoom-Pan-Scroll along with point-by-point analysis Cartesian, Polar and LOG scales with up to 16 signals by 32000 samples Customizable line/symbol color, size, type

and font with high quality printer and .WMF output High performance - low overhead application suitable for use with data acquisition systems Powerful batch file and DDE command operation language that allows complete control and customization Basic signal processing including: spectral analysis, integration, differentiation and various statistics Easy to use inexpensive system with examples and on-line help Focus WinPLOT was written out of a need for a simple yet effective 2-D data display and analysis tool for engineers and scientists. WinPLOT combines some of the best features from an assortment of other more expensive and complicated products into a package that is easy to use and at a very affordable cost. On the other hand, WinPLOT is not intended for business type presentation or high end graphic visualization systems and thus does not support fancy 3-D pie charts or surface-contour graphics etc. WinPLOT is however designed to be controlled from an external program or process which allows you freedom to choose your data processing environment Shareware

WINSPEC32
PATH: \ENGINEER\WINSPEC
of an audio frequency spectrum analyser on a multimedia computer running Windows95. It provides both time and frequency domain displays of audio data captured by a standard sound card. It has been written to aid in the teaching of Fourier analysis and FFTs. It is, however, a fully functional spectrum analyser that can be used for a number or real-world applications Winspec32 performs a fast Fourier transform (fft) of analogue data and displays the results graphically. The fft is a mathematically intensive routine, which requires a fast processor (Pentium 100+) to run well. A good graphics card also helps. The program is small and does not require a fast disc or large memory

WINTG
PATH: \ENGINEER\WINTG
WinTG is a Turtle Graphics program for MS Windows v.3.x and Windows95

WinThread
PATH: \ENGINEER\WNTHRD
This program is a simple utility by which one can access general dimensional data for common thread forms and calculate a general purpose torque value based on a user chosen material. Thread form data is extracted directly from American National Standard ANSI B1.1-1982, Unified Inch Screw Threads. Torque is calculated from classical equations based on thread lubrication, sectional properties, and material strength It should be noted that recommended torques are for general purpose and should not be used in critical applications without further consideration of torque methods used, accuracy of torque applying devices, etc

WINWOOD
PATH: \ENGINEER\WODUPK
WINWOOD

WL-Plot 2.70
PATH: \ENGINEER\WLPLT270
WL-Plot 2.70 - Mathematical Plotting Program Plots either Algebraic or RPN functions in cartesian, parametric, and polar modes Also graphs

inverses, integrals, 1st & 2nd derivatives, rotated conic sections non-function relations, bifurcations recursive relations and best fit curves Useful for Algebra through Calculus and Physics courses. Free for educational use

WPlot v2.1.1
PATH: \ENGINEER\WPLOT
WPlot v2.1.1 Windows Plotting Software WPlot makes 2 and 3-dimensional plots with linear or log axes. Data can be fit by a smooth curve, a least squares polynomial or exponential or a Fourier series and functions can be plotted WPlot can optionally be controlled by a user`s C or Visual Basic program SHAREWARE: $25

XPlotter V1.0
PATH: \ENGINEER\XPLOT
XPlotter is shareware program for Windows 3.1 and higher that plots XY ternary and diamond plots. Has a built in spreadsheet with printing and clipboard support, font, symbol and color options

XRAYDIF1
PATH: \ENGINEER\XRAYDIF1
XRAYDIF1 is a shareware version of my theoretical, x-ray powder diffraction, profile simulator. It is intended as an inexpensive substitute for data-based, powder diffraction profile generators, and as a teaching tool

XTENDER ZX81 (TS1000) EMULATOR
PATH: \ENGINEER\XTNDR093
The Sinclair ZX81 (or Timex/Sinclair TS1000) is the second computer marketed by Sir Clive Sinclair in the early eighties. In 1980, he introduced his first computer and called it `ZX80`. In those days, computers were far from the common good` they are nowadays and the ZX80 was a relatively cheap machine It was offered for around 100 pounds (and was marketed as `the worlds first complete personal computer for under 100 pounds`), while its closest competitor (the VIC20 from Commodore) was about three times as expensive Although the ZX80 was quite a success (50,000 sold), it had some shortcomings e.g. it could only do integer calculations (no floating point), the screen flashed at every keypress and went blank during execution of programs (this did increase speed but was not very `ergonomic`). An upgraded version of the ZX80 appeared within a year. It had an 8k ROM (instead of the 4k of the ZX80 could do floating point mathematics and offered a choice between FAST operation with black screen (as on the ZX80) or SLOWer operation with normal screen. This updated version was called ZX81. It had a Z80A processor operating at 3.2 MHz, 1k RAM (yes! only 1024 bytes, but expandable to 48k 32x24 text screen and 64x48 graphics resolution in black and white. Programs could be stored on tape and be retrieved at 300 baud. The first versions sold for 70 pounds (ready built) and 50 pounds (DIY kit); 50,000 ZX81s were purchased in the first 3 months after its release. Later computers from Sinclair include the ZX Spectrum (1982, Z80 based, 3.5 MHz, 16k ROM, 48k RAM colour, sound, high resolution, a lot faster thanks to screen-hardware instead of -software, ASCII based character set and more expansion possibilities) and the QL (Quantum Leap, 1984, 68008 based, 8 MHz, 48k ROM, 128k RAM [upgradable to 68000, 24 MHz, 2M RAM],

multitasking and !superb! operating system QDOS Although the Spectrum was undoubtedly the most popular of all Sinclair machines, I think that many people using MS/DOS machines nowadays may have been introduced to the world of computers by way of their (late) ZX81. I hope these people will re-enjoy working with this simple yet very fine computer again

Z80 emulator
PATH: \ENGINEER\ZSIM241
Z80 emulator + CP/M-80 BIOS to run CP/M

ZPlot
PATH: \ENGINEER\ZPLOT
ZPlot contains ZPlot.exe, ZPlot.hlp, registration file, and title.zp, title.bmp and title.pl. This is shareware (copyrighted) with some restrictions on distribution. See registration file for shareware details The sample files included with ZPlot3.12 may or may not work with ZPlot3.24 as shown, due to extensive internal changes. However, most of the sample 2D files are now included in ZPlot3.24 as part of an internal sample data base accessible through the Edit Formula window

ZRPnet v1.0
PATH: \ENGINEER\ZRPNET16
ZRPnet v1.0 <ASP> Pipe Network Flow Solver Icompressible fluids. Compute pressure-flow relations in pipe & conduit networks. Fluids database to estimate density & viscosity for selected temperature & pressure. Includes database for pipe sizes & roughness. Most eng. units accepted. Valve Cv calculator Print and report options. Simple graphical user interface to design network. For ChemE ME, Civil, HVAC