# Précis

*This column presents some of the new PPX Programs which have been recently accepted. The abstracts here are from programs that the analysts thought would be of special interest to members. You can purchase these programs at a cost of $4.00 each. Send your order to: Texas Instruments: C/O PPX Department; P.O. Box 109, Lubbock, TX 79408. Include an additional $2.00 to cover postage and handling.*

*If you have a need for a specific program, send a note to PPX. There is a chance that the program may have already been written. If it has, we will put the abstract in the next issue of the Exchange. Requests for programs not yet written will be placed in the "Programming Corner" column.*

### 018014H Financial Statement Preparation

This program takes a worksheet utilized by accountants during the preparation of financial statements and can be utilized for manufacturing and non-manufacturing concerns. It provides zero proof totals for all columns and prints the cost of whether it is a net income or loss figure. This program can be used with any size worksheet, no matter how many pages or accounts are utilized by the user.
Thomas K. Lehman, Magna,
587 Steps, PC-100A

### 658159H Inverse Laplace

Uses the Heaviside Expansion Theorem for unrepeated real and complex poles (denominator roots) to find the time response of a linear network to a particular input. For example, the step responses of low pass, band pass, and high pass filters may easily be calculated. The case of repeated poles is seldom of interest in engineering applications; however, should repeated poles occur, the convolution program of the Electrical Engineering module (EE-11) can extend the use of this program with repeated poles. To use the program it is only necessary to enter the Laplace function.
Lee Payne, Tucson, AZ
850 Steps, Mod 1

### 668168H Restrictive Orifice Sizing

Sizes a restrictive orifice to limit gas flow. This program sizes the orifice so that it will pass peak load with the regulator working and it calculates the volume through the orifice if the regulator were to fail open. This program is used in comparing the restricted flow to the relief valve capacity in order not to overpressure the downstream (lower pressure) piping.
James N. Phillips, Dallas, TX
606 Steps, PC-100A

### 778035H Lambert, State (Coordinate Transformation)

Transforms coordinates from geographic to grid and from grid to geographic for those state systems employing a Lambert projection. Additionally, computes meridian convergence and scale factor for points given their geographic coordinates or grid coordinates.
Thomas W. Dickson, Vivian, LA
409 Steps, PC-100A

### 868022H Imputed BTU (Heat Value) of Natural Gas

Program calculates BTU of natural gas from molecular percentages of gas components. Input variables are molecular percentages of gas components from a gas analysis test.
Dave Enarson, Sugarland, TX
399 Steps

### 908217H Block Edit Program Relocator

This program permits the relocation of programs resident in memory banks 2, 3, and part of 4. Inherent characteristics of the structure of numbers used by the TI-59 limits the valid transfer of program memory to about 65%, so that relocated code requires manual editing.
Clive McCarthy, Santa Clara, CA
224 Steps, PC-100A

### 918294H Chess Descriptive Notation

Program prints all moves of a standard chess game in descriptive notation. Up to 99 moves may be entered, more than adequate for most games. Special moves, such as castling or en passant, can be entered with ease. Includes all standard symbols.
Ronald W. Rushing, Albany, GA
389 Steps, PC-100A, Mod 10

### 919301H Liars Dice

A game of bluffing for 2 to n people using 1 to n calculators. A player "rolls" five dice to make up a poker hand (which he can see). He then announces his hand either real or a bluff. The next player must challenge or accept. If he accepts, he looks at the dice and can roll all, some or none of the dice. He must then announce a hand higher than the one he accepted. The play continues until a challenge occurs. At this time, the round ends with the player who made the last announcement winning or losing dependent on whether his roll was real or a bluff.
David S. Lane, Clearwater, FL
66 Steps

### 928052H Print Long Division

Given a dividend and a divisor, this program prints all intermediate steps and the final quotient and the remainder in the long division format that is taught in grade school.
David Kantrowitz, Brookline, MA
480 Steps, PC-100A

### 958020H Exposure Compensation Factor

Calculates the printing exposure factor resulting from changes in focal length or aperture of lenses or distance separating negatives and images. Values are accepted in millimeters or focal lengths, inches or millimeters for spacing and numerics for aperatures; these may be entered in any order, and are retained until changed. The exposure factor is calculated as a ratio and in photographic stops. Changes in times or apertures are readily determined at the keyboard. Lateral magnifications are intrinsically available.
Thurman E. Smithey, Chula Vista, CA
273 Steps