Radio Shack®
A Division of Tandy Corporation

NATIONAL TECHNICAL SUPPORT 0220 817-390-3810
400 ATRIUM—ONE TANDY CENTER, FORT WORTH, TEXAS 76102

June 11, 1984

TO: _____
Radio Shack Service Center # _____

This will confirm your enrollment in the Advanced Technician Training class # 84-R7A in Fort Worth, July 9 - August 15, 1984

If you are flying to Fort Worth you will find an airline ticket enclosed. Upon your arrival at DFW Airport you will need to make arrangements at the Surtran counter for transportation to downtown Fort Worth. Tell the bus driver which hotel you are staying at and he will drop you off.

Reservations for your class have been made at the Fort Worth Hilton, 1701 Commerce Street. Their telephone number is (817) 335-7000. Room and Tax only will be billed directly to Radio Shack. You must pay for any incidentals prior to checking out from the hotel.

While you are in Fort Worth, you will be paid $20.00 per day to cover such expenses as food, room service, laundry, etc. A check for the total amount will be issued to you during your first week of class. Since this is on a per diem basis, you will NOT be required to account for these funds. However, any expenses incurred in excess of this payment will be borne by you.

Please meet in the lobby of the hotel at 7:30 a.m. on the first day of class and the hotel will supply a van which will drop you off in front of the Tandy Center. This van will also pick you up after class. Dress for the class is minimum business dress - NO JEANS. Dress shirt, slacks and tie are required for men. I suggest that you bring along a calculator, it may assist you in certain areas of the course.

If you have any questions, or require assistance in any way, please contact me at Technical Support tel. 1-800-433-1684 or 817-390-3969.

Listed below are the names and telephone numbers of people that members of your family can contact if there is an emergency at home while you are here in Fort Worth.

Don Alves	Work# (817) 390-2982	
Dave Williams	Work# (817) 390-2985	Home# (817) 457-6377
Tom King	Work# (817) 390-3886	Home# (817) 485-6610

We hope that your stay in Fort Worth will be a pleaseant one.

Sincerely,

Don Alves

Don Alves
Technical Education Coordinator

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Date: July 9, 1984

To: Class 84-R7A

From: Dave Williams, Manager Technical Support and Training

Subject: Classroom and Student policies for class 84-R7A

Welcome to Fort Worth and our Advanced Technical Training Class. At this time I would like to pass on the policies I feel you need to be aware of for your stay in Fort Worth.

1) Telephones:

Phones will be used for calling your shops on business matters only. Our phones have outbound WATTS lines. Dial -9- then the number you are calling DO NOT dial 1 for long distance. Please make all personal calls from your hotel. In the event of an emergency contact myself or Perry Presto immediately.

2) Time Cards:

Time cards will be supplied to you as needed. Fill them out DAILY and at the end of YOUR regular pay period phone your hours to your shop. Record your classroom hours only. As per Bud McClure's memo dated September 7, 1983: "All personnel attending formal training either in Fort Worth or in the field, will be paid hourly rates only. No pay will be paid during travel time to or from training." Arrangements will be made if you wish to have your paycheck held here in Fort Worth.

3) Transportation:

We have a van for your use on Thursday nights for laundry and on weekends for you to seek out new life and entertainment. Gas will be your responsibility. DO NOT leave the Dallas/Fort Worth area. One person will be designated as driver and will be responsible for the van. This is a company van and if a company function requires the use of this van over the weekend, unfortunately you will be left without transportation.

4) Classroom tools and test equipment:

You are responsible for the equipment you use. If it is lost or damaged you will have to replace or repair it. This includes the computer equipment you work on during lab time. At the end of each day take a few minutes to clean up and organize the classroom for the next day. Empty your ashtrays and throw away any trash that has accumulated.

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5) Areas of access:

Do not wander around the floor during breaks or lunch time. Customer Services and Tandy Tax have business to conduct and we should not distract them. Also the data entry people in this department are not to disturbed. I do encourage you to visit with Instructors and the Technical Representatives if you have some questions or ideas you would like to share with us. Technical Support is here for your benefit, not only for training but in your shops. If you have any ideas that deal with the technical aspects of our business that you feel are important please bring them to our attention.

