

Tape Payroll

Catalog Number 26-1504

Radio Shack®

**TRS-80
MICRO
COMPUTER
SYSTEM**

The Radio Shack Tape Payroll System is designed for smaller businesses with a high growth potential. Using a minimum 16K Level II TRS-80™ Micro Computer, the program will process payroll for 15 employees. As the company grows, the system can be expanded to match the needs of the company. The Tape Payroll System will process checks for 75 employees with 16K additional memory. A 48K Level II TRS-80 will accommodate 135 employees.

Features Of The Tape Payroll System:

- Payroll Checks are Automatically Calculated and Printed
- Automatic FICA and Federal Taxes Calculation
- Provisions for State and City Tax
- Provisions for Voluntary Deductions
- Provisions for Disability Deductions
- Check Register
- Annual Reports
- Professional Appearance
- Easy Error Correction

TAPE PAYROLL ADDENDUM

FOR DISK USERS:

The Tape Payroll package will operate on Disk and automatically use Disk storage rather than tape.

For the "Payroll" Menu program, follow these steps exactly:

1. Turn on everything except the TRS-80 keyboard.
2. Put a TRSDOS Disk in Drive Ø and turn on the keyboard.
3. When "TRSDOS READY" appears, type BASIC2 and press **ENTER**.
Press ENTER for "MEMORY SIZE".
4. Insert the "Payroll" Menu cassette in the recorder and press the "PLAY" button.
5. Type **CLOAD** and press **ENTER**.
6. When "READY" appears, remove the Master cassette, insert a new, blank tape. Press the "PLAY" and "RECORD" buttons.
7. Type **DSAVE"P"** and press **ENTER**.
8. When "READY" appears, press the Reset button on the back of the keyboard.

Use the tape you just recorded for the "Payroll" tape and refer to the instructions on page 28 of the manual for Converting to Disk.

To convert the remaining tape programs to Disk, follow the instructions on page 28 of the manual for each of the following programs:

<u>NAME</u>	<u>PROGRAM</u>
"COMAINT"	Company Maintenance
"PRMAINT"	Employee Payroll Maintenance
"PRPROC"	Payroll Processing
"PRTOT"	Payroll Totals

FOR COMPUTERS WITH THE LOWER CASE MODIFICATION:

The Tape Payroll program is not designed for use on computers with the lower case modification. If you have a computer with a lower case modification, the following modifications must be made for the program to operate properly.

Follow these steps exactly for each of the four programs:

Company Maintenance Payroll Processing	Employee Payroll Maintenance Payroll Totals
---	--

1. Load the program by typing **LOAD**.
2. Type the following information EXACTLY as shown:
6 CLEAR(36*X+256):ME%=(FRE(X\$)-256)/36: X%=ME%+1 ENTER
8 ENTER
3. Rewind the tape and advance past the plastic leader.
4. Press the "PLAY" and "RECORD" buttons on the recorder.
5. Type **CSAVE("A")** and press **ENTER**.

Tape Payroll System

Radio Shack

T A DIVISION OF TANDY CORPORATION
FORT WORTH, TEXAS 76102

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Introduction

The Radio Shack Tape Payroll System will process payrolls for a small business. The available memory size of your system will determine how many employees you can process.

System	Number Of Employees
16K Level II Tape	15
32K Level II Tape	75
48K Level II Tape	135

The Tape Payroll System consists of four tapes:

TAPE 1

Side One — Company Data Maintenance (COMAINT)
Side Two — Employee Payroll Maintenance (PRMAINT)

TAPE 2

Side One — Payroll Processing (PRPOC)
Side Two — Payroll Totals (PRTOT)

TAPE 3

Blank Data Tape — All of the information (to run your payroll) will be stored on the Data Tape.

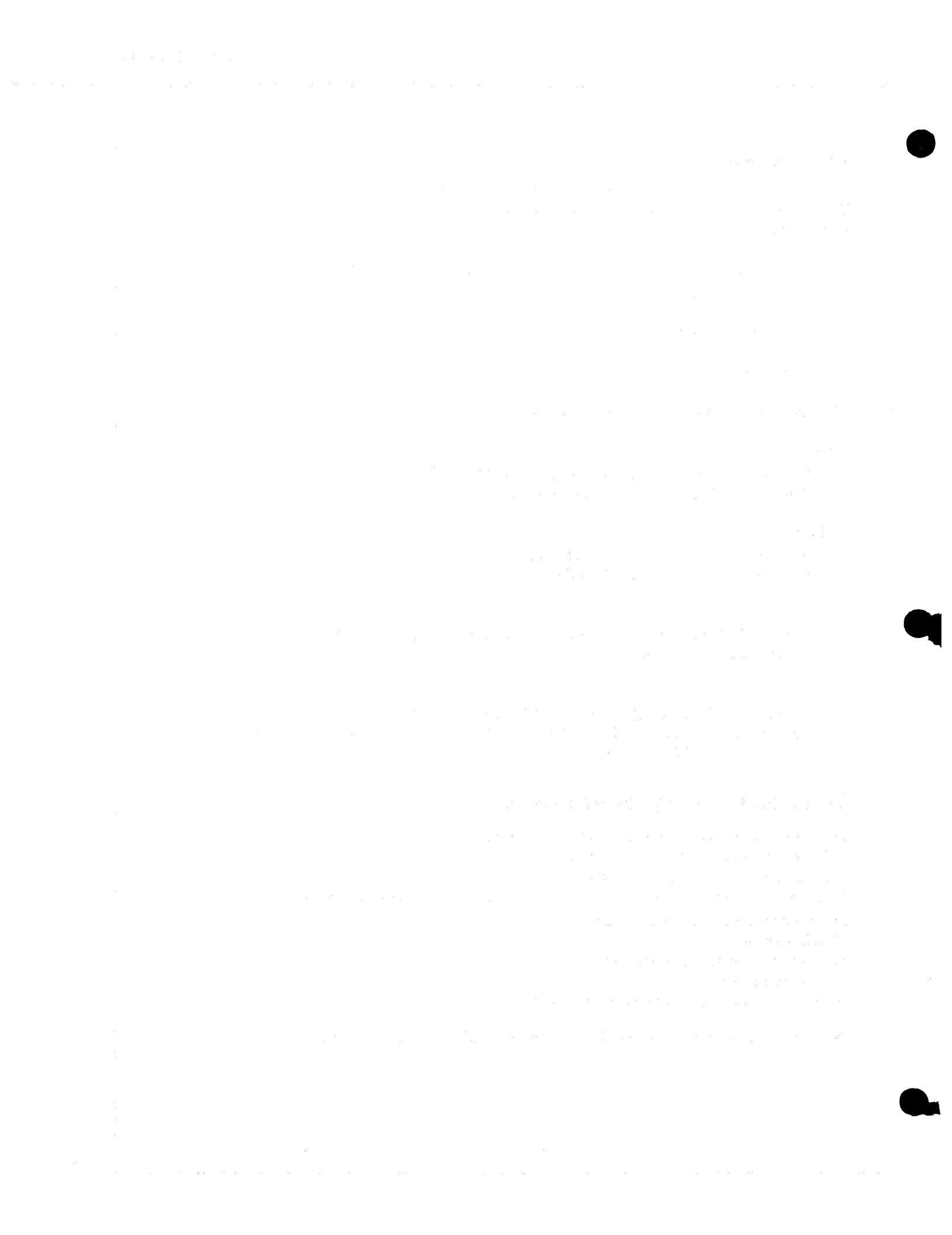
TAPE 4

This is the "Menu" Program tape. It will only be used when you wish to convert these programs to Disk. (This is explained in detail in the Disk Users section on page 27.)

Features Of The Tape Payroll System

- Calculates and prints checks (if you have a printer).
- Calculates all Federal Taxes and FICA.
- Calculates most State and City Taxes.
- Provisions for voluntary deductions, such as Savings, Christmas Clubs, Insurance, etc.
- Provisions for Disability deductions.
- Check Register.
- Easy error correction and recovery.
- Annual summaries.
- All reports printed out, or displayed on the screen.

Note: Checks can only be printed, they cannot be displayed on the screen.



Setting Up The System

Before you use the Tape Payroll System, you must provide some information about your particular company and its employees. This is called the "Set Up". This "Set Up" procedure is done only once. It is not a difficult task, but it is time consuming. Just take your time and we'll lead you through step by step.

Information You Need To Supply

You will need your employee records, company and employee FICA percentages. Annual Tax Tables for 1979 are provided with this manual. If your state or city has an income tax, you will need these Tax Tables.

Once you "set up" the system, maintenance is minimal. You can add (or delete) employees easily, make wage changes quickly, and print any reports that may be needed. You will be able to prepare payroll checks in a fraction of the time it would take to prepare them by hand.

Starting The "Set Up"

Get the most comfortable chair in the building and when you're ready, let's start the "Set Up" procedure.

Note: If you have a large number of employees, it goes a lot faster if two people work on the set up — one person to call out the information, and a second person to type the information into the computer.

Loading Instructions

Here are the loading instructions that apply to the Tape Payroll System. All the tapes for the Payroll system will load the same way:

1. Power up the TRS-80.
2. Put the COMAINT tape in the cassette recorder and press "REWIND".
3. Set the volume between 4 and 6.
4. Press the "PLAY" button.

The screen will show:

MEMORY SIZE?_

READY>_

You Type:

Press **ENTER**

C L O A D and press **ENTER**

Set Up (continued)

This will start the tape. An asterisk will appear at the top of the screen. A second asterisk will blink, indicating that the program is loading. When the program is loaded, **READY>_** will again appear on the screen. Type **RUN** and press **ENTER**.

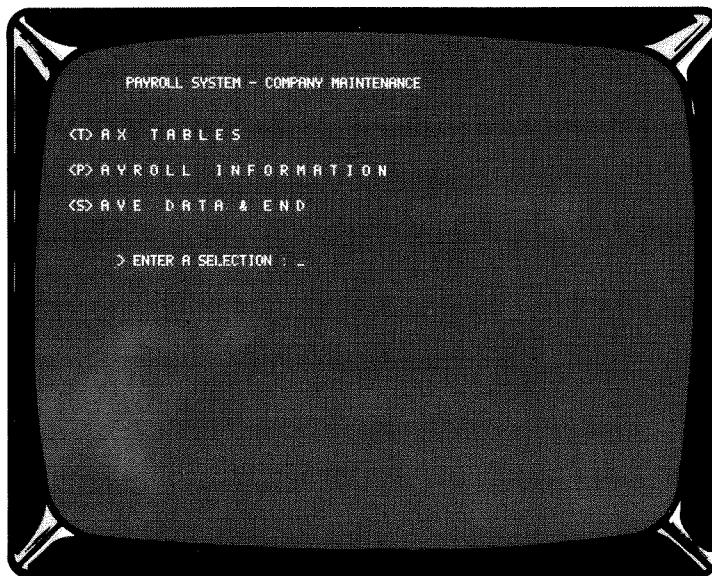
Note: If the tape did not load properly or an error occurred, rewind the tape and start over. If the program didn't load properly, you'll have to adjust the volume of the recorder.

The screen will show:

DO YOU WISH TO START A NEW PAYROLL (YES/NO)

Type **Y_ES** .

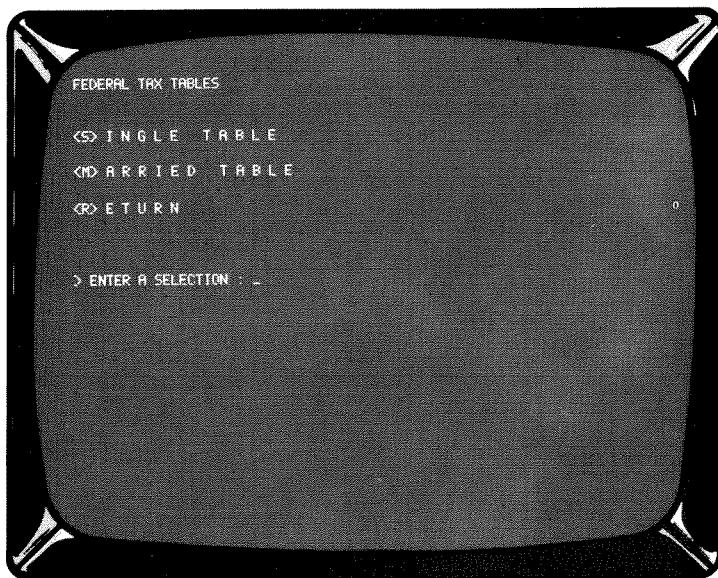
The screen will show:



This is the Main Menu for Company Maintenance, (COMAIN). Every program tape has a menu with all the available functions listed. Since we are just starting, let's begin with Tax Tables. Press **T** .

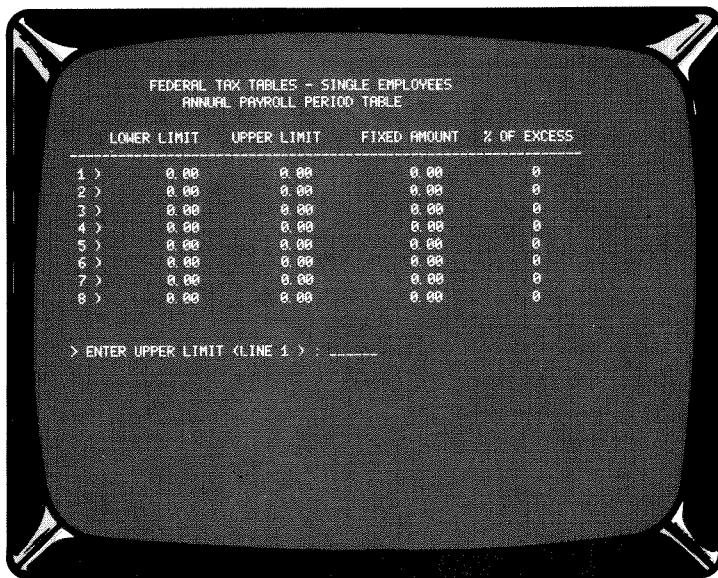
Set Up (continued)

The screen will show:



This is the Tax Menu. Press **S** for Single Employees Table. You will be asked if this is a new table. Press **Y** for Yes.

The screen will show:



Set Up (continued)

Use the Annual Tax Table for single employees on page 33.

1. Type in the Upper Limit for line 1 and press **[ENTER]**.
2. Type in the Fixed Amount (in line 1, this is zero, so press **[ENTER]** for a zero in this category).
3. Type Percent of Excess. This is the amount of tax withheld over the lower bracket limit, then press **[ENTER]**.
4. The Lower Limit is automatically set beginning with line 2.
5. Follow this procedure for each line. (On line 8, the Upper Limit is automatically set at \$999,999. You just add the Fixed Amount and Percent of Excess).

You will be asked if all information is correct. Press **[Y]** if Yes. This will return you to the Tax Menu.

This is how a typical finished single Tax Table should appear:

FEDERAL TAX TABLES - SINGLE EMPLOYEES ANNUAL PAYROLL PERIOD TABLE				
	LOWER LIMIT	UPPER LIMIT	FIXED AMOUNT	% OF EXCESS
1 >	0.00	1,420.00	0.00	8
2 >	1,420.00	3,300.00	0.00	15
3 >	3,300.00	6,800.00	282.00	18
4 >	6,800.00	18,200.00	912.00	21
5 >	18,200.00	14,200.00	1,626.00	26
6 >	14,200.00	17,200.00	2,666.00	30
7 >	17,200.00	22,500.00	3,566.00	34
8 >	22,500.00	999,999.00	5,368.00	39

Making Corrections

If you accidentally type in the wrong information:

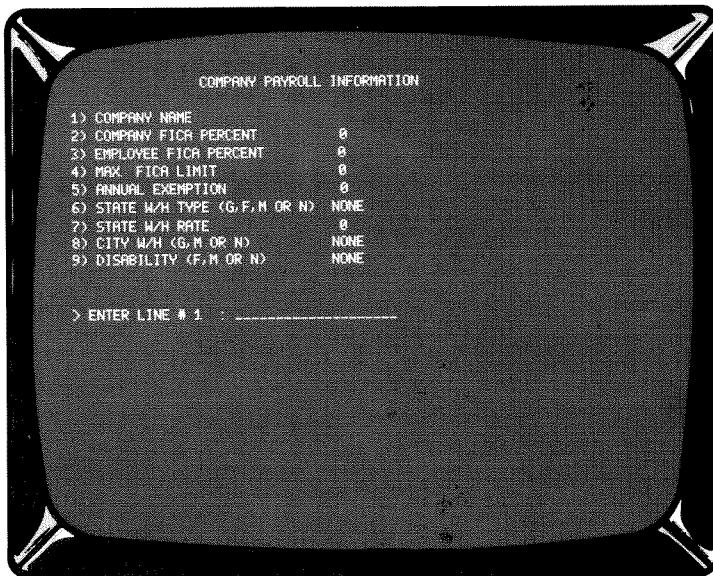
1. You will be asked if all the information is correct after you enter line 8.
2. Press **N** for No.
3. Type the line number with the error.
4. You can now type the correct information, then press **ENTER**.
5. The lower limit for the following line will automatically adjust to new upper limit.
6. Press **@** to return to Tax Menu.

Married Table

1. Press **M** for Married Employees.
2. You will see the same format as the Single Employees Table.
3. Type in the information (using the Annual Tax Chart) following the same procedure for the Single Employees Table.
4. Make any needed corrections.
5. Press **R** to return to the Company Maintenance Main Menu.

Set Up (continued)

Next, you will need to supply your Payroll Information, so Press **P**.
The screen will show:



Entering Your Company Name, etc.

1. Type your company name in the space at the bottom of the screen. You can type as many as 20 characters for the company name (spaces count as characters). Press **ENTER** when you've finished.
2. Type the Company FICA percentage and press **ENTER**.
3. Type the Employee FICA percentage and press **ENTER**.
4. Type the maximum FICA salary limit.
5. Type the Annual Exemption (dollars per exemption).
6. State withholding type (if applicable).

G = Percentage of Gross

F = Percentage of Federal Withholding

M = Manual Entry. (If your state tax type is not covered in the choices above, you can enter it manually during Payroll Processing.)

N = None

7. State Withholding Rate, if your state has a percentage of federal tax or gross income.
8. City Withholding (if applicable)

G = Percentage of Gross. If you press [G], there will be a line (in the lower righthand corner), where you can type the required percentage.

M = Manual

N = None

9. Disability

F = Fixed Amount. Type the amount in the space provided (in the righthand corner). This is a fixed amount per pay period. It will be deducted from all employees.

M = Manual

N = None

If all information is correct, Press [Y] to return to the Main Menu.

Saving The Data

Press [S] for Save and End. The screen will show:

LOAD DATA TAPE AND REWIND
SET TO RECORD
PRESS <ENTER> WHEN READY

Set Up (continued)

Follow these steps exactly:

1. Take the Company Maintenance tape out of the recorder.
2. Label the Data Tape, put it in the recorder and rewind. If your tape has a leader, make sure the tape is advanced past the leader.
3. Press the "PLAY" and "RECORD" buttons on the recorder.
4. Press **[ENTER]** when you're ready to "Save" the "Set Up" data.

Note: It is a good idea to mark the side of the Data Tape you just recorded. When you need this data later, you will know which side of the tape to use.

All of the information (that you just entered on the COMAINT program) is being recorded on the Data Tape. When all of the data is recorded, you will be asked if you want to make another copy. Press **[Y]** for Yes. Take out the Data Tape and insert a new blank tape or turn the tape over and use the reverse side. Record it as you did before. This is a Safety or Backup copy.

Payroll Maintenance

After you've finished, press **N** for No More Copies. READY>_ will appear on the screen.

1. Take out the Data Tape, put the Payroll Maintenance, PRMAINT tape in the recorder and rewind the tape.
2. Press the "PLAY" button on the recorder.
3. Type **C L O A D** and press **ENTER**.
4. When the tape is loaded, READY>_ will appear again. Type **R U N** and press **ENTER**.

The screen will show:

LOAD DATA TAPE AND REWIND
SET TO PLAY
PRESS <ENTER> WHEN READY

1. Take out the Payroll Maintenance tape, load the Data Tape, and rewind.
2. Press the "PLAY" button on the recorder.
3. Press **ENTER**.

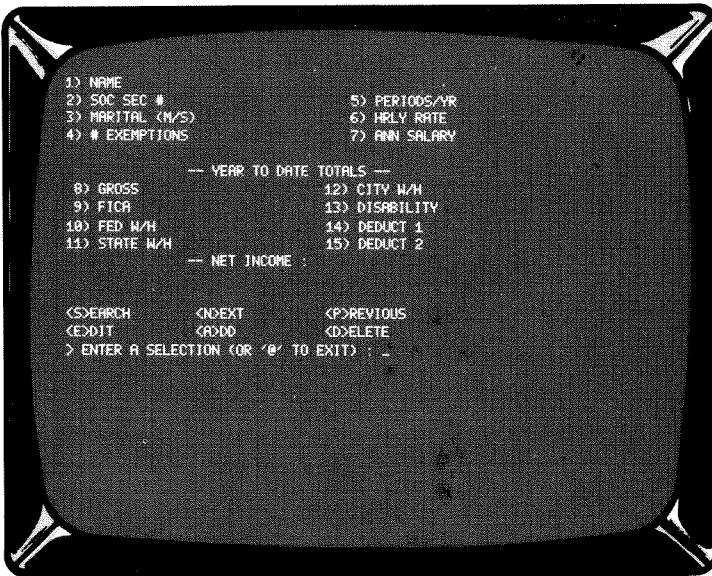
The screen will show:

READING PAYROLL DATA

Note: Asterisks will not blink when loading in a Data tape.

Payroll Maintenance (continued)

When the computer has read in the data, you will see the Menu. You have two choices on this Menu; (Edit Employee File and (Save Data & End. Press **E** . The screen will show:



You will notice a list of commands at the bottom of the screen:

(S)earch — You type in an employee number. The computer will search for that employee, and display the record on the screen.

(E)dit — Used to correct (or revise) an employee record.

(N)ext — This will advance you to the next employee.

(A)dd — This lets you add new employees.

(P)revious — This will take you back to the previous employee.

(D)elete — This lets you erase a terminated employee's records.

Since you are just starting your Tape Payroll System, press **A** for Add.

1. Type the first employee's number and press **[ENTER]**. (Numbers can range from 1 to 9999.)
2. Type the employee's name and press **[ENTER]**.
3. Type in all the required information for lines 1-7. (Press **[ENTER]** after each line except marital status).

Note: If the employee has an hourly rate, the computer will automatically skip Annual Salary. If the employee is salaried, you can skip Hourly Rate by pressing **[ENTER]**.

Lines 8 thru 15 are for Year-to-Date (YTD) totals.

Note: If you make a mistake, don't worry about it for now. Continue to fill out the employee record. After you type line 15, you will be asked if everything is correct. Press **[N]**. Now you can correct the line.

Once the information for your first employee is correct, press **[A]** to Add employees again. Type in the next employee's record. Press **[A]** to add more employees until you enter all of your employees or you reach the maximum allowed by the program.

Saving The Data

When all the employee records have been completed, press **[@]** to return to the Menu. Press **[S]** for Save. A reminder message will appear on the screen.

1. You already have the Data Tape in the recorder, so press rewind.
2. Press the "PLAY" and "RECORD" keys.
3. Press **[ENTER]** when ready.
4. Make another copy. When finished, remove the Data Tape and keep it in a safe place.

Congratulations, the Tape Payroll System is now "Set Up". If you are ready to run a payroll, go on to Payroll Processing (start at step 2). If you're not ready to run a payroll, turn off the system, and make sure to store the tapes in a safe place. To run your first payroll, you will need the Data Tape and the Payroll Processing, PRPROC tape. When you are ready to run your payroll, go to "Payroll Processing".



Payroll Processing

1. Power up the TRS-80.
2. Load the Payroll Processing tape in recorder and rewind.
3. Set the volume of the recorder between 4 and 6.
4. Press the "PLAY" button on recorder.

Screen will show:

MEMORY SIZE? _
READY> _

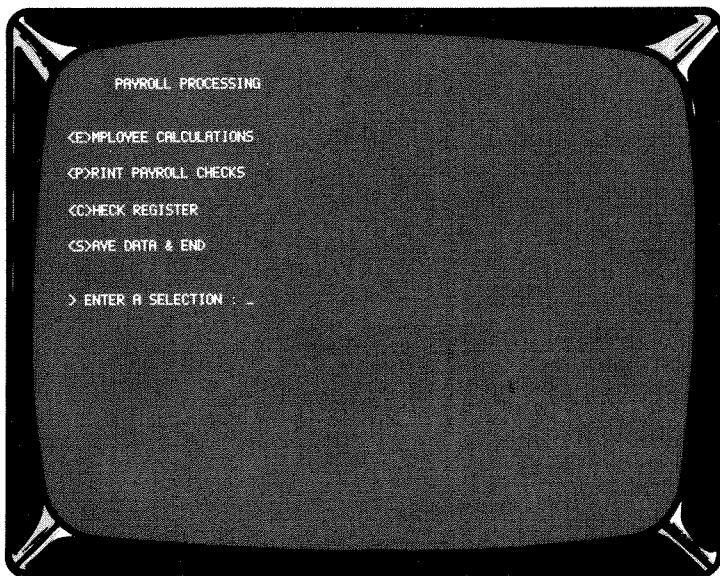
You type:

Press **[ENTER]**
C L O A D and press **[ENTER]**

When the program has loaded, READY will appear on the screen. Type **R U N** and press **[ENTER]**.

1. Take the Payroll Processing tape out of the recorder.
2. Load the Data Tape and rewind.
3. Set the recorder to "PLAY".
4. Press **[ENTER]** when ready.

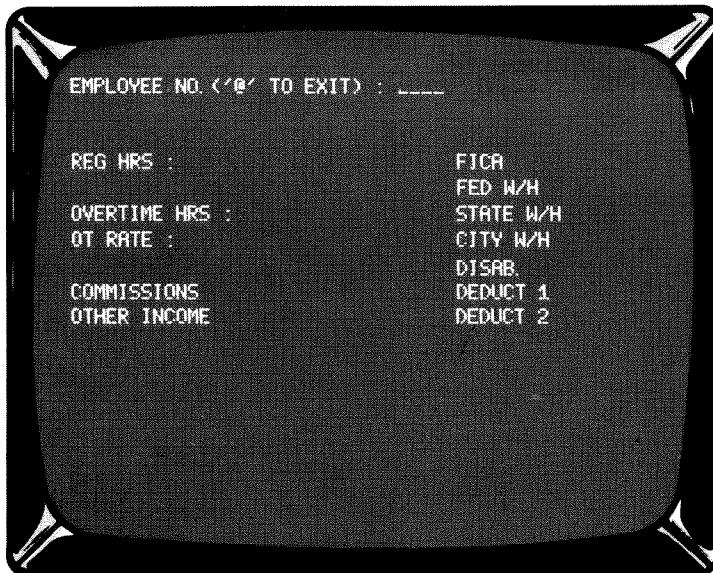
After entering the payroll data, the screen will show:



Payroll Processing (continued)

This is the Payroll Processing Main Menu. You need to enter Employee Calculations, so press **E**.

The screen will show:



Calculating Employee's Pay

1. Type in the first employee number and press **ENTER**.
2. Now you can type in the employee's regular hours. If employee is salaried, the computer will automatically calculate the pay for this period. Press **ENTER**.
3. Pay (for this period) will appear beside the regular hours.
4. Type in overtime hours (if none, press **ENTER**). Enter overtime rate. Press **ENTER** for time-and-a-half. If your overtime rate is not time-and-a-half, then type in the rate and press **ENTER**.
5. Type in commissions and other income (if any), then press **ENTER**.
6. Gross Income will appear at the bottom of the screen.
7. Now you have a choice: Let the Computer calculate the deductions or do it Manually. Press **C** or **M**.

Note: If you pressed **M** for Manual Entry (in Company Payroll Information) for any withholding type, and you now type **C**, the computer will stop at that line, to allow you to enter the information.

If you let the computer calculate deductions, it will always stop at Deduct 1. This gives you a chance to enter any additional deductions that aren't provided. For example: Christmas Club, Stock Plans, Insurance, etc.

This deduction category can also be used for any employees which qualify for Earned Income Credit. If Earned Income Credit is required, enter the Amount for Deduction 1 as a negative value.

Deduct 2 is another general purpose deduction category. After Deduct 2 is entered, you will see total deductions and net pay for that pay period.

Note: If there is a mistake, press **N** to the question "IS EVERYTHING CORRECT". You will be asked if you want to (C)ancel, or (R)eenter the information. Cancel is used if you do not want to pay the employee at all during this period. For example: paying a terminated employee by mistake. Reenter will leave the name and number of the employee. You can then Reenter the correct information.

Once you are sure all the information is correct, press **Y**. Type in the next employee's number. Follow the same procedure for each employee.

Checking Calculations

You can check all calculations once again before printing checks.

1. Type in the first employee's number.
2. Press **N** for Next after every employee until you have examined all of them.
3. You can now return to the Main Menu by pressing **@**.

Now you can print the checks. (If you do not have a printer, you can skip this section and go to Check Register on page 19.)

Payroll Processing (continued)

Printing The Checks

Press **P** at the Main Menu for Print Payroll Checks.

The screen will show:

LOAD CHECKS IN PRINTER

Loading Checks

1. Line up the left perforation of check on column 1 of the plastic guide.
2. Set the top perforation of check at the bottom of the plastic guide. See Figure 1.