If you have any questions about any subject during your stay in Fort Worth please feel free to contact me about it.

TRS-80 ®

{Class # 84-R7A July 9 - August 15, 1984}

Monday July 9	**DC & AC Fundamentals**	
8:00 - 10:00	Welcome & Introduction	Bud McClure
8:30 - 12:00	Electron Theory Concepts	Cindy Caldwell
	Ohms Law for Series & Parallel Circuits	
	Power Consumption & Relationships	
	Complex DC Circuits & Divider Networks	
12:00 - 1:00	**Lunch**	
1:00 - 5:30	OHM's Law For AC Circuits	George Murray
	Waveforms & Their Characteristics	
	Transformer Action	
	Inductive & Capacitive Reactance	
	Oscillators & Filter Networks	
Tuesday July 10	**Semiconductor Fundamentals & Analog Devices**	
8:00 - 12:00	PN Junctions; Biasing & Current Flow	Steve Dakin
	Characteristics of Semiconductor Devices	
	Amplifiers & Other Active Devices	
12:00 - 1:00	**Lunch**	
1:00 - 5:30	Decimal, Binary & Hexadecimal Numbers	Gene Hamilton
	Data Representation & Methods of Conversion	
	Basic Logic Gates & Their Truth Tables	
	Characteristics of CMOS & TTL Devices	
Wednesday July 11	**TTL/CMOS Logic & Microprocessor Basic**	
8:00 - 12:30	Flip - Flops & Latches	Larri Rosser
	Combinational & Sequential Logic Circuits	
	Decoding & Encoding Devices	
	Semiconductor Memory Devices	
12:30 - 1:00	**Lunch**	
1:00 - 5:30	Microprocessor Terms & Conventions	Gene H.
	Microprocessor Architecture	
	Introduction to Programming Languages	
Thursday July 12	**Assembly Languages & Test Equipment**	
8:00 - 12:00	Assembly Language Fundamentals	Bob Bownes
	Z-80 Assembly Language Overview	
12:00 - 1:00	**Lunch**	
1:00 - 5:30	Using Multimeters & Ground Ref. Points	Gary Bannister
	Oscilloscope Operation	
	Using Frequency Counter	
Friday July 13	**Troubleshooting Techniques & Exam**	
8:00 - 12:00	Microprocessor Troubleshooting Techniques	Cindy/Ken
12:00 - 1:00	**Lunch** group "A", **Exam** group "B"	
1:00 - 2:00	**Lunch** group "B", **Exam** group "A"	
2:00 - 3:00	Exam Review	
3:00 - 5:30	Support Operations Procedures	**Sally McCall**

{Class # 84-R7A July 9 - August 15, 1984}

Monday	**July 16**	**Model III Systems**	
	8:00 - 12:00	Model III Operational Overview	
		Hardware Overview	Larri R.
		Switching Power Supply Theory/Lab	
		Processor Section Theory & Lab	
	12:00 - 1:00	**Lunch**	
	1:00 - 5:30	Address Decoding Section Theory & Lab	Cindy C.
		Ram Section Theory & Lab	
Tuesday	**July 17**	**Model III Systems**	
	8:00 - 11:30	Keyboard Section Theory & Lab	Cindy C.
		Printer Section	
		Real Time Clock Section	
		I/O Bus Section	
	11:30 - 12:30	**Lunch**	
	12:30 - 5:30	VDG Section Theory & Lab	George M.
Wednesday	**July 18**	**Model III Systems**	
	8:00 - 12:30	General Monitor Theory	Steve D.
		Monitor Boards Theory & Lab	
	12:30 - 1:30	**Lunch**	
	1:30 - 5:30	General Cassette Theory	George M.
		Cassette Section Theory & Lab	
		General RS232 Theory	
		RS232 Section Lab	
Thursday	**July 19**	**Model III Systems**	
	8:00 - 12:30	General FDC Theory	Cindy C.
		FDC Board Theory & Lab	
	12:30 - 1:30	**Lunch**	
	1:30 - 5:30	General Disk Drive Theory	Steve/Larri
		TRS-80 5 1/4" Disk Drive Overview/Lab	
		{Shugart,TPI,Tandon,TEC}	
Friday	**July 20**	**Model III Systems**	
	8:00 - 12:30	Winchester Technology & Bubble Units	Cindy C.
		Read/Write H.D. Logic Board Theory	
		Hard Drive Controller Board Theory	
	12:30 - 1:30	**Lunch**	
	1:30 - 5:30	LDOS Overview	Steve D.
		5 1/4" Hard Drive Alignment Lab	