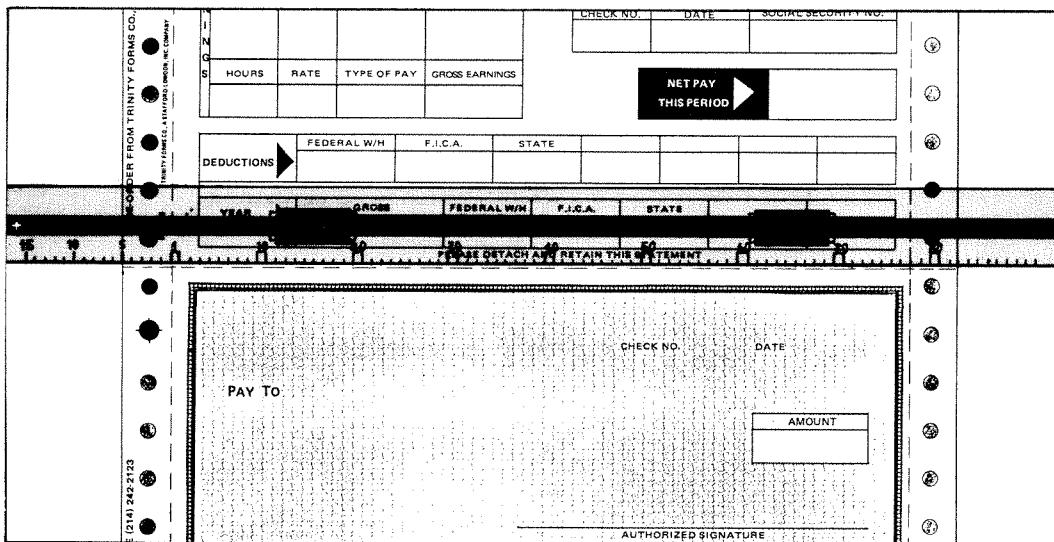


Figure 1.

Running A Sample

Press **ENTER** when checks are in the printer. You can now run a sample to test the alignment. Press **Y** (in answer to Test Printer Alignment). You can run as many samples as you want by pressing **Y**. When you are ready to print, press **N**.

Printing

1. Type the starting check number and press **ENTER**.
2. Type the date (MM/DD/YY). Example: 07/15/79. Press **ENTER**.
3. You can now have (A)ll or (I)ndividual checks printed. **Note:** Individual check printings will come in handy if one of the checks has a mistake and must be reprinted.

After you press **A**, the checks will begin printing. As each check is printed out, the employee name and the net pay will appear on the screen.

Note: When printing large numbers of checks, check the alignment periodically in case the forms slip. If this happens, press the "pause" switch on the printer and adjust. When realigned, turn off the "pause" button and printing will resume.

After all the checks are printed, you will return to the Payroll Processing Menu. If you are printing individual checks, press **@** (for employee number) to return to the Menu.

Now you can have a printed check register.

Check Register

Type **C** at the Menu for Check Register.

Note: For those without a printer, use this and the Employee Processing section to get the information you need to make out your checks. If you want year-to-date totals on your checks, you'll have to run Payroll Totals before you finish making out the checks. If checks were not printed, check numbers will be **Ø**.

1. Press **S** or **P** for the register to go to the Screen or Printer.
2. You will get a list of every check you've just printed.
3. Press **ENTER** after you've seen all of the checks.
4. You will see the payroll totals for this period.

Note: If you notice any errors in the check register, go back to employee processing, and make the necessary corrections and print a new check. You can use the Individual Check option. After making the corrections, print a new check register.

Saving Data

Press **[S]** at the Payroll Processing Menu.

1. Rewind the Data tape.
2. Set the recorder to “RECORD”.
3. Press **[ENTER]** when ready.

Note: You need to record the data from every pay period. This will enable the computer to update totals.

If this is not the end of a quarter or year, congratulations — you have just run your first payroll. Take the Data Tape out and store it in a safe place. For your next payroll, repeat the process starting on page 15 for Payroll Processing. If you’re at the end of a quarter or year (or you just want to see the yearly payroll totals), go onto the next page for Payroll Totals. (Start at Step 2.)

Payroll Totals

Here's how to print and reset totals:

1. Power up the TRS-80.
2. Load the Payroll Totals, PRTOT tape in the recorder and rewind.
3. Set the volume on the recorder between 4 and 6.
4. Press the "PLAY" button on the recorder.

Screen will show:

MEMORY?_

READY>_

You type:

Press **ENTER**

C L O A D and press **ENTER**

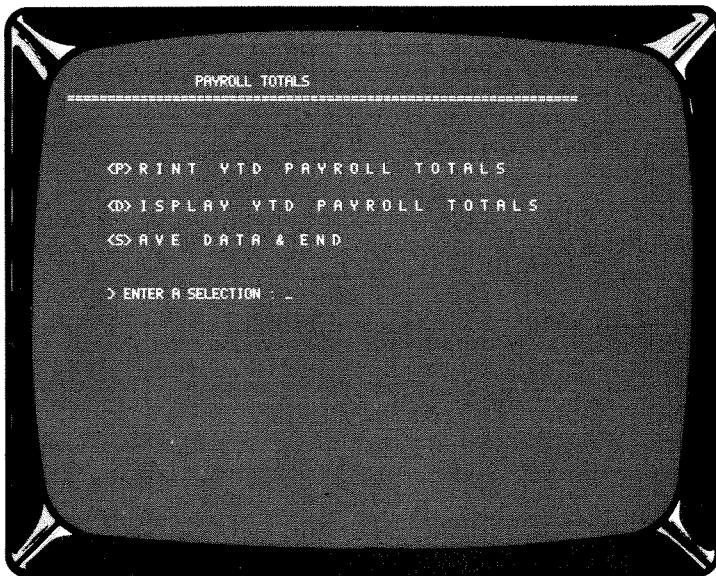
When the Payroll Totals tape has loaded:

1. Remove the tape from the recorder and load the Data Tape.
2. Rewind the Data Tape.
3. Set the recorder to "PLAY".
4. Press **ENTER**.
5. You will now see:

READING PAYROLL DATA

Payroll Totals (continued)

Once Payroll Data is read, the screen will show:



This is the Menu for Payroll Totals.

End Of Year

1. Press **P** for Print or **D** for Display.
2. You will see the individual employee totals for the year on the screen (or a printed copy from the printer).
3. At the end of this list, press **ENTER**.
4. Now you will see the company payroll totals for the year.
5. When the report is complete, you will be asked if it's okay to reset the totals. Type **YES** if it is the end of the year. This will reset all totals (for the year) to zero.
A **NO** answer will not change the totals.
6. Now you'll return to the Menu.
7. Save the data.

How To Update Or Revise Company Maintenance

It might be necessary to change information periodically. The Tax Tables will probably change from year to year. You may also have to change Company Payroll Information. Here's how to perform these operations.

How To Change The Tax Tables

1. Load the Company Maintenance tape as specified in the "Set Up" procedure.
2. When asked if this is a new payroll, press **N** for No.
3. Press **T** for Tax Tables at the Main Menu.
4. Press **S** for Single Employees Table (or **M** for Married).
5. When asked if this is a new table, press **Y**. This will set the table at zero.
6. Using updated tax charts, fill out the tax tables (as you did for "Set Up").
7. Press **@** to return to the Main Menu.
8. If you do not need to change anything else, press **S**. Load the Data Tape and record.

What If Company Payroll Information Changes

1. Press **N** when asked if this is a New payroll.
2. Press **P** at the Main Menu.
3. The current information should now appear.
4. Indicate at the bottom of the screen that all information is not correct by pressing **N**.
5. Now type in the number of the line that needs correcting and press **ENTER**.
6. You can change as many lines as needed by pressing **N** until everything is correct.

Revising Company Information (continued)

7. Return to the Main Menu by pressing **[Y]**.
8. Press **[S]** to Save the corrected data.
9. Load the Data tape and record.

Revising and updating is the only time you'll need to use the Company Maintenance tape.

What If An Employee Gets A Raise Or Marries, etc.

If you need to edit employee records for any reason, here's how.

1. Load the Payroll Maintenance tape (as specified in "Set Up").
2. Press **[E]** for Edit Employee File.
3. From the list of commands, press **[S]** for Search.
4. Now you can type the employee's number which needs correcting. Press **ENTER**.
5. The computer will search for that number and then display the employee's record.
6. To make the necessary corrections, press **[E]** for Edit, then type the number of the line that needs correcting.
7. If more than one employee needs editing, use the search option or, press **[N]** for Next, or **[P]** for Previous, until you get to the employee.
8. Press **[@]** to return to the Menu.
9. Rewind Data Tape and record new information.

What If I Hire A New Employee?

Note: You can't add an employee if you've reached the maximum allowed by the program. If you delete an employee, then you can add one.

1. Load the Payroll Maintenance tape.
2. Press **E** at the Menu.
3. Press **A** at the command list.
4. Now you can type in the new employee's number.
5. Fill out the file as you did in "Set Up".
6. Return to the Menu.
7. Rewind the Data Tape and record.
8. Your new employee is now on payroll.

What If An Employee Quits Or Is Fired?

Follow these steps to delete an employee.

Note: Do not delete an employee until the end of the year, or unless you save a permanent record of his earnings for use on W-2 forms.

1. Load the Payroll Maintenance tape.
2. Press **E** at the Menu.
3. Press **S** or **N** to find the employee you want to delete.
4. When the employee's record is on the screen, press **D**.
5. You will be asked if it's okay to delete. This gives you a second chance (in case you hit the delete key by accident). Press **Y**.
6. That employee's file will be deleted. It will no longer be in the computer.
7. Return to the Main Menu by pressing **@**.
8. Rewind the Data Tape and record.

Now you should be able to handle anything that comes up regarding payroll. A quick look at the instructions will serve as a refresher if you have any problems. Good Luck.



For Disk Users

This program has a built in provision for transferring it to disk. Disk users will find this more convenient and much simpler to use than tape. You must have at least one Disk Drive and a TRS-DOS diskette to run this program on disk. When operating under disk, the data files will be placed on disk rather than tape — automatically. Follow these instructions to transfer the program from tape to disk.

Killing The Files

1. Turn everything on except the keyboard of the TRS-80.
2. Put a TRS-DOS Diskette in Drive Ø.
3. Make a Backup of the Diskette. (If you do not know how to make Backup copies check the instructions on page 31.)
4. Take the TRS-DOS Diskette out and put the Backup copy in Drive Ø. Note: This is done to save the files on the original TRS-DOS Diskette. You may need those files at a later date.
5. Type **DIR** and press **ENTER**.
6. Type **KILL** and the name of the file(s) in the directory and press **ENTER**. Kill every file on the directory of the Backup copy (other than system files). If BASICR is on the disk, this should also be killed by typing **KILL**□****B****A****S****I****C****R****□****C****M****D****□****B****A****S****I****C****.

Once you've finished, we can begin the transfer from tape to disk.

Transferring To Disk

Using the Backup copy of the TRS-DOS Diskette in Drive Ø, type **BA**S****I****C**** and press **ENTER**.

The screen will show:
HOW MANY FILES?
MEMORY SIZE?

You type:
Press **ENTER**
Press **ENTER**

For Disk Users (continued)

Note: The following steps will be the same for each program tape, Payroll, Company Maintenance, Payroll Maintenance, Payroll Processing, and Payroll Totals.

1. Put the tape labeled "PAYROLL" in the recorder and rewind it.
2. Set the volume of the recorder between 4 and 6.
3. Type **C M D " T "** and press **ENTER**.
4. Press the "PLAY" button down on the recorder.
5. Type **C L O A D** and press **ENTER**.
6. When the tape has loaded, type **S A V E " P A Y R O L L "** and press **ENTER**.
7. Remove the "PAYROLL" tape. Repeat the process detailed above for each of the program tapes. (You can omit steps 2 and 3).

Once you have saved all of the programs, make a backup copy of the program diskette.

Note: The disk version of Tape Payroll will hold 40 employees.

Running Your Payroll

Now you can run your first payroll on disk. Here's how to do it.

1. Turn on everything except the keyboard.
2. Place the Payroll Disk in Drive Ø.
3. Turn on the keyboard.

The screen will show:

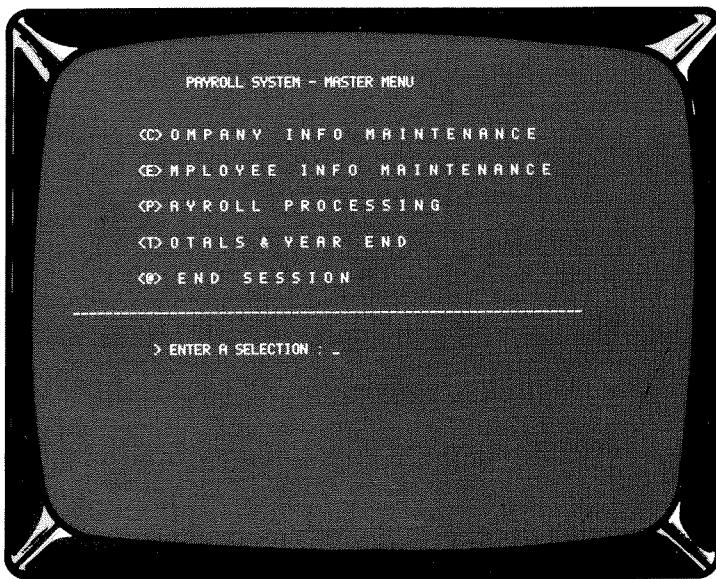
DOS READY
HOW MANY FILES?
MEMORY SIZE?
READY>_

You type:

B A S I C and press **ENTER**
Press **ENTER**
Press **ENTER**
R U N " P A Y R O L L " and
press **ENTER**

For Disk Users (continued)

The screen will show:



This is the Payroll Menu. After every Payroll session be sure and make a backup copy of the Payroll disk.



Backing Up Your Diskette

Leave the program diskette you just made in Drive 0. Insert a blank diskette in Drive 1. Press the reset button on the left hand side of the keyboard and follow these instructions exactly:

The screen will show:

DOS READY

SOURCE DRIVE NUMBER?

DESTINATION DRIVE NUMBER

BACKUP DATE (MM/DD/YY)

HIT 'ENTER' TO CONTINUE

You type:

B A C K U P and press **ENTER**

0 and press **ENTER**

***1** and press **ENTER**

0 1 / 0 1 / 8 0 and press **ENTER**

(example for January 1, 1980)

STOP — don't type anything!

1. Remove the original diskette from Drive 0 and save it.
2. Take the backup diskette out of Drive 1. Place the Backup copy in Drive 0 and close the door.
3. Press **ENTER**.

*Note: If you are using only one Disk Drive, type 0 for Destination Drive Number and follow the instructions given by BACKUP.



Annual Tax Table**Single Person – including head of household:**

If the amount of wages is:	The amount of income tax to be withheld shall be:	
Over –	But Not Over –	Of Excess Over
Not over \$1,420	Ø	
\$1,420 –	\$3,300.15%	\$1,420
\$3,300 –	\$6,800.\$282 plus 18%	\$3,300
\$6,800 –	\$10,200.\$912 plus 21%	\$6,800
\$10,200 –	\$14,200.\$1,626 plus 26%	\$10,200
\$14,200 –	\$17,200.\$2,666 plus 30%	\$14,200
\$17,200 –	\$22,500.\$3,566 plus 34%	\$17,200
\$22,500.\$5,368 plus 39%	\$22,500

Married Person –

If the amount of wages is:	The amount of income tax to be withheld shall be:	
Over –	But Not Over –	Of Excess Over
Not over \$2,400	Ø	
\$2,400 –	\$6,600.15%	\$2,400
\$6,600 –	\$10,900.\$630 plus 18%	\$6,600
\$10,900 –	\$15,000.\$1,404 plus 21%	\$10,900
\$15,000 –	\$19,200.\$2,265 plus 24%	\$15,000
\$19,200 –	\$23,600.\$3,273 plus 28%	\$19,200
\$23,600 –	\$28,900.\$4,505 plus 32%	\$23,600
\$28,900 –\$6,201 plus 37%	\$28,900



**TRINITY
FORMS
COMPANY**

A STAFFORD LOWDON COMPANY

TRS-80 ORDER FORM FOR CUSTOM PRINTED CHECKS

* DESIGNED FOR USE ON TRS-80 TRACTOR FEED PRINTER

ANY BUSINESS U.S.A.	CHECK NO.	DATE
PAY TO	AMOUNT	
ANY BANK ANYWHERE, U.S.A.	AUTHORIZED SIGNATURE	
XXXXXXXXXXXX		
EARNINGS HOURS RATE TYPE OF PAY GROSS EARNINGS	EMPLOYEE NAME	
DEDUCTIONS → FEDERAL W.H. FICA STATE	CHECK NO.	DATE SOCIAL SECURITY NO.
YEAR TO DATE → GROSS FEDERAL W.H. FICA STATE	NET PAY THIS PERIOD ►	
PLEASE DETACH AND RETAIN THIS STATEMENT		

STANDARD SPECIFICATIONS

SIZE: 8½ x 7 (7½ x 7 DETACHED)

NUMBER OF PARTS: ONE

INK COLORS: LIGHT BLUE & BLACK

PAPER: 24LB. WHITE MICR BOND

TO ORDER YOUR FORMS SIMPLY FOLLOW THE STEP BY STEP PROCEDURES AS SHOWN BELOW: REMEMBER THAT YOUR ACCURACY IS VERY IMPORTANT AS YOU WILL BE RESPONSIBLE FOR YOUR ERRORS!

TYPE OR PRINT CLEARLY

- #1- PRINT EXACTLY IN THE SPACE AT RIGHT, THE IMPRINT YOU WANT ON YOUR FORM. SPACE SHOWN IS THE EXACT SIZE AVAILABLE FOR YOUR COMPANY NAME, ADDRESS, STATE, ZIP AND PHONE NUMBER AS DESIRED.

- #2- CHECK QUANTITY DESIRED: WE SUGGEST YOU ORDER AT LEAST A 1 YEARS SUPPLY.

500 1,000 2,500 5,000 10,000 OTHER: _____

PRICES: \$96.00 \$120.00 \$220.00 \$280.00 \$340.00 PRICE WILL BE QUOTED. (OVER 10,000 ONLY)
TEXAS RESIDENTS ADD 5% SALES TAX.

- #3- PLEASE ATTACH A VOIDED CHECK THAT YOU ARE PRESENTLY USING FOR YOUR PAYROLL, OR ATTACH A BANK SPECIFICATION SHEET THAT YOU MAY OBTAIN FROM YOUR BANK. A HANDWRITTEN COPY OF THE ACCOUNT NUMBER IS NOT ACCEPTABLE.

- #4- IF YOU WANT WINDOW ENVELOPES PLEASE CHECK QTY. DESIRED.

NO ENVELOPES 500, \$ 53.00 1,000, \$ 74.00 2,500, \$ 132.00 5,000, \$ 206.00

- #5- CHECK HERE IF YOU HAVE SPECIAL INSTRUCTIONS ON REVERSE.

- #6- ENCLOSURE YOUR CHECK FOR FULL PAYMENT MADE PAYABLE TO TRINITY FORMS COMPANY.

- #7- MAKE SURE ALL INSTRUCTIONS ARE COMPLETE AND CHECK FOR SPELLING ERRORS.

- #8- ALLOW 3 TO 5 WEEKS FOR COMPLETE DELIVERY.

- #9- GIVE US YOUR SHIPPING ADDRESS: _____

- #10- SIGNED: _____ TITLE: _____ PHONE #: _____

- #11- SEND THIS FORM, YOUR VOIDED CHECK SAMPLE OR YOUR BANKS SPECIFICATION SHEET, AND YOUR PAYMENT TO: TRINITY FORMS COMPANY, NO. 1 FORMS DRIVE, CARROLLTON, TEXAS 75006
PRICES SUBJECT TO CHANGE WITHOUT NOTICE