{Class # 84-R7A July 9 - August 15, 1984}

Monday	**July 23**	**Model III & 4/4P Systems**	
	8:00 - 12:00	Network III Overview	Larri
		General CRTC Theory	
	1:00 - 2:00	**Lunch**	
	2:00 - 5:30	Model 4/4P Hardware Overview	Steve
		Model III Upgrade to Model 4	
		Main CPU Board Overview	
		Model 4P Overview & Comparison	
Tuesday	**July 24**	**Model III Systems**	
	8:00 - 12:00	Model III Troubleshooting Lab	Cindy/George
	12:00 - 1:00	**Lunch**	
	1:00 - 5:30	Model III Troubleshooting Lab {Graded}	Cindy/George
Wednesday	**July 25**	**Model II/16 Business Systems**	
	8:00 - 9:30	Diagnostics Overview (All Systems)	Gary Kueck
	9:30 - 11:00	**National Parts Tour**	
	11:00 - 12:00	**Exam Model III/4**	
	12:00 - 1:00	**Lunch**	
	1:00 - 5:30	Model 11/16 Operational Overview	Bob B.
		Model II/16 Hardware Overview	
		Business Systems Dos Overview	
		Business Systems Power Supplies	
Thursday	**July 26**	**Model II/16 Business Systems**	
	8:00 - 1:00	Z80 CPU Board Theory/Lab	Gene H.
		8-Bit Ram Theory & Lab	
	1:00 - 2:00	**Lunch**	
	2:00 - 5:30	Keyboards Overview & Lab	Perry P.
		Video Monitors Overview	
		VDG Section Theory & Lab	
Friday	**July 27**	**Model II/16 Business Systems**	
	8:00 - 12:30	Model II/16 FDC Theory/Lab	Perry P.
	12:30 - 1:30	**Lunch**	
	1:30 - 5:30	TRS80 8" Floppy Drive Overview & Lab {Shugart, TPI, CDC & Thinline}	Gene/Gary

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Monday	**July 30**	**Model II/16 Business Systems**	
8:00 - 12:00		TRS80 8" Floppy Drive Alignment Lab {Shugart, TPI, CDC & Thinline}	Gene/Gary
12:00 - 1:00		**Lunch**	
1:00 - 5:30		8 & 12 Meg HD Interface Boards HD Shugart Logic Board 8 Meg Controller Board	Perry P.
Tuesday	**July 31**	**Model II/16 Business Systems**	
8:00 - 11:30		8 Meg Hard Drive Alignment Lab	Bob/Perry
11:30 - 12:30		**Lunch**	
12:30 - 5:30		68000 Logic Design 68000 CPU Board & Diagnostics Lab 68000 Memory Board	Gene H.
Wednesday	**August 1**	**Model 12/16B/16B+ Business Systems**	
8:00 - 12:00		Model II/16 Troubleshooting Lab	Bob/Gary
12:00 - 1:00		**Lunch**	
1:00 - 5:30		Model 12/16B/16B+ Overview Internal Hard Drive Overview & Alignment	Perry P.
Thursday	**August 2**	**Arcnet & TRS-XENIX Multi-User**	
8:00 - 12:00		Arcnet Installation/Overview Arcnet Theory of Operation	Gary B.
12:00 - 1:00		**Lunch**	
1:00 - 2:00		**Exam Model 2/12/16**	
2:00 - 5:30		XENIX {UNIX} Overview & Installation The Editor & It's Uses File Structures & Shells	Bob B.
Friday	**August 5**	**XENIX & Tandy 2000 Personal Computer**	
8:00 - 10:00		XENIX Field Problems	Ken Brookner
10:00 - 11:30		XENIX & more XENIX	Bob B.
11:30 - 12:30		**Lunch**	
12:30 - 5:30		Intro. to the Tandy 2000 Tandy 2000 Hardware & Upgrades MS-DOS Overview Power Supply Overview Keyboard & Keyboard Interface Overview	Gene H.