1 © (C) 1979 BY TANDY CORP.
2 CLS:DK=1:ONERRORGOTO99:CLOSE:ONERRORGOTO0:IFDK=1THENCLEAR1700:DK=1:X%=41:ME%=4
0:GOTO10
4 CLEAR0:X=(INT((PEEK(16544)+PEEK(16545)*256)/16000)-2)*60+15
6 PRINT"MAX EMP : ";X:CLEAR(36*X+256):FORX=11TO14:M\$=M\$+CHR\$(PEEK(15360+X)):NEXT
8 ME%=VAL(M\$):X%=ME%+1
10 DEFINTI-N,P,W-Z:DEFSTRV,K:DEFDBLG
40 DIMW,WL,WS,WD,FL,E%(X),E\$(X,5),RG(X),G(X,B),CN(X),PR#(X),NP#(X),TX#(X),V(12),
R(X,7),TX(X,7),B(B,2),P(B,2),D(B,2)
50 P1\$="#,#####":P2\$="###.# ##.% #####.##"
60 POKE16553,255:FORX=0TO11:READV(X):NEXT:V2=" " :V4=" " :V5=" "
70 P3\$="####.##":P4\$="###.##":P5\$="###.##":P\$="###"
80 L\$=STRING\$(31,140):GOSUB5000:X=FRE(X\$):GOTO200
90 DATAGROSS,FICA,FED W/H,STATE W/H,CITY W/H,DISAB.,OTHER,NET PAY,HOURLY,SALARY,
NOT PAID,EMPLOYEE NO.
99 DK=0:RESUMENEXT
100 IN\$="" :W\$=INKEY\$:WD=0:WS=WD:WL%=WD:IFFL=WDTHENFL=1
105 PRINTSTRING\$(ABS(FL),CHR\$(136));STRING\$(ABS(FL),CHR\$(24));
110 PRINTCHR\$(14)::FORW%=1TO25:W\$=INKEY\$:IFW\$<>" " THEN115ELSENEXT:PRINTCHR\$(15)::
FORW%=1TO25:W\$=INKEY\$:IFW\$<>" " THEN115ELSENEXT:GOTO110
115 IFW\$<>CHR\$(13)THEN120ELSEPRINTSTRING\$(ABS(FL)-WL%, " ");
117 PRINTCHR\$(15)::W%=25:NEXT:RETURN
120 PRINTCHR\$(14)::IFW\$=CHR\$(24)THENPRINTSTRING\$(WL%,CHR\$(24))::GOTO100
125 IFW\$<>CHR\$(8)THEN145ELSEIFWL%>0THEN110ELSEPRINTCHR\$(24)::IFFL>0THEN135ELSEIF
PEEK(16418)=44THEN140
130 IFPEEK(16418)=46THENWD=0:GOTO135ELSEIFPEEK(16418)=43ORPEEK(16418)=45THENWS=0
135 IN\$=LEFT\$(IN\$,LEN(IN\$)-1)
140 WL%=WL%-1:POKE16418,136:GOTO110
145 IFABS(FL)=WL%THEN110ELSEIFFL>0THENIFW\$>= " ANDW\$<=" Z " THEN170
150 IFW\$= " . " ANDWD=0THENWD=1:GOTO170
155 IFW\$= " , " THENPRINTW\$::WL%=WL%+1:GOTO175
160 IF (W\$= " - " ORW\$= " + ") ANDWS=0ANDWL%>0THENWS=1:GOTO170
165 IFW\$< " 0 " ORW\$> " 9 " THEN110
170 PRINTW\$::IN\$=IN\$+W\$::WL%=WL%+1
175 IFABS(FL)=1THEN117ELSE110
200 CLS:PRINTTAB(15)" PAYROLL PROCESSING":PRINTL\$;L\$
210 PRINT@202," <E>MPLOYEE CALCULATIONS
220 PRINT@458," <C>HECK REGISTER
230 PRINT@330," <P>INT PAYROLL CHECKS
240 PRINT@586," <S>AVE DATA & END
250 PRINT@778," > ENTER A SELECTION : " ::FL=1:GOSUB100
260 IFIN\$=" E " THENGOSUB1000:GOTO200
270 IFIN\$=" C " THENGOSUB2000:GOTO200
280 IFIN\$=" P " THENGOSUB3000:GOTO200
290 IFIN\$=" S " THENGOTO4000
295 GOTO250
300 I=0:FORX=1TONE:IFE%(X)=ENTHENI=X:X=NE
310 NEXT:IFI=0THENPRINT" NOT FOUND"
320 RETURN

```
400 J=0:PRINT@960,"> IS INFORMATION CORRECT (Y/N) : ";:FL=1:GOSUB100
410 IFIN$="Y"THENJ=1ELSEIFIN$<>"N"THEN400
420 RETURN
901 FORX=1TO2000:NEXT:RETURN
1000 CLS:PRINT@128,L$:CHR$(188);L$:PRINT"REG HRS :
OVERTIME HRS :
OT RATE :

COMMISSIONS
OTHER INCOME
1010 FORX=1TO5:PRINT@X*64+161,V(X)::NEXT:PRINT@545,"DEDUCT 1";:PRINT@609,"DEDUCT
2"
1030 PRINTL$:CHR$(191);L$:PRINT
1040 PRINTL$:CHR$(143);L$:FORX=223TO750STEP64:PRINT@X,CHR$(191)::NEXT
1050 IFFX=1THENFX=0:PRINT@0,V(11)" ":";:GOTO1160
1100 IFI<NETHENT$="(" <N>EXT OR "? TO EXIT )"ELSET$="(? TO EXIT)
1110 PRINT@0,CHR$(30);V(11);T$;" ":";:FL=4:GOSUB100
1115 IFIN$="?"THENRETURN
1120 IFIN$="N"ANDI<NETHENI=I+1:GOTO1160ELSEIFIN$="N"THEN1100
1130 EN=VAL(IN$):IFEN<1THEN1110
1140 GOSUB300:IFI=0THENGOSUB901:GOTO1110
1160 PRINT@12," ":"E%(I)";" ";E$(I,0);TAB(46);E$(I,1)
1170 PRINT@832,CHR$(30)::PRINT@64,:IFRG(I)<100THENPRINTV(8);" RATE : ";USING"##
.####";RG(I);:T=0:GOTO1190
1180 PRINT"ANNUAL SALARY : ";USINGP1$;RG(I);:T=1
1190 PRINTTAB(29);PDS/YR : ";E$(I,4);V2;"EXEMPT : ";E$(I,3);V2;"MAR : ";E$(I,2);
1200 IFPR#(I)>0THEN1500
1210 IFT=0THENPRINT@203,:FL=-5:GOSUB100:R(I,0)=VAL(IN$):R(I,1)=R(I,0)*RG(I)ELSE
R(I,0)=0:R(I,1)=RG(I)/VAL(E$(I,4))
1220 PRINT@210,:USING"##"+P1$;R(I,1);
1230 PRINT@335,:FL=-5:GOSUB100:R(I,2)=VAL(IN$)
1240 IFR(I,2)=0THENR(I,3)=0:GOTO1270ELSEIFT=0THENOT!=RG(I)*1.5ELSEOT!=RG(I)/2080
*1.5
1250 PRINT@896,CHR$(30);TAB(10);"PRESS <ENTER> FOR : "USINGP4$;OT!:
1260 PRINT@394,:FL=-7:GOSUB100:R(I,3)=VAL(IN$):IFR(I,3)=0THENR(I,3)=OT!
1265 PRINT@394,USINGP5$;R(I,3);
1270 R(I,4)=R(I,2)*R(I,3):PRINT@404,:USINGP1$;R(I,4);:PRINT@832,CHR$(31);
1280 PRINT@534,:FL=-7:GOSUB100:R(I,5)=VAL(IN$):PRINT@532,:USINGP1$;R(I,5);
1290 PRINT@598,:GOSUB100:R(I,6)=VAL(IN$):PRINT@596,:USINGP1$;R(I,6);
1300 PR#(I)=R(I,1)+R(I,4)+R(I,5)+R(I,6)
1310 PRINT@704,"GROSS EARNINGS":TAB(20):USINGP1$;PR#(I);
1320 PRINT@896,"> <C>ALCULATE TAXES OR ENTER <M>ANUALLY ":";FL=1:GOSUB100
1330 IFIN$="M"THEN1600ELSEIFIN$<>"C"THEN1320
1340 GOSUB7000:GOSUB8000:GOSUB9000:GOSUB10000:GOSUB11000
1350 PRINT@566,:FL=-7:GOSUB100:TX(I,5)=VAL(IN$):PRINT@564,:USINGP1$;TX(I,5);
1360 PRINT@630,:GOSUB100:TX(I,6)=VAL(IN$):PRINT@628,:USINGP1$;TX(I,6);
1370 TX#(I)=0:FORX=0TO6:TX#(I)=TX#(I)+TX(I,X):NEXT
1380 PRINT@737,"TOTAL DEDUCTIONS":TAB(52):USINGP1$;TX#(I);
1390 NP#(I)=PR#(I)-TX#(I):PRINT@842,V(7)" = "USINGP1$;NP#(I):PRINTCHR$(31);
```

```
1400 GOSUB400:IFJ=1THEN1000
1420 PRINT@960,CHR$(30);"> <R>E-ENTER OR <C>ANCEL ";;FL=1:GOSUB100
1430 PR#(I)=0:IFIN$="R"THENFX=1ELSEFX=0:IFIN$<>"C"THEN1420
1440 GOTO1000
1500 IFT=0THENPRINT@204,:USINGP5$;R(I,0);
1510 PRINT@210,:USING"$$"+P1$;R(I,1);
1520 PRINT@335,:USINGP5$;R(I,2)::PRINT@394,:USINGP5$;R(I,3);
1530 PRINT@404,:USINGP1$;R(I,4)::PRINT@532,:USINGP1$;R(I,5);
1540 PRINT@596,:USINGP1$;R(I,6)::PRINT@704,"GROSS EARNINGS":TAB(20);USINGP1$;PR#
(I);
1550 FORX=0TO6:PRINT@X*64+244,:USINGP1$;TX(I,X)::NEXT:GOTO1370
1600 FORX=0TO6:IFX=2ANDC(5)=0THEN1630
1610 IFX=3ANDC(7)=0THEN1630ELSEIFX=4ANDC(8)=0THEN1630
1620 PRINT@X*64+244,:FL=-7:GOSUB100:TX(I,X)=VAL(IN$):PRINT@X*64+244,:USINGP1$;T
X(I,X);
1630 NEXT:GOTO1370
2000 CLS:H$="CHECK REGISTER":PRINTTAB(15);H$
2005 FORX=0TO7:T#(X)=0:NEXT
2007 PRINT"
> <S>CREEN OR <P>RINTER (S OR P) : ";;FL=1:GOSUB100:IFIN$="S"THEN2200ELSEIF
IN$<>"P"THEN2007
2010 IFDT$=""THENPRINT"
> DATE (MM/DD/YY) : ";;FL=8:GOSUB100:DT$=IN$:IFLEN(DT$)<>8THEN2010
2020 POKE16425,1:IFPEEK(14312)>127THENPRINT@256,"** PRINTER NOT READY **

> PRESS <ENTER> TO CONTINUE OR <a> TO EXIT : ";;FL=1:GOSUB100:IFIN$="a"THEN
RETURNELSEGOTO2020
2070 GOSUB2170:FORI=1TON:GOSUB2160:LPRINTTAB(7)USINGP$+V4:E%(I)::LPRINTE$(I,0);
TAB(40);
2080 IFPR#(I)=0THENLPRINTV(10):GOTO2130ELSEPRINTUSINGP3$;PR#(I)
2085 LPRINTUSINGP$+"#" + V2 + P3$ + " ";CN(I);
2090 FORX=0TO6:LPRINTUSINGP4$+V2;TX(I,X)::NEXT:LPRINTUSINGP3$;NP#(I)
2110 T#(0)=T#(0)+PR#(I):T#(7)=T#(7)+NP#(I)
2120 FORX=0TO4:T#(X+1)=T#(X+1)+TX(I,X)::NEXT:T#(6)=T#(6)+TX(I,5)+TX(I,6)
2130 LPRINTCHR$(138)::NEXT:LPRINTCHR$(12):LPRINTTAB(15);"PAYROLL TOTALS":LPRINTST
RING$(40,"=")
2140 FORX=0TO7:LPRINTV(X);TAB(30);USINGP3$+" ";T#(X)::NEXT:LPRINT
2150 LPRINTCHR$(12)::RETURN
2160 IFPEEK(16425)<58THENRETURNELSEPRINTCHR$(12)
2170 LPRINTTAB(10);C$;V2;H$;V4;DT$::LPRINTCHR$(138)
2175 LPRINTTAB(7);"EMP #      NAME":TAB(40);"GROSS /
2180 LPRINT"CHK #";V4;V(1)V2;V(2)V2;V(3)V2;V(4)V2;V(5)V2;" DED 1      DED 2 "V2;V(
7)
2190 LPRINTSTRING$(80,"=")::LPRINTCHR$(138)::RETURN
2200 CT=1:GOSUB2300:FORI=1TON:IFCT=6THENGOSUB2400:GOSUB2300
2210 PRINTEX%(I);V2;E$(I,0);TAB(30)::IFPR#(I)=0THENLPRINTV(10):GOTO2240
2215 PRINTUSINGP4$+" ";PR#(I);NP#(I)
2220 PRINTUSING"##### ";CN(I)::FORX=0TO6:PRINTUSING" "+P4$;TX(I,X)::NEXT:PRINT
2230 T#(0)=T#(0)+PR#(I):T#(7)=T#(7)+NP#(I):FORX=1TO5:T#(X)=T#(X)+TX(I,X-1)::NEXT:
```

```
T#(6)=T#(6)+TX(I,5)+TX(I,6)
2240 CT=CT+1:NEXT:GOSUB2400
2250 CLS:PRINTTAB(10);"PAYROLL TOTALS

":FORX=0TO7:PRINTV(X):NEXT
2260 FORX=0TO7:PRINT@220+64*X,USINGP1$;T#(X)::NEXT:GOTO2400
2300 CLS:PRINT"EMP # NAME"TAB(30)"GROSS      NET /
    CHK #   FICA   FED W/H STATE CITY DISAB.    DED 1    DED 2":PRINTSTRIN
    G$(63,"-"):RETURN
2400 CT=1:PRINT@960;"> PRESS <ENTER> TO CONTINUE : "::FL=1:GOSUB100:RETURN
3000 CLS:PRINT"> LOAD CHECKS IN PRINTER":I=0
3010 PRINT@128;"> TEST PRINTER ALIGNMENT (Y/N) ? "::FL=1:GOSUB100
3020 IFIN$="Y" THENI=0:DT$=P$+P$:E$(0,1)=P5$+.+"+P$::GOSUB3190:GOTO3010
3030 IFIN$<>"N"THEN3010
3040 PRINT@256;"> STARTING CHECK NO. : "::FL=-5:GOSUB100:CN=VAL(IN$)
3050 PRINT@384;"> DATE (MM/DD/YY) : "::FL=8:GOSUB100:IFLEN(IN$)<>8THEN3050ELSEDT
    $=IN$
3060 PRINT@640;"> <A>LL OR <I>NDIVIDUAL CHECKS : "::FL=1:GOSUB100
3065 IFIN$="A" THENI=1:NF=1ELSEIFIN$="I" THENN=0ELSE3060
3070 GOSUB400:IFIJ=0THEN3040
3080 CT=0:CLS:PRINT"EMP. # V5"NAME"TAB(40)V(7)
3090 PRINTSTRING$(63,"="):IFNF=0THENPRINT@960,"'N' FOR NEXT EMPLOYEE, '0' TO EXI
    T";:PRINT@128,;
3100 IFNF=1THEN3150ELSEFL=4:GOSUB100:IFIN$="0"THENRETURNSEEN=VAL(IN$)
3110 IFIN$="N"ANDI<NETHENI=I+1:GOTO3150ELSEIFIN$="N"THEN3100
3130 GOSUB300:IFI=0THEN3340
3150 PRINTCHR$(29):USINGP$;E%(I)::IFPR#(I)=0THENPRINTV2;E$(I,0);V2;V(10)::GOTO33
    35
3160 PRINTTAB(7);E$(I,0);TAB(38);USINGP1$;NP#(I);
3190 CN(I)=CN:LF=3:GOSUB3900:LPRINTTAB(45);CN;TAB(56);DT$
3200 LF=4:GOSUB3900:LPRINTTAB(14);E$(I,0);TAB(56);USING"***"+P1$;NP#(I)
3210 LF=10:GOSUB3900:IFRG(I)<100THEN=0ELSESET=1
3215 IFT=0THENP0!=RG(I)ELSEP0!=0
3220 LPRINTTAB(4)USINGP2$;R(I,0);P0!;V(T+B);R(I,1)
3230 LPRINTTAB(42);E$(I,0)V2;E%(I)
3240 LPRINTTAB(4);USINGP2$;R(I,2);R(I,3);"OT HRS";R(I,4)
3250 LPRINTCHR$(138):LPRINTTAB(17);"COMM";TAB(26);USINGP3$;R(I,5)
3260 LPRINTTAB(40);CN;TAB(49);DT$;V2;E$(I,1)
3270 LPRINTTAB(17);V(6);TAB(26);USINGP3$;R(I,6)
3290 LF=2:GOSUB3900:LPRINTTAB(17);V(T+B);TAB(26);USINGP3$;PR#(I);
3300 LPRINTTAB(59)USING"***"+P1$;NP#(I)
3310 LF=3:GOSUB3900:LPRINTTAB(14)::LPRINTUSINGP4$;TX(I,1)::LPRINTTAB(24);USINGP4
    $+" ";TX(I,0);
3315 FORX=2TO6:LPRINTUSINGP3$;TX(I,X)::NEXT:LPRINT
3320 GOSUB3900:LPRINTTAB(18);USINGP3$+" "+P3$+" "+P3$+V2+P4$+V2+P3$+V2+P4$;G(I,0
    )+PR#(I);G(I,2)+TX(I,1);G(I,1)+TX(I,0);G(I,3)+TX(I,2);G(I,4)+TX(I,3);G(I,5)
    +TX(I,4)
3330 LF=5:GOSUB3900:IFI=0THENRETURNSEEN=CN+1
3335 IFNF=1THENI=I+1:IFI>NETHENI=0:PRINT"
```

```

CHECKS PRINTED": :GOSUB901:RETURN
3340 CT=CT+1:IFCT>10THEN3080ELSEPRINT:GOTO3100
3900 FORX=1TO1F:LPRINTCHR$(138):NEXT:RETURN
4000 CLS:PRINT"UPDATING TOTALS":FORI=1TONE:IFPR#(I)=0THEN4030
4010 G(I,0)=G(I,0)+PR#(I):G(I,8)=G(I,8)+NP#(I)
4020 FORX=1TO7:G(I,X)=G(I,X)+TX(I,X-1):NEXT
4030 NEXT:GOTO6000
5000 IFDK=1THENOPEN" I ",1," PRDATA" ELSEDK=-1:T$=" PLAY":GOSUB5200
5010 PRINT"

** READING PAYROLL DATA
5020 INPUT#DK,C$,NE,C(1),C(2),C(3),C(4),C(5),C(6),C(7),C(8)
5030 FORX=0TO1:INPUT#DK,B(0,X),B(1,X),B(2,X),B(3,X),B(4,X),B(5,X),B(6,X),B(7,X),
P(0,X),P(1,X),P(2,X),P(3,X),P(4,X),P(5,X),P(6,X),P(7,X),D(0,X),D(1,X),D(2,X),
D(3,X),D(4,X),D(5,X),D(6,X),D(7,X):NEXT
5090 FORX=1TONE
5100 INPUT#DK,E%(X),E$(X,0),E$(X,1),E$(X,2),E$(X,3),E$(X,4),RG(X)
5110 INPUT#DK,G(X,0),G(X,1),G(X,2),G(X,3),G(X,4),G(X,5),G(X,6),G(X,7),G(X,8)
5120 NEXT:IFDK=1THENCLOSE:RETURNELSERETURN
5200 CLS:PRINT"LOAD DATA TAPE & REWIND
      SET TO "T$:PRINT@320,"PRESS <ENTER> WHEN READY : " ;:FL=1:GOSUB100:RETURN
6000 K="" :IFDK=1THENOPEN" O ",1," PRDATA" ELSEK="" :DK=-1:T$=" RECORD":GOSUB5200
6010 D$="," :PRINT#DK,C$;D$;NE;K;C(1);K;C(2);K;C(3);K;C(4);K;C(5);K;C(6);K;C(7);K
;C(8):FORX=0TO1
6020 PRINT#DK,B(0,X);K;B(1,X);K;B(2,X);K;B(3,X);K;B(4,X);K;B(5,X);K;B(6,X);K;B(7
,X);K;P(0,X);K;P(1,X);K;P(2,X);K;P(3,X);K;P(4,X);K;P(5,X);K;P(6,X);K;P(7,X)
;K;D(0,X);K;D(1,X);K;D(2,X);K;D(3,X);K;D(4,X);K;D(5,X);K;D(6,X);K;D(7,X):NE
XT
6050 FORI=1TONE:PRINT#DK,E%(I);D$;E$(I,0);D$;E$(I,1);D$;E$(I,2);D$;E$(I,3);D$;E$
(I,4);D$;RG(I)
6060 PRINT#DK,USING"#####.##D0"+K;G(I,0);G(I,1);G(I,2);G(I,3);G(I,4);G(I,5);G(I
,6);G(I,7);G(I,8)
6070 NEXTI:IFDK=1THENRUN"PAYROLL"ELSEPRINT"
> DO YOU WANT TO MAKE ANOTHER COPY (Y/N) : "
6080 FL=1:GOSUB100:IFIN$="Y" THEN6000ELSEIFIN$>"N" THENPRINTCHR$(8):GOTO6080ELSE
END
7000 IFG(I,6)>C(3)THENTX(I,0)=0:GOT07040
7010 IFG(I,6)+PR#(I)<=C(3)THENFG=PR#(I)ELSEFG=C(3)-G(I,7)
7020 TX(I,0)=C(2)/100*FG
7040 PRINT@244,:USINGP1$;TX(I,0);:RETURN
8000 AG#=PR#(I)*VAL(E$(I,4))-VAL(E$(I,3))*C(4)
8010 MS=0:IFE$(I,2)="M" THENMS=1
8020 FORX=0TO7:IFAG#<B(X,MS)THENBR=X:X=7ELSEIFX=7THENBR=X
8030 NEXT:IFBR=0THENTX(I,1)=0:GOT08050
8040 TX(I,1)=((AG#-B(BR-1,MS))*P(BR,MS)/100+D(BR,MS))/VAL(E$(I,4))
8050 PRINT@308,:USINGP1$;TX(I,1);:RETURN
9000 IFC(5)=0THENTX(I,2)=0
9010 IFC(5)=3THENPRINT@374,:FL=-7:GOSUB100:TX(I,2)=VAL(IN$)
9020 IFC(5)=1THENTX(I,2)=PR#(I)*(C(6)/100)
9030 IFC(5)=2THENTX(I,2)=TX(I,1)*(C(6)/100)

```

```
9050 PRINT@372,:USINGP1$:TX(I,2)::RETURN
10000 IFC(7)=0THEN TX(I,3)=0
10010 IFC(7)=-1THEN PRINT@436,:FL=-7:GOSUB100:TX(I,3)=VAL(IN$)
10020 IFC(7)>0THEN TX(I,3)=PR#(I)*(C(7)/100)
10030 PRINT@436,:USINGP1$:TX(I,3)::RETURN
11000 IFC(8)=0THEN TX(I,4)=0
11010 IFC(8)=-1THEN PRINT@500,:FL=-7:GOSUB100:TX(I,4)=VAL(IN$)
11020 IFC(8)>0THEN TX(I,4)=C(8)
11030 PRINT@500,:USINGP1$:TX(I,4)::RETURN
```

```
1 '(C) 1977 BY TANDY CORP.
2 CLS:DK=1:ONERRORGOTO99:CLOSE:ONERRORGOTO0:IFDK=1THENCLEAR1900:DK=1:X%=41:ME%=4
  0:GOTO10
4 CLEAR0:X=(INT((PEEK(16544)+PEEK(16545)*256)/16000)-2)*60+15
6 PRINT"MAX EMP : "X:CLEAR(36*X+256):FORX=11TO14:M#=M#+CHR$(PEEK(15360+X)):NEXT
8 ME%=VAL(M#):X%=ME%+1
10 CLS:DEFINTI-N,P,W,X:DEFDBLG:DEFSTRK:PRINTTAB(10);"PAYROLL SYSTEM - COMPANY MA
  INTENANCE"
20 DIMW, WL, WD, WS, FL, B(8,2), P(8,2), D(8,2), G(X,8), E%(X), E$(X,5), RG(X)
25 P1$="###,###.##      ###,###.##      ###,###.##      ###,##":P$="###,###.##,###
27 N$="NONE":M$="MANUAL":F$="% OF FED W/H":G$="% OF GROSS":FA$="FIXED AMOUNT
30 PRINT
  > DO YOU WISH TO START A NEW PAYROLL (YES OR NO) : ";;FL=3:GOSUB100
40 IFIN$="YES"THEN200ELSEIFIN$="NO"THENGOSUB5000:GOTO200:ELSEGOTO30
99 DK=0:RESUMENEXT
100 IN$="" :W$=INKEY$:WD=0:WS=WD:WL%=WD:IFFL=WDTHENFL=1
105 PRINTSTRING$(ABS(FL),CHR$(136));STRING$(ABS(FL),CHR$(24));
110 PRINTCHR$(14)::FORW%=1TO25:W$=INKEY$:IFW$<>" THEN115ELSENEXT:PRINTCHR$(15)::

  FORW%=1TO25:W$=INKEY$:IFW$<>" THEN115ELSENEXT:GOTO110
115 IFW$<>CHR$(13)THEN120ELSEPRINTSTRING$(ABS(FL)-WL%, " ");
117 PRINTCHR$(15)::W%=25:NEXT:RETURN
120 PRINTCHR$(14)::IFW$=CHR$(24)THENPRINTSTRING$(WL%,CHR$(24))::GOTO100
125 IFW$<>CHR$(8)THEN145ELSEIFWL%>0THEN110ELSEPRINTCHR$(24)::IFFL>0THEN135ELSEIF
  PEEK(16418)=44THEN140
130 IFPEEK(16418)=46THENWD=0:GOTO135ELSEIFPEEK(16418)=43ORPEEK(16418)=45THENWS=0
135 IN$=LEFT$(IN$,LEN(IN$)-1)
140 WL%=WL%-1:POKE16418,136:GOTO110
145 IFABS(FL)=WL%THEN110ELSEIFFL>0THENIFW$>= " ANDW$<= " Z " THEN170
150 IFW$=". " ANDWD=0THENWD=1:GOTO170
155 IFW$="," THENPRINTW$::WL%=WL%+1:GOTO175
160 IF(W$="-- ORW$= "+") ANDWS=0 ANDWL%>0 THENWS=1:GOTO170
165 IFW$< " 0 " ORW$> " 9 " THEN110
170 PRINTW$::IN$=IN$+W$::WL%=WL%+1
175 IFABS(FL)=1THEN117ELSE110
200 CLS:PRINTTAB(20);C$::PRINTTAB(15)"PAYROLL SYSTEM - COMPANY MAINTENANCE"
210 PRINT@264,"<T> A X   T A B L E S":PRINT@392,"<P> A Y R O L L   I N F O R M A
  T I O N
220 PRINT@520,"<S> A V E   D A T A   &   E N D
230 PRINT@718,"> ENTER A SELECTION : ";;FL=1:GOSUB100
240 IFIN$="T"THENGOSUB1000:GOTO200:ELSEIFIN$="P"THENGOSUB2000:GOTO200
250 IFIN$="S"THENGOSUB6000:END:ELSEGOTO230
1000 CLS:PRINTTAB(10);"FEDERAL TAX TABLES
1010 PRINT@202,"<S> I N G L E   T A B L E":PRINT@330,"<M> A R R I E D   T A B L
  E
1020 PRINT@458,"<R> E T U R N":PRINT@714,"> ENTER A SELECTION : ";;FL=1:GOSUB100
1030 IFIN$="S"THENM=0:MS$="SINGLE":ELSEIFIN$="M"THENM=1:MS$="MARRIED":ELSEIFIN$=
  "R"THENRETURNSEGOTO1020
1040 PRINT@128,"> IS THIS A NEW TABLE (Y/N) : ";CHR$(31)::FL=1:GOSUB100
1045 IFIN$="Y"THENNW=1ELSENW=0:IFIN$<>"N"THEN1040
```

```
1047 IFNW=1 THEN FORX=0 TO 7: B(X,M)=0: P(X,M)=0: D(X,M)=0: NEXT
1050 PRINT@28, " - "; MS$; " EMPLOYEES"; CHR$(31)
1055 PRINT@78, "ANNUAL PAYROLL PERIOD TABLE"
1060 PRINT@197, "LOWER LIMIT" TAB(20); "UPPER LIMIT" TAB(36) "FIXED AMOUNT" TAB(51); "% OF EXCESS"
1070 PRINT STRING$(63, "-") : FORX=0 TO 7: IFX=0 THEN B=0 ELSE B=B(X-1,M)
1080 PRINT X+1; "); TAB(6) USING P1$: B; B(X,M); D(X,M); P(X,M): NEXT
1085 IFNW=1 THEN 1200
1090 PRINT@960, CHR$(30); : PRINT@896, CHR$(30); "> LINE # TO BE CORRECTED (OR <@> TO RETURN) : " ; : FL=1: GOSUB100
1100 IF IN$="@" THEN 1000 ELSE X=VAL(IN$): IF X<10 THEN 1090
1110 IF X<8 THEN PRINT@960, CHR$(30); "> ENTER UPPER LIMIT (LINE"; X; ") : " ; : FL=-6: GOSUB100 ELSE IN$="999999"
1120 B(X-1,M)=VAL(IN$): PRINT@X*64+276, ; USING P$: B(X-1,M);
1130 PRINT@960, CHR$(30); "> FIXED AMOUNT : " ; : FL=-7: GOSUB100: D(X-1,M)=VAL(IN$)
1140 PRINT@X*64+292, ; USING P$: D(X-1,M);
1150 PRINT@960, CHR$(30); "> % OF EXCESS OVER LOWER LIMIT : " ; : FL=-3: GOSUB100
1160 P(X-1,M)=VAL(IN$): PRINT@X*64+311, ; USING "###": P(X-1,M);
1170 IF X<8 THEN PRINT@X*64+326, ; USING P$: B(X-1,M);
1180 IF RF=1 THEN RETURN ELSE GOTO1090
1200 RF=1: FORX=1 TO 8: GOSUB1110: NEXT: RF=0
1210 PRINT@960, CHR$(30); "> ARE ALL ENTRIES CORRECT (Y/N) : " ;
1220 FL=1: GOSUB100: IF IN$="Y" THEN MF(M)=1: GOTO1000 ELSE IF IN$="N" THEN 1090 ELSE GOTO1210
0
2000 CLS: PRINT TAB(10), " COMPANY PAYROLL INFORMATION"
2010 PRINT@128, "1) COMPANY NAME
2) COMPANY FICA PERCENT
3) EMPLOYEE FICA PERCENT
4) MAX. FICA LIMIT
5) ANNUAL EXEMPTION
6) STATE W/H TYPE (G,F,M OR N)
7) STATE W/H RATE
8) CITY W/H (G,M OR N)
9) DISABILITY (F,M OR N)
2020 FI=0: GOSUB2200: IF C$="" THEN FI=1: FOR Q=1 TO 9: GOTO2070
2030 FI=0: PRINT@832, "> IS ALL INFORMATION CORRECT (Y/N) " ; CHR$(30); : FL=1: GOSUB100
0
2040 IF IN$="Y" THEN RETURN ELSE IF IN$<>"N" THEN 2030
2050 PRINT@832, CHR$(30); "> ENTER LINE # TO BE CORRECTED : " ; : FL=-1: GOSUB100
2060 Q=VAL(IN$): IF Q<1 THEN 2050
2070 PRINT@832, CHR$(30); "> ENTER LINE #"; Q; " : " ;
2080 IF Q=1 THEN FL=20: GOSUB100: C$=IN$: PRINT@161, C$; CHR$(30); : GOTO2140
2085 IF Q>1 AND Q<6 THEN FL=-7: GOSUB100: C(Q-1)=VAL(IN$): PRINT@64*(Q-1)+160, CHR$(30); : IN$; : GOTO2140
2090 IF Q<>6 THEN 2100 ELSE V$="" : FL=1: GOSUB100: IF IN$="N" THEN C(5)=0: V$=N$
2092 IF IN$="G" THEN C(5)=1: V$=G$ ELSE IF IN$="F" THEN C(5)=2: V$=F$
2094 IF IN$="M" THEN C(5)=3: V$=M$ ELSE IF V$="" THEN PRINT CHR$(8); : GOTO2090
2096 PRINT@480, V$; CHR$(30); : GOTO2140
2100 IF Q=7 AND (C(5)=1 OR C(5)=2) THEN FL=-7: GOSUB100: C(6)=VAL(IN$): PRINT@544, C(6); CHR$(30); : GOTO2140
```

```

2110 IFQ<>8THEN2120ELSEV$="" :FL=1:GOSUB100:IFIN$="N"THENC(7)=0:V$=N$  

2112 IFIN$="M"THENC(7)=-1:V$=M$ELSEIFIN$="G"THENV$=G$:PRINTTAB(34);"PERCENT : ";  

:FL=-7:GOSUB100:C(7)=VAL(IN$):V$=V$+" = "+STR$(C(7))  

2113 IFV$=""THENPRINTCHR$(8)::GOTO2110  

2114 PRINT@608,V$:CHR$(30)::GOTO2140  

2120 IFQ<>9THEN2140ELSEV$="" :FL=1:GOSUB100:IFIN$="N"THENC(8)=0:V$=N$  

2130 IFIN$="M"THENC(8)=-1:V$=M$ELSEIFIN$="F"THENV$=FA$:PRINTTAB(34);FA$+" : ";  

L=-7:GOSUB100:C(8)=VAL(IN$):V$=V$+" = "+STR$(C(8))  

2132 IFV$=""THENPRINTCHR$(8)::GOTO2120  

2135 PRINT@672,V$:CHR$(30);  

2140 IFFI=1THENNEXT  

2150 GOTO2030  

2200 PRINT@161,C$::FORX=1TO4:PRINT@X*64+160,C(X);CHR$(30)::NEXT  

2210 IFC(5)=0THENV$=N$ELSEIFC(5)=3THENV$=M$ELSEIFC(5)=1THENV$=G$ELSEIFC(5)=2THEN  

V$=F$  

2220 PRINT@480,V$:CHR$(30);  

2230 PRINT@544,C(6);  

2240 IFC(7)=0THENV$=N$ELSEIFC(7)=-1THENV$=M$ELSEV$=G$+STR$(C(7))  

2250 PRINT@608,V$:CHR$(30);  

2260 IFC(8)=0THENV$=N$ELSEIFC(8)=-1THENV$=M$ELSEV$=FA$+" = "+STR$(C(8))  

2270 PRINT@672,V$:CHR$(30)::RETURN  

5000 IFDK=1THENOPEN" I ",1,"PRDATA"ELSEDK=-1:T$="PLAY":GOSUB5200  

5010 PRINT"  

    ** READING PAYROLL DATA  

5020 INPUT#DK,C$,NE,C(1),C(2),C(3),C(4),C(5),C(6),C(7),C(8)  

5030 FORX=0TO1:INPUT#DK,B(0,X),B(1,X),B(2,X),B(3,X),B(4,X),B(5,X),B(6,X),B(7,X),  

P(0,X),P(1,X),P(2,X),P(3,X),P(4,X),P(5,X),P(6,X),P(7,X),D(0,X),D(1,X),D(2,X)  

,D(3,X),D(4,X),D(5,X),D(6,X),D(7,X)::NEXT  

5090 FORX=1TONE  

5100 INPUT#DK,E$(X,0),E$(X,1),E$(X,2),E$(X,3),E$(X,4),RG(X)  

5110 INPUT#DK,G(X,0),G(X,1),G(X,2),G(X,3),G(X,4),G(X,5),G(X,6),G(X,7),G(X,8)  

5120 NEXT:IFDK=1THENCLOSE:RETURNELSERETURN  

5200 CLS:PRINT"LOAD DATA TAPE & REWIND  

    SET TO "T$":PRINT@320,"PRESS <ENTER> WHEN READY : ";:FL=1:GOSUB100:RETURN  

6000 K="" :IFDK=1THENOPEN" O ",1,"PRDATA"ELSEK="," :DK=-1:T$="RECORD":GOSUB5200  

6010 D$="," :PRINT#DK,C$;D$;NE;K;C(1);K;C(2);K;C(3);K;C(4);K;C(5);K;C(6);K;C(7);K  

;C(8):FORX=0TO1  

6020 PRINT#DK,B(0,X);K;B(1,X);K;B(2,X);K;B(3,X);K;B(4,X);K;B(5,X);K;B(6,X);K;B(7  

,X);K;P(0,X);K;P(1,X);K;P(2,X);K;P(3,X);K;P(4,X);K;P(5,X);K;P(6,X);K;P(7,X)  

;K;D(0,X);K;D(1,X);K;D(2,X);K;D(3,X);K;D(4,X);K;D(5,X);K;D(6,X);K;D(7,X);NE  

XT  

6050 FORI=1TONE:PRINT#DK,E$(I);D$;E$(I,0);D$;E$(I,1);D$;E$(I,2);D$;E$(I,3);D$;E$  

(I,4);D$;RG(I)  

6060 PRINT#DK,USING"#####.##D0"+K;G(I,0);G(I,1);G(I,2);G(I,3);G(I,4);G(I,5);G(I  

,6);G(I,7);G(I,8)  

6070 NEXTI:IFDK=1THENRUN"PAYROLL"ELSEPRINT"  

> DO YOU WANT TO MAKE ANOTHER COPY (Y/N) : "  

6080 FL=1:GOSUB100:IFIN$="Y"THEN6000ELSEIFIN$<>"N"THENPRINTCHR$(8)::GOTO6080ELSE  

END