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Monday	**August 6**	**Tandy 2000 Personal Computer**	
8:00 - 12:00		80-186 CPU Overview	Perry P.
		CPU & Bus Interface Section	
		ROM & Interrupt Control Section	
		DMA Controller	
12:00 - 1:00		**Lunch**	
1:00 - 5:30		Parallel & Keyboard Interface Section	Gene H.
		Serial Interface & Timer Circuitry	
		Memory Timing & Control Circuits	
		128K RAM Boards	
		256K RAM Board Overview	
		Digi Mouse/Clock Interface Board	
Tuesday	**August 7**	**Tandy 2000 Personal Computer**	
8:00 - 12:00		System PLL/Clock Circuitry	Perry P.
		Intel CRTC & Support IC's Overview	
		Main Video Logic Circuitry	
12:00 - 1:00		**Lunch**	
1:00 - 5:30		FDC Section Theory & Lab	Bob/Gene
		5 1/4" 96 TPI Floppy Disk Lab	
Wednesday	**August 8**	**Tandy 2000 Personal Computer**	
8:00 - 12:00		Hires Color Upgrade	Perry P.
		Hires Color Graphics Overview	
		WD 1010 HD Interface Overview	
12:00 - 1:00		**Lunch**	
1:00 - 5:30		General Monitor Overview	Gary B.
		VM-1 Monochrome Monitor Overview	
		CM-1 Hires Color Monitor Overview	
Thursday	**August 9**	**Tandy 2000 Personal Computer**	
8:00 - 12:00		Hires Color Monitor Lab	Gary/Perry
12:00 - 1:00		**Lunch**	
1:00 - 4:30		Model 2000 Troubleshooting Lab	Gene/Perry
4:30 - 5:30		**EXAM** Model 2000	
Friday	**August 10**	**Color Computers**	
8:00 - 12:00		Color Computer Theory	George M.
12:00 - 1:00		**Lunch**	
1:00 - 5:30		Color Computer Theory	Gary B.
		Color Computer Comparisons	

{Class # 84-R7A July 9 - August 15, 1984}

Monday	**August 13**	**CoCo & DMP Printers**	
8:00 - 12:00		Color Computer Lab	George/Gary
12:00 - 1:00		**Lunch**	
1:00 - 5:30		Dot Matrix Printer Theory	Steve D.
		Line Printer V Overview	
		LP V Alignment Lab	
Tuesday	**August 14**	**DWP Printers, Exam, Model I & Modems**	
8:00 - 11:00		Daisy Wheel Theory	George M.
		DW II Overview	
		DW II Alignment Lab	
11:00 - 12:00 93		**Exam Color Computers & Printers**	
		Student Critique Turn-in	
12:00 - 1:00		**Lunch**	
1:00 - 5:30		Model I Overview	Steve D.
		Modem Theory & Operation	
		Student Evaluation Review	
5:30 - ???		**Graduation Dinner**	
Wednesday	**Augusy 15**	**RSCC Shop Procedures**	
8:00 - 10:00		Course Overview & Discussion	Don Alves
10:00 - 12:00		Contract Sales	Cindy LaHue
12:00 - 1:00		**Lunch**	
1:00 - ???		Processing for Travel Out	