```

10 ' RADIO SHACK TRS-80 TAPE/DISK PAYROLL SYSTEM
20 ' (C) 1979 BY TANDY CORPORATION - ALL RIGHTS RESERVED

```
30 CLOSE:CLEAR1000:GOTO200
100 IN$="" :W$=INKEY$:WD=0:WS=WD:WL% =WD:IFFL=WDTHENFL=1
105 PRINTSTRING$(ABS(FL),CHR$(136));STRING$(ABS(FL),CHR$(24));
110 PRINTCHR$(14)::FORW%=1TO25:W$=INKEY$:IF W$<>"" THEN115ELSENEXT:PRINTCHR$(15)::

    FORW%=1TO25:W$=INKEY$:IF W$<>"" THEN115ELSENEXT:GOTO110
115 IF W$<>CHR$(13)THEN120ELSEPRINTSTRING$(ABS(FL)-WL%, " ");
117 PRINTCHR$(15)::W%=25:NEXT:RETURN
120 PRINTCHR$(14)::IF W$=CHR$(24)THENPRINTSTRING$(WL%,CHR$(24))::GOTO100
125 IF W$<>CHR$(8)THEN145ELSEIF WL% =0THEN110ELSEPRINTCHR$(24)::IFFL>0THEN135ELSEIF
    PEEK(16418)=44THEN140
130 IF PEEK(16418)=46THENWD=0:GOTO135ELSEIF PEEK(16418)=43ORPEEK(16418)=45THENWS=0
135 IN$=LEFT$(IN$,LEN(IN$)-1)
140 WL% =WL%-1:POKE16418,136:GOTO110
145 IF ABS(FL)=WL% THEN110ELSEIFFL>0THENIF W$>= " AND W$<=" Z " THEN170
150 IF W$= " . " AND WD=0THENWD=1:GOTO170
155 IF W$= " ." THENPRINTW$::WL% =WL% +1:GOTO175
160 IF (W$= " - " OR W$= "+ ") AND WS=0 AND WL% =0 THEN WS=1:GOTO170
165 IF W$<" 0 " OR W$>" 9 " THEN110
170 PRINTW$::IN$=IN$+W$::WL% =WL% +1
175 IF ABS(FL)=1THEN117ELSE110
200 CLS:PRINT@14," PAYROLL SYSTEM - MASTER MENU":PRINTSTRING$(63,140)
210 PRINT@200," <C> O M P A N Y I N F O M A I N T E N A N C E
220 PRINT@328," <E> M P L O Y E E I N F O M A I N T E N A N C E
230 PRINT@456," <P> A Y R O L L P R O C E S S I N G
240 PRINT@584," <T> O T A L S & Y E A R E N D
250 PRINT@712," <@> E N D S E S S I O N
260 PRINT@832,STRING$(63,"-")
270 PRINT@970," > ENTER A SELECTION : " ::FL=1:GOSUB100
280 IF IN$=" C " THEN RUN" COMAINT
290 IF IN$=" E " THEN RUN" PRMAINT
300 IF IN$=" P " THEN RUN" PRPROC
310 IF IN$=" T " THEN RUN" PRTOT
320 IF IN$<>" @ " THEN270
```

```
1 *(C) 1979 BY TANDY CORP.
2 CLS:DK=1:ONERRORGOT099:CLOSE:ONERRORGOT00:IFDK=1THENCLEAR1900:DK=1:X%=41:ME%=4
  0:GOTO10
4 CLEAR0:X=(INT((PEEK(16544)+PEEK(16545)*256)/16000)-2)*60+15
5 PRINT"MAX EMP : ";X:CLEAR(36*X+256):FORX=11TO14:M$=M$+CHR$(PEEK(15360+X)):NEXT
8 ME%=VAL(M$):X%=ME%+1
10 DEFINTI-N,W-Z,P:DEFDBLG:DEFSTRK
20 DIMW WL WS WD FL,B(8,2),P(8,2),D(8,2),E$(X,5),RG(X),G(X,8),EX(X)
30 GOSUB5000:PR$=" PAYROLL TOTALS"
40 P$="###":P1$="####.##":P2$="#,###.##"
50 POKE16553,255:FORX=0TO8:READV$(X):NEXT:X=FRE(X$):GOTO200
60 DATA$GROSS,FICA,FED W/H,STATE W/H,CITY W/H,DISABILITY,DEDUCT. 1,DEDUCT. 2,NET
  PAY
99 DK=0:RESUMENEXT
100 IN$=" " :W$=INKEY$:WD=0:WS=WD:WL%=WD:IFFL=WDTHENFL=1
105 PRINTSTRING$(ABS(FL),CHR$(136));STRING$(ABS(FL),CHR$(24));
110 PRINTCHR$(14);:FORW%=1TO25:W$=INKEY$:IFW$<>" " THEN115ELSENEXT:PRINTCHR$(15);:
  FORW%=1TO25:W$=INKEY$:IFW$<>" " THEN115ELSENEXT:GOTO110
115 IFW$<>CHR$(13)THEN120ELSEPRINTSTRING$(ABS(FL)-WL%, " ");
117 PRINTCHR$(15);:W%=25:NEXT:RETURN
120 PRINTCHR$(14);:IFW$=CHR$(24)THENPRINTSTRING$(WL%,CHR$(24));:GOTO100
125 IFW$<>CHR$(8)THEN145ELSEIFWL%>0THEN110ELSEPRINTCHR$(24);:IFFL>0THEN135ELSEIF
  PEEK(16418)=44THEN140
130 IFPEEK(16418)=46THENWD=0:GOTO135ELSEIFPEEK(16418)=43ORPEEK(16418)=45THENWS=0
135 IN$=LEFT$(IN$,LEN(IN$)-1)
140 WL%=WL%-1:POKE16418,136:GOTO110
145 IFABS(FL)=WL%THEN110ELSEIFFL>0THENIFW$>= " ANDW$<=" Z" THEN170
150 IFW$=". " ANDWD=0THENWD=1:GOTO170
155 IFW$="," THENPRINTW$;:WL%=WL%+1:GOTO175
160 IF(W$="-" ORW$="+")ANDWS=0ANDWL%>0THENWS=1:GOTO170
165 IFW$<>"0" ORW$>"9" THEN110
170 PRINTW$;:IN$=IN$+W$:WL%=WL%+1
175 IFABS(FL)=1THEN117ELSE110
200 CLS:PRINTTAB(15);PR$:PRINTSTRING$(63,"=")
210 PRINT@325,"<P> R I N T Y T D P A Y R O L L T O T A L S
220 PRINT@453,"<D> I S P L A Y Y T D P A Y R O L L T O T A L S
230 PRINT@581,"<S> A V E D A T A & E N D
240 PRINT@773,"> ENTER A SELECTION : ";:FL=1:GOSUB100
250 IFIN$="P"THEN1000
260 IFIN$="D"THEN1200
270 IFIN$="S"THEN60000ELSEGOTO200
300 FORX=0TO8:T#(X)=0:NEXT:RETURN
1000 CLS:PRINTTAB(20);PR$
1040 IFPEEK(14312)>127THENPRINT@384,"** PRINTER NOT READY **
  > PRESS <ENTER> TO CONTINUE OR '@' TO EXIT : ";:FL=1:GOSUB100:IFIN$="@" THEN
  RETURNELSE1040
1050 POKE16425,1:GOSUB300:GOSUB1160:FORI=1TON:LPRIINTUSINGP$;E%(I);:LPRIINT"   ";E
  $(I,0);TAB(27);USINGP1$+"   ";G(I,0);G(I,8)
1055 T#(0)=T#(0)+G(I,0):T#(8)=T#(8)+G(I,8):LPRIINT"
```

```
1060 FORX=1TO7:LPRINTUSINGP1$+" ";G(I,X);:T#(X)=T#(X)+G(I,X):NEXT:LPRINT
1070 LPRINTSTRING$(80,"-"):GOSUB1150:NEXT:LPRINTCHR$(12)
1080 LPRINTTAB(25):PR$:LPRINTTAB(10)STRING$(52,"-"):LPRINTCHR$(13B)
1090 FORX=0TO8:LPRINTTAB(10);V$(X);" ";STRING$(40-LEN(V$(X)),"."):USINGP2$:T#(X)
1100 NEXT:LPRINTCHR$(12):GOTO1500
1150 IFPEEK(16425)<56THENRETURNELSELPRINTCHR$(12)
1160 LPRINTTAB(10);C$;" ";PR$:LPRINTCHR$(13B)
1170 LPRINT"EMP# NAME":TAB(28);"GROSS NET PAY":LPRINTSTRING$(80,"-"):LPRINT"
    FICA      FED W/H STATE W/H CITY W/H DISAB. DEDUCT 1 DEDUCT 2
1180 LPRINTSTRING$(80,"="):LPRINTCHR$(13B):RETURN
1200 CLS:GOSUB1410:CT=1:GOSUB300:FORI=1TONE:PRINTUSINGP$+" ";E%(I);
1205 PRINTE$(I,0):TAB(38):USINGP1$+" ";G(I,0);G(I,B)
1210 FORX=1TO7:PRINTUSINGP1$+" ";G(I,X);:T#(X)=T#(X)+G(I,X):NEXT
1215 T#(0)=T#(0)+G(I,0):T#(B)=T#(B)+G(I,B):CT=CT+1:PRINT"
    ":GOSUB1400:NEXT
1220 IFCT>1THENGOSUB1420
1230 CLS:PRINTTAB(10);TY$:PR$:PRINTSTRING$(63,140):PRINT
1240 FORX=0TO8:PRINTV$(X);" STRING$(32-LEN(V$(X)),"."):USINGP2$:T#(X):NEXT:GOTO
    1500
1400 IFCT<5THENRETURNELSEGOSUB1420
1410 CT=1:CLS:PRINT"EMP# NAME":TAB(40)"GROSS NET PAY /
    FICA      FED W/H STATE W/H CITY W/H DISAB. DED 1 DED 2":PRINTSTRING
    $(63,"="):RETURN
1420 PRINT@960,"> PRESS <ENTER> TO CONTINUE : ";;FL=1:GOSUB100:RETURN
1500 PRINT@832,"> OK TO RESET ";PR$;" (YES/NO) : ";;FL=3:GOSUB100
1510 IFIN$="NO"THEN200
1520 IFIN$<>"YES"THEN1500
1530 PRINT"
    ** RESETTING TOTALS **"
1540 FORI=1TONE:FORX=0TO8:G(I,X)=0:NEXTX,I:GOTO200
5000 IFDK=1THENOPEN" I",1,"PRDATA"ELSEDK=-1:T$="PLAY":GOSUB5200
5010 PRINT"

    ** READING PAYROLL DATA
5020 INPUT#DK,C$,NE,C(1),C(2),C(3),C(4),C(5),C(6),C(7),C(8)
5030 FORX=0TO1:INPUT#DK,B(0,X),B(1,X),B(2,X),B(3,X),B(4,X),B(5,X),B(6,X),B(7,X),
    P(0,X),P(1,X),P(2,X),P(3,X),P(4,X),P(5,X),P(6,X),P(7,X),D(0,X),D(1,X),D(2,X)
    ),D(3,X),D(4,X),D(5,X),D(6,X),D(7,X):NEXT
5090 FORX=1TONE
5100 INPUT#DK,E%(X),E$(X,0),E$(X,1),E$(X,2),E$(X,3),E$(X,4),RG(X)
5110 INPUT#DK,G(X,0),G(X,1),G(X,2),G(X,3),G(X,4),G(X,5),G(X,6),G(X,7),G(X,8)
5120 NEXT:IFDK=1THENCLOSE:RETURNELSERETURN
5200 CLS:PRINT"LOAD DATA TAPE & REWIND
    SET TO "T$":PRINT@320,"PRESS <ENTER> WHEN READY : ";;FL=1:GOSUB100:RETURN
6000 K="" :IFDK=1THENOPEN" O",1,"PRDATA"ELSEK="," :DK=-1:T$="RECORD":GOSUB5200
6010 D$="," :PRINT#DK,C$:D$:NE;K;C(1);K;C(2);K;C(3);K;C(4);K;C(5);K;C(6);K;C(7);K
    ;C(8):FORX=0TO1
6020 PRINT#DK,B(0,X);K;B(1,X);K;B(2,X);K;B(3,X);K;B(4,X);K;B(5,X);K;B(6,X);K;B(7
    ,X);K;P(0,X);K;P(1,X);K;P(2,X);K;P(3,X);K;P(4,X);K;P(5,X);K;P(6,X);K;P(7,X)
    ;K;D(0,X);K;D(1,X);K;D(2,X);K;D(3,X);K;D(4,X);K;D(5,X);K;D(6,X);K;D(7,X):NE
```

XT

```
6050 FOR I=1 TO N: PRINT#DK,E%(I);K;E$(I,0);D$;E$(I,1);D$;E$(I,2);D$;E$(I,3);D$;E$(I,4);D$;RG(I)
6060 PRINT#DK,USING"#####.##D0"+K;G(I,0);G(I,1);G(I,2);G(I,3);G(I,4);G(I,5);G(I,6);G(I,7);G(I,8)
6070 NEXT I: IF DK=1 THEN RUN "PAYROLL" ELSE PRINT"
    > DO YOU WANT TO MAKE ANOTHER COPY (Y/N) : ";
6080 FL=1: GOSUB 100: IF IN$="Y" THEN 6000 ELSE IF IN$<>"N" THEN PRINT CHR$(8)::GOTO 6080 ELSE
END
```

```
1' (C) 1979 BY TANDY CORP.
2 CLS:DK=1:ONERRORGOTO99:CLOSE:ONERRORGOTOO:IFDK=1THENCLEAR1900:DK=1:X%=41:ME%=4
   0:GOTO10
4 CLEAR0:X=(INT((PEEK(16544)+PEEK(16545)*256)/16000)-2)*60+15
6 PRINT"MAX EMP : ";X:CLEAR(36*X+256):FORX=11TO14:M$=M$+CHR$(PEEK(15360+X)):NEXT
8 ME%=VAL(M$):X%=ME%+1
10 DEFINTI=N,P,W,X:DEFSTRK:DEFDBLG
25 DIMW,WS,WL,WD,FL,B(8,2),P(8,2),D(8,2),E$(X,5),RG(X),G(X,8),E%(X)
30 L$=STRING$(63,140):H$="##,###":G$="###,##.###"
40 GOSUB5000:GOSUB7000:X=FRE(X$):GOTO500
99 DK=0:RESUMENEXT
100 IN$="" : W$=INKEY$:WD=0:WS=WD:WL%=WD:IFFL=WDTHENFL=1
105 PRINTSTRING$(ABS(FL),CHR$(136));STRING$(ABS(FL),CHR$(24));
110 PRINTCHR$(14)::FORW%=1TO25:W$=INKEY$:IFW$<>"" THEN115ELSENEXT:PRINTCHR$(15)::

   FORW%=1TO25:W$=INKEY$:IFW$<>"" THEN115ELSENEXT:GOTO110
115 IFW$<>CHR$(13)THEN120ELSEPRINTSTRING$(ABS(FL)-WL%, " ");
117 PRINTCHR$(15)::W%=25:NEXT:RETURN
120 PRINTCHR$(14)::IFW$=CHR$(24)THENPRINTSTRING$(WL%, CHR$(24))::GOTO100
125 IFW$<>CHR$(8)THEN145ELSEIFWL%=0THEN110ELSEPRINTCHR$(24)::IFFL>0THEN135ELSEIF
   PEEK(16418)=44THEN140
130 IFPEEK(16418)=46THENWD=0:GOTO135ELSEIFPEEK(16418)=43ORPEEK(16418)=45THENWS=0
135 IN$=LEFT$(IN$,LEN(IN$)-1)
140 WL%=WL%-1:POKE16418,136:GOTO110
145 IFABS(FL)=WL%THEN110ELSEIFFL>0THENIFW$>=" "ANDW$<="Z"THEN170
150 IFW$=". "ANDWD=0THENWD=1:GOTO170
155 IFW$="," THENPRINTW$::WL%=WL%+1:GOTO175
160 IF(W$="-"ORW$="+")ANDWS=0ANDWL%=0THENWS=1:GOTO170
165 IFW$<"0"ORW$>"9"THEN110
170 PRINTW$::IN$=IN$+W$::WL%=WL%+1
175 IFABS(FL)=1THEN117ELSE110
200 CLS:PRINT"1) NAME
   2) SOC SEC # ";TAB(35);"5) PERIODS/YR
   3) MARITAL (M/S) ";TAB(35);"6) HRLY RATE
   4) # EXEMPTIONS ";TAB(35);"7) ANN SALARY
210 PRINTL$::PRINTTAB(15);"-- YEAR TO DATE TOTALS --
220 PRINT" 8) GROSS";TAB(32);"12) CITY W/H
   9) FICA";TAB(32);"13) DISABILITY
  10) FED W/H";TAB(32);"14) DEDUCT 1
  11) STATE W/H";TAB(32);"15) DEDUCT 2
   ";TAB(15);"-- NET INCOME :KILL&CVI
14884 RETURN
500 CLS:PRINTTAB(5);C$;" PAYROLL - MASTER FILE MAINT.":I=0
510 PRINTL$::PRINT@264,"<E> D I T   E M P L O Y E E   F I L E
520 PRINT@392,"<S> A V E   D A T A   &   E N D
540 PRINT@584,"> ENTER A SELECTION : ";:FL=1:GOSUB100
550 IFIN$="E"THENGOSUB600:GOTO500
560 IFIN$="S"THEN6000ELSEGOTO500
600 GOSUB200
610 PRINT@832,CHR$(31);"<S>EARCH", "<N>EXT", "<P>REVIOUS
```

```
<E>EDIT", "<A>DD", "<D>ELETE
620 PRINT@960, CHR$(30);> ENTER A SELECTION (OR 'Q' TO EXIT) : ";:FL=1:GOSUB100
630 IFIN$="Q" THENRETURNELSEIFIN$="S" THENTY$="SEARCH FOR":GOSUB1000:IFI=0THENPRIN
    T" ** NOT FOUND **";:GOSUB9001:GOT0610:ELSEGOT0610
640 PT=I:IFIN$="N" THENZ=1:GOSUB1500:GOT0610
650 IFIN$="P" THENZ=-1:GOSUB1500:GOT0610
660 IFIN$="E" THENTY$="EDIT":GOSUB2000:GOT0610
670 IFIN$="A" THENTY$="ADD":GOSUB3000:GOT0610
680 IFIN$="D" THENTY$="DELETE":GOSUB4000:GOT0610ELSEGOT0610
800 FORX=0TO4:PRINT@P1(X,0), STRING$(ABS(P1(X,1)),32);
810 PRINT@P1(X,0), E$(I,X);:NEXT
815 PRINT@45,"EMP # : ";E%(I);
820 IFRG(I)<100THENPRINT@179,:USINGH$;RG(I);:PRINT@243,CHR$(30);
825 IFRG(I)>100THENPRINT@243,:USINGG$;RG(I);:PRINT@179,CHR$(30);
830 FORQ=0TO7:IFQ<4THENP=400+Q*64ELSEP=433+(Q-4)*64
840 PRINT@P,:USINGG$;G(I,Q);:NEXT
850 PRINT@670,USINGG$;G(I,8);:RETURN
900 ER=0:IFX>4THEN910ELSEPRINT@P1(X,0),:FL=P1(X,1):GOSUB100:E$(I,X)=IN$
902 IFX=2AND(IN$<>"M"ANDIN$<>"S")THEN900ELSERETURN
910 IFX=5ANDRG(I)<100THENPRINT@179,CHR$(30);:FL=-7:GOSUB100:IFVAL(IN$)<100THENRG
    (I)=VAL(IN$):PRINT@179,USINGH$;RG(I);:RETURNELSE910
920 IFX=6AND(RG(I)=0ORRG(I)>99.9999)THENPRINT@243,CHR$(30);:FL=-7:GOSUB100:RG(I)
    =VAL(IN$):PRINT@243,USINGG$;RG(I);:RETURN
930 IFX<7THENER=1:RETURN
940 IFX<11THENP=400+64*(X-7)ELSEP=433+64*(X-11)
950 PRINT@P,:FL=-10:GOSUB100:G(I,X-7)=VAL(IN$):PRINT@P,USINGG$;G(I,X-7);
960 NP#=0:FORZ=1TO7:NP#=NP#+G(I,Z):NEXT:NP#=G(I,0)-NP#
970 G(I,8)=NP#:PRINT@670,USINGG$;NP#:RETURN
1000 PRINT@832,CHR$(31);:PRINT@896,> " ";TY$;" EMPLOYEE NO. : ";
1010 FL=-4:GOSUB100:EN=VAL(IN$):IFEN<1THEN1000
1020 I=0:FORX=1TO1:IFE%(X)=ENTHENI=X:X=NE
1030 NEXT:IFI>0THENGOSUB800
1040 RETURN
1490 IF(I=NEORI=1)ANDE%(I)=0THENI=PT:RETURN
1500 IFI+Z>NEORI+Z<1THENRETURN
1510 I=I+Z:IFE%(I)=0THEN1490
1520 GOSUB800:RETURN
2000 PRINT@832,CHR$(31);:IFI=0THENGOSUB1000:IFI=0THENPRINT" ** NOT FOUND **";:G
    OSUB9001:RETURN
2010 PRINT@896,"** EDITING EMPLOYEE NO. ";E%(I);" **"
2020 PRINT@960,> ENTER ITEM NO. TO BE CORRECTED OR 'Q' IF OK :";:FL=2:GOSUB100
2030 IFIN$="Q" THENRETURNELSEX=VAL(IN$)-1:IFX<0RX>14THEN2020
2040 GOSUB900:GOT02020
3000 K%=0:IFNE+1<=METHEN3005ELSEIFD=0THENPRINT" ** FILE FULL **";:GOSUB9001:RET
    URN
3002 FORX=1TO1:IFE%(X)=0THENK%=X:X=NE:NEXTELSENEXT
3005 GOSUB200:GOSUB1000:IFI<>0THENPRINT@960,"** EMPLOYEE NO. ";E%(I);" ALREADY EX
    ISTS **";:GOSUB800:GOSUB9001:RETURN
3007 IFK%>0THENNE=NE+1:I=NEELSED=D-1:I=K%
3010 E%(I)=EN:FORX=0TO14:GOSUB900:NEXT
```

```
3020 PRINT@960,"> ARE ALL ENTRIES CORRECT (Y/N) : ";:FL=1:GOSUB100
3030 IFIN$="Y" THENRETURNSEIFIN$<>"N"THEN3020ELSEGOSUB2020:RETURN
4000 IFI=0THENGOSUB1000ELSEIFEX(I)=0THENRETURN
4010 PRINT@960,"> OK TO DELETE (YES/NO) : ";CHR$(30)::FL=3:GOSUB100
4020 IFIN$="NO"THENPRINT" ** DELETION ABORTED **";:GOSUB9001:RETURN
4030 IFIN$<>"YES"THEN4010
4040 PRINT@18,"** DELETED **";CHR$(30)::D=D+1:E%(I)=0:RETURN
5000 IFDK=1THENOPEN" I ",1,"PRDATA"ELSEDK=-1:T$="PLAY":GOSUB5200
5010 PRINT"
** READING PAYROLL DATA
5020 INPUT#DK,C$,NE,C(1),C(2),C(3),C(4),C(5),C(6),C(7),C(8)
5030 FORX=0TO1:INPUT#DK,B(0,X),B(1,X),B(2,X),B(3,X),B(4,X),B(5,X),B(6,X),B(7,X),
P(0,X),P(1,X),P(2,X),P(3,X),P(4,X),P(5,X),P(6,X),P(7,X),D(0,X),D(1,X),D(2,X)
),D(3,X),D(4,X),D(5,X),D(6,X),D(7,X):NEXT
5090 FORX=1TONE
5100 INPUT#DK,E%(X),E$(X,0),E$(X,1),E$(X,2),E$(X,3),E$(X,4),RG(X)
5110 INPUT#DK,G(X,0),G(X,1),G(X,2),G(X,3),G(X,4),G(X,5),G(X,6),G(X,7),G(X,8)
5120 NEXT:IFDK=1THENCLOSE:RETURNNELSERETURN
5200 CLS:PRINT"LOAD DATA TAPE & REWIND
SET TO "T$:PRINT@320,"PRESS <ENTER> WHEN READY : ";:FL=1:GOSUB100:RETURN
6000 K="" :IFDK=1THENOPEN" O ",1,"PRDATA"ELSEK="," :DK=-1:T$="RECORD":GOSUB5200
6010 D$="," :PRINT#DK,C$;D$;NE-D;K;C(1);K;C(2);K;C(3);K;C(4);K;C(5);K;C(6);K;C(7)
;K;C(8):FORX=0TO1
6020 PRINT#DK,B(0,X);K;B(1,X);K;B(2,X);K;B(3,X);K;B(4,X);K;B(5,X);K;B(6,X);K;B(7
,X);K;P(0,X);K;P(1,X);K;P(2,X);K;P(3,X);K;P(4,X);K;P(5,X);K;P(6,X);K;P(7,X)
;K;D(0,X);K;D(1,X);K;D(2,X);K;D(3,X);K;D(4,X);K;D(5,X);K;D(6,X);K;D(7,X):NE
XT
6045 FORI=1TONE:IFE%(I)=0THEN6070
6050 PRINT#DK,E%(I);D$;E$(I,0);D$;E$(I,1);D$;E$(I,2);D$;E$(I,3);D$;E$(I,4);D$;RG
(I)
6060 PRINT#DK,USING"#####.##D0"+K;G(I,0);G(I,1);G(I,2);G(I,3);G(I,4);G(I,5);G(I
,6);G(I,7);G(I,8)
6070 NEXTI:IFDK=1THENRUN"PAYROLL"ELSEPRINT"
> DO YOU WANT TO MAKE ANOTHER COPY (Y/N) : ";
6080 FL=1:GOSUB100:IFIN$="Y"THEN6000ELSEIFIN$<>"N"THENPRINTCHR$(8)::GOT06080ELSE
END
7000 POKE16553,255:FORX=0TO4:READP1(X,0),P1(X,1):NEXT:RETURN
7010 DATA18,20,82,11,146,1,210,-2,115,-3
9001 FORX=1TO2000:NEXT:RETURN
```



Important Information for Cassette Users

Free Modification for LEVEL II Units

A modification that helps cassette loads in LEVEL II computers is available free to TRS-80 LEVEL II owners. This modification makes the volume setting less critical so that variations in different tapes usually will not require volume readjustments.

Some of the more recent LEVEL II Keyboard units have had this modification factory-installed. To see if the modification has been included in your computer, look at the catalog number on the bottom of the keyboard case. The modification has been made if the number ends in -1. For example, if the number is 26-1004-1, the modification has already been installed; if the number is 26-1004, the modification has not been installed.

If the number does not end in -1 and you have not already had the cassette modification installed by Radio Shack, you may arrange for installation at your local Radio Shack store.

Using Your Cassette Deck

Many factors affect the performance of a cassette system. The most significant one is volume. Too low a volume may cause some of the information to be missed. Too high a volume may cause distortion and result in the transfer of background noise as valid information.

Three different cassette models have been supplied with the TRS-80 system — the CTR-40, CTR-41 and CTR-80. Each model has its own loading characteristics. The table below gives suggested volume ranges for each of the CTR models. Figures are for systems **without** the CLOAD modification.

Notice that volume ranges for LEVEL I and LEVEL II are different. This is because the LEVEL II data transfer rate is faster (500 baud vs. 250 baud). Also, notice that pre-recorded Radio Shack programs need a slightly **higher** volume setting than that required by your own CSAVED tapes. The pre-recorded tapes are produced with high-speed audio equipment at a slightly lower level than the CSAVE process provides.

RECORDER MODEL	USER-GENERATED TAPES		PRE-RECORDED RADIO SHACK TAPES	
	LEVEL I	LEVEL II	LEVEL I	LEVEL II
CTR-40	YELLOW LINE	RED LINE	YELLOW LINE	RED LINE
CTR-41	6 – 8	4 – 6	6½ – 8½	5 – 7
CTR-80	4½ – 6½	3 – 5	5½ – 7½	2½ – 5

Recommended Volume Settings for RADIO SHACK Cassette Decks

(With CTR-40 and CTR 80, to increase volume, turn the control to the left.
With CTR-41, turn control to the right.)

When information is being loaded from the cassette tape, two asterisks will appear on the screen. The one on the right will flash on or off each time a new line of data or program is read in. If the asterisks do not appear, or the one on the right does not flash, then the volume setting is probably too low. If the asterisks appear but one is not flashing, try increasing the volume setting. Use the reset button to stop the cassette and return control to you if loading problems occur.

Radio Shack programs are recorded at least twice on each tape (usually once on each side). You should do the same when you record programs on tape. This will give you a back-up if one does not load properly or if it becomes damaged.

Important Note: The CTR-41 requires that you keep the supplied "dummy plug" in the MIC jack at all times. However, the CTR-40 and the CTR-80 should never be used with the "dummy plug."

LEVEL I

Sometimes you will get an error message during an attempted CLOAD. This means that some information was lost or garbled. Adjust the volume level slightly and try again.

LEVEL II

In case of an error message, proceed as above. In LEVEL II, there is also a rare case in which the program has not loaded correctly *even though no error is generated*. So, after CLOADing a program, be sure to LIST it. If some data was garbled, then at some point in the listing, the display will be filled with meaningless words and characters. Adjust the volume and try again.

Hints and Tips

Computer tapes should be stored in a relatively dust-free area (a cassette case is recommended) and protected from high temperatures. Magnetic and electrical fields may alter recorded information, so avoid them (i.e. household appliances, power sources such as transformers and television sets, etc.).

The cassette deck supplied with the TRS-80 is very compatible with the system and will perform its duties with great success. To keep the cassette deck in top condition and thus minimize your problems, you should periodically perform some routine maintenance on it. Dirty heads can cause as much as a 50% loss in volume. Also, heads become magnetized with use and may cause distortion. We recommend that you clean the head, capstan and pinch roller after every four hours of operation. Heads on new recorders should always be cleaned before use.

Note: Cassette cleaning and demagnetizing accessories are available from your local Radio Shack store.

IMPORTANT NOTICE

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NOTE: Good data processing procedure dictates that the user test the program, run and test sample sets of data, and run the system in parallel with the system previously in use for a period of time adequate to insure that results of operation of the computer or program are satisfactory.

